Community Health Needs Assessment

December 13, 2018

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

Riley Hospital for Children
Indiana University Health

Sarah Evans Barker

Judge Sarah Evans Barker
Chairman, Committee on Values, Ethics, Social Responsibility and Pastoral Services
IU Health, Inc. Board of Directors

12-13-18
Date

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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.

Riley Hospital for Children at IU Health (Riley at IU Health or "the hospital") delivers healthcare that cannot be found anywhere else in Indiana. Riley at IU Health has the only pediatric research hospital in the state, ranked among the top hospitals in the nation in eight categories of specialized healthcare for children. As a national and regional healthcare leader, Riley at IU Health strives to improve the health of the patients and community through innovation and excellence in care, education, research and service.

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.

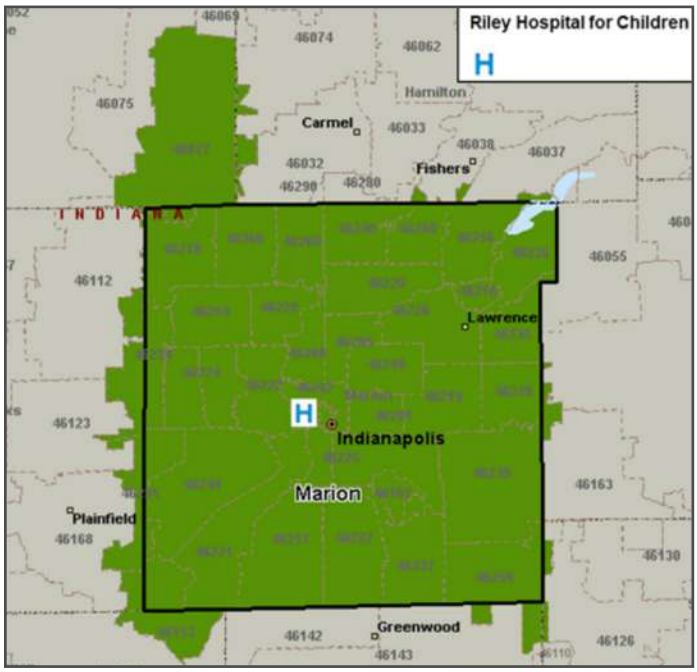
For copies of each IU Health CHNA report and also for associated implementation strategies, visit: https://iuhealth.org/in-the-community. Updated implementation strategies for each IU Health hospital are scheduled to be published by May 15, 2019.

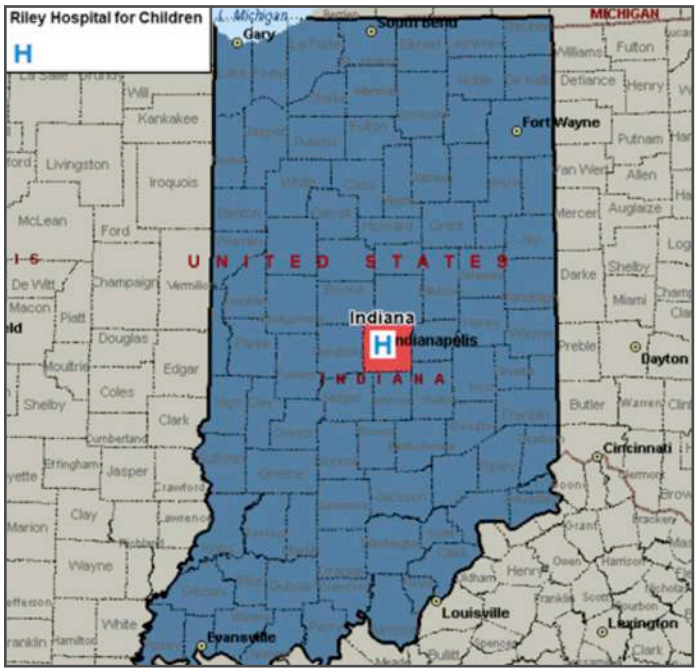
Community Definition

While Riley at IU Health provides a range of services to children both locally and across the State of Indiana, for purposes of this CHNA, Riley at IU Health's "local community" is defined as Marion County, Indiana. Children from Marion County accounted for approximately 32 percent of the hospital's inpatient cases in 2016. The total population of the county in 2015 was 938,058, and the total number of children (0 to 17 years of age) was 232,778.

Riley at IU Health also serves the children and families of Indiana as a whole. The total population of the state in 2015 was 6,612,768, and the total child population was 1,578,079.

The following maps portray these communities. For the local community, the map shows county and ZIP code boundaries. Specific ZIP codes are included in analyses if any portions of the ZIP codes overlap with Marion County.





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[1] including demographics, health status, and access to care indicators,
- Findings from other community health assessments of areas served by the hospital,
- Input obtained from individuals who participated in one or more community meetings,
- Input obtained from one or more individuals who were interviewed, and
- A community survey conducted in collaboration with other Indiana health systems.

Based on the assessment of the above data sources, the following community health needs (listed in alphabetical order) have been identified as significant in the community served by Riley at IU Health. References are made below to exhibits and findings presented in this report (e.g., whether certain needs were found to be significant based in part on findings from the community survey or community meetings).

Maternal and Infant Health

- Marion County has a number of unfavorable maternal and infant health indicators, including comparatively high infant mortality rates. Infant mortality rates for Black infants are much higher than rates for White infants, both in Marion County and state-wide (**Exhibit 25**). "Perinatal risks" are the most frequent cause both in Marion County and across Indiana (**Exhibit 27**).
- The community health assessment published by the Marion County Public Health Department in 2014 identified premature birth among Black mothers and high rates of maternal smoking as top concerns. Expectant mothers are failing to get "timely and adequate" prenatal care (**Other Assessments**).
- Indiana ranks in the bottom ten states for: smoking during pregnancy, maternal mortality, well-baby checks, neonatal mortality, and under age 5 mortality (**America's Health Rankings, Exhibit 40**).

Mental Health

- The community health assessment published by the Marion County Public Health Department in 2014 identified mental health of children in the 5 to 17 age group as a top concern. Indiana's State Health Assessment also raises concerns about mental health (**Other Assessments**).
- Several mental Health Professional Shortage Area (HPSA) facilities and areas are present in Marion County (**Exhibit 32C**) and across Indiana. State-wide, 62 of Indiana's 92 counties rank in the bottom half of peer counties for the per-capita supply of mental health professionals (**Exhibit 41**).
- Statistics in Indiana's Youth Risk Behaviors Survey indicate higher risks of suicide (and actual suicide attempts) in Indiana than in the United States (**Exhibit 38**).
- Participants in all three Marion County community meetings decided that mental health of children (and adults) was among the 3-5 most significant community health issues in the county (**Community Meetings**).
- Similarly, respondents to the community survey (from Marion County and across Indiana) indicated that mental health is a significant issue (**Community Survey**).

Obesity and Access to Healthy Food

- The community health assessment published by the Marion County Public Health Department in 2014 identified obesity (in the 5 to 11 age group) as a significant issue (**Other Assessments**).
- Marion County has a comparatively poor food environment index, indicating that access to healthy food is more challenging in the county than in the U.S. (**Exhibit 22**).
- Participants in Marion County community meetings and interviews consistently ranked obesity as among the most significant health needs (**Community Meetings, Interviews**). These views were shared by respondents to the community survey (**Community Survey**).
- In *The State of Obesity*, a Robert Wood Johnson Foundation initiative, Indiana was found to have the ninth highest childhood obesity and overweight rate (**Other Assessments**).
- Statistics in Indiana's Youth Risk Behaviors Survey indicate that physical inactivity is a contributing factor (**Exhibit 38**).

Poverty and Other Social Determinants of Health

- Regarding poverty:
  - About 31 percent of Marion County's children live in poverty (**Exhibit 15**). Poverty rates are highest for non-White households (**Exhibit 16**). Due to comparatively high rates, Marion County ranks 91 out of 92 Indiana counties for childhood poverty (**Exhibit 21**) and also in the bottom half of its peer counties across the United States (**Exhibit 23A**).
  - Marion County is home to a number of Medically Underserved Areas and Populations (**Exhibit 31**).
  - The community health assessment published by the Marion County Public Health Department in 2014 identified poverty and hunger in 12 to 17 age group as a top concern (**Other Assessments**).
  - Participants in all three Marion County community meetings decided that poverty was among the 3-5 most significant community health issues in the county (**Community Meetings**).
  - Similarly, over 30 percent of respondents to the community survey (from Marion County and across Indiana) indicated that poverty is a significant issue (**Community Survey**).
- Marion County has a comparative lack of affordable housing (**Exhibit 21, Interviews**) and the Indiana State

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

Health Assessment identifies housing as a state-wide concern (**Other Assessments**).

- Marion County's crime rates are high (**Exhibit 20**) and high school graduation rates are comparatively low (**Exhibit 22**).
- Indiana's recently published State Health Assessment indicates that a focus on addressing social determinants of health is needed across the state (**Other Assessments**).

Smoking, Tobacco Use, and Exposure to Second Hand Smoke

- More adults smoke in Marion County than in peer counties across the United States (**Exhibit 23**). This contributes to child exposure to second hand smoke and to perinatal risks.
- The community health assessment published by the Marion County Public Health Department in 2014 concluded that asthma prevalence and exposure to tobacco smoke is high (particularly in the 5 to 11 age group) (**Other Assessments**).
- Indiana's Tobacco Control 2020 Strategic Plan raises concerns about growing use of e-cigarettes (**Other Assessments**).
- Statistics in Indiana's Youth Risk Behaviors Survey indicate that smoking rates are higher than U.S. averages (**Exhibit 38**).
- Indiana ranks in the bottom ten states for: smoking during pregnancy and household smoke (**America's Health Rankings, Exhibit 40**).

Violence and Injuries

- Marion County's crime rates are high (**Exhibit 20**) as is its rate of mortality from injuries (**Exhibit 23**).
- Participants in one of three community meetings held in Marion County identified injury prevention as a top concern (**Community Meetings**).
- Statistics in Indiana's Youth Risk Behaviors Survey indicate higher risks of violence and lower rates of bicycle helmet use in Indiana than in the United States (**Exhibit 38**).

Other State-wide Concerns

- On a per-capita basis, Indiana's funding for public health services and departments is among the lowest in the United States. This may explain, in part, why Indiana ranks among the states with the lowest childhood immunization rates (**Exhibit 40**).
- Data indicate that air pollution (a known contributor to asthma) is a significant community health issue across Indiana (**Exhibit 41**).

DATA AND ANALYSIS

Riley at IU Health provides a range of services for patients from central Indiana and from across the state. Recognizing the hospital's local and state-wide roles, two communities have been assessed: Marion County (the "local community") and the state.

Local Community Assessed

The community assessed by Riley at IU Health was defined by the geographic origins of the patients discharged from the hospital as well as the hospital's role in serving children. On that basis, the "local community" was identified as Marion County, Indiana and the CHNA focused on assessing community health needs for children.

Children from Marion County accounted for more than 32 percent of the hospital's 2016 inpatient discharges (**Exhibit 1**).

Exhibit 1: Riley at IU Health Inpatient Discharges by County, 2016

County	Percent of Inpatients (2016)
Marion County	32.4%

Source: Analysis of Indiana University Health Discharge Data, 2016

In 2016, the next highest number of Riley at IU Health inpatients originated in Hamilton County (4.0 percent of discharges). Because the majority of inpatients originated from across Indiana and because Riley at IU Health plays a state-wide role in providing specialty care, advancing knowledge, and in meeting other needs, this CHNA report also identifies and discusses state-wide community health concerns.

The estimated, total population of Marion County in 2015 was 938,058 persons, while the child population (aged 0-17) was 232,778 (**Exhibit 2**).

Exhibit 2: Local Community Population, 2015

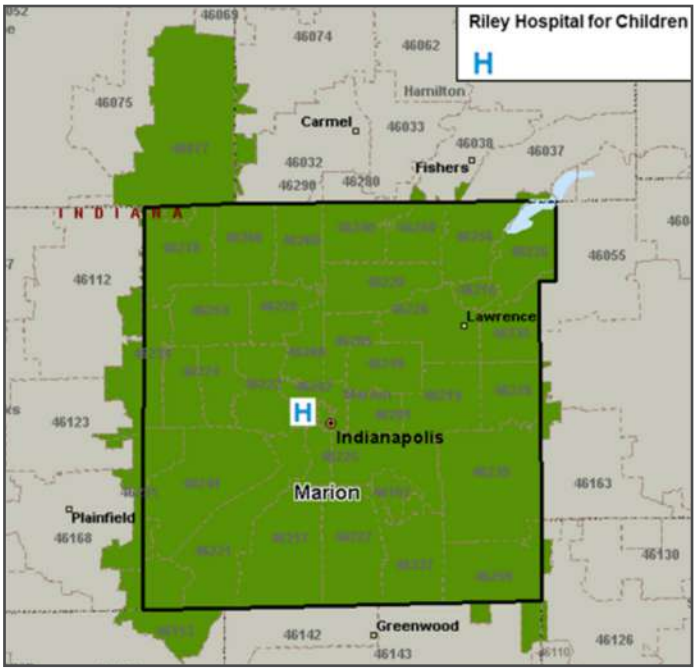
County	Estimated Population 2015
Marion County – Total Population	938,058
Marion County – Children (Age 0-17)	232,778

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

The hospital is located in Marion County (City of Indianapolis, Indiana, ZIP Code 46202).

Exhibit 3 portrays the local 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 Marion County.

Exhibit 3: Riley at IU Health Local Community



Source: Microsoft MapPoint and IU Health, 2018

Secondary Data Summary (Marion County)

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

Demographics

Population characteristics and trends directly influence community health needs. The total population of Marion County is expected to grow 2.7 percent from 2015 to 2020, while the child population is expected to grow at 3.0 percent.

Economic Indicators

Many health needs have been associated with poverty. Just over 30 percent of Marion County's children live in poverty – a rate well above state and national averages. Data suggest that poverty rates are higher in non-White households. Low income census tracts are prevalent in Marion County, including areas surrounding the hospital.

Overall crime rates in the City of Indianapolis consistently have been significantly higher than Indiana averages – an issue that affects children across Marion County.

Local Health Status and Access Indicators

Indiana has 92 counties. In the 2018 County Health Rankings, Marion County ranked in the bottom quartile for several child-related indicators, including:

- low birthweight births,
- adult smoking,
- food environment,
- high school graduation rates,
- children in poverty,
- prevalence of children living in single-parent households,
- violent crime,
- injury deaths,
- air pollution, and
- severe housing problems.

In the 2018 *Community Health Status Indicators* (which compares community health indicators for each county with those for peers across the United States), Marion County ranks unfavorably compared to its peer counties for child health indicators including low birth weight births, children in poverty, children living in single-parent households, and the teen birth rate. It also ranks in the bottom quartile for other issues that influence child health, namely: percent of adults smoking, violent crime, injury mortality, and air pollution.

According to the Indiana State Department of Health, Marion County ranked unfavorably compared to Indiana for many maternal and child health indicators, including infant mortality rate, low birthweight, preterm births, teen birth rates, and mothers receiving early prenatal care. Additionally, rates of Black infant mortality, neonatal mortality, and post-neonatal mortality were nearly double the rates for Whites.

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 Marion County was 3.8 – well above the national median of 3.0. Fourteen of 38 ZIP codes scored in the "highest need" category.

Food Deserts

The U.S. Department of Agriculture's Economic Research Service identifies census tracts that are considered "food

deserts" because they include lower-income persons without supermarkets or large grocery stores nearby.

Several census tracts in Marion County have been designated as food deserts, including in areas near the hospital.

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."

Many census tracts throughout Marion County have been designated as Medically Underserved, particularly in areas around the hospital and throughout Indianapolis.

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

Areas throughout Marion 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.

An assessment of health in Marion County was published in 2014 by the Marion County Public Health Department.[2] Notably, this assessment focused on specific age groups, including children 0-4, 5-11, and 12-17 years of age. The following significant needs were found for these age groups.

Ages 0 – 4 Years
- A lack of "timely and adequate" prenatal care.
- Premature and low-weight birth among Black mothers and inequity in birth outcomes.
- High rates of maternal smoking.

5 – 11 Years
- High prevalence of obesity and overweight children.
- Asthma prevalence and exposure to tobacco smoke is high.
- Mental health issues, particularly ADHD and depression.

Ages 12 – 17 Years
- Poverty and hunger.
- Homicide as the leading cause of death for 15 to 24 year olds in Marion County.
- Depression and suicide risks.

Significant Indicators
Exhibit 4 presents many of the indicators discussed in the above secondary data summary. An indicator is considered significant if it varies materially from a benchmark level (e.g., an average for Indiana or the United States). For example, while Indiana's child poverty rate (percent of children in households that are at or below 100 percent of the Federal Poverty Level) was 21.2 percent, the rate in Marion County was 30.9 percent. For Riley at IU Health's local community, the child poverty rate thus is considered significant. The last column of **Exhibit 4** identifies where more information regarding the data sources can be found in this report.

The benchmarks include Indiana averages, 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
Years of potential life lost per 100,000	Marion County	9,216	6,700 – U.S.	22
Population change, 2015-2020	Marion County	2.7%	1.9% – Indiana	11A
Child (0-17) population change, 2015-2020	Marion County	3.0%	-0.4% – Indiana	12
Child poverty rate, 2012-2016	Marion County	30.9%	21.2% – Indiana	15
Poverty rate, Black, 2012-2016	Marion County	28.7%	30.9% – Marion County Total	16
Poverty rate, Hispanic, 2012-2016	Marion County	37.6%	30.9% – Marion County Total	16
Overall Community Needs Index	Marion County	3.8	3.0 – U.S. Median	31
Percent of children in poverty	Marion County	28.0%	20.0% – U.S.	22
High school graduation rate	Marion County	72.1%	83.0% – U.S.	22
Violent Crime per 100,000	Indianapolis	1,374	407 – Indiana	20
% of live births with low birthweight	Marion County	9.1%	8.0% – Indiana	22
Teen birth rate (15-19)	Marion County	41	27 – U.S.	22

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

Exhibit 4: Significant Indicators (continued)

Indicator	Area	Value	Benchmark	Exhibit
Teen birth rate (15-19)	Marion County	41	30 – Peer Counties	23A
Infant mortality rate	Marion County	8.6	7.2 – Indiana	24
Mother on Medicaid percent	Marion County	57.9%	44.3% – Indiana	24
Infant mortality rate (black infants)	Marion County	10.2	6.1 – Marion County White	25
Infant mortality from perinatal risks	Marion County	53.5%	48.0% – Indiana	27
Childhood cancer (<age 20) rate	Marion County	18.1	17.3 – Indiana	28
Food environment index (higher is better)	Marion County	6.6	7.7 – U.S.	22
Particulate matter (PM 2.5) rate	Marion County	12.3	11.1 – U.S.	22

Source: Verité Analysis

Exhibit 4 suggests that based on available secondary data alone, the most significant community health issues in Marion County include:

- Various social determinants of health, including: childhood poverty, housing problems, access to healthy food, crime, and educational achievement.
- Adult smoking, which exposes children to second-hand smoke.
- Air pollution.
- Unfavorable maternal and child health outcomes, particularly for those who are non-White.

As described in the next section, many of these child health-related issues are prevalent across Indiana. Data from the Youth Risk Behavior Survey (YRBS), for example, indicate a higher prevalence of violence, mental health problems, tobacco use, asthma, and obesity in Indiana than in the United States.

Secondary Data Summary (State of Indiana)

Riley at IU Health also assessed community health needs across Indiana. The following section summarizes findings from that analysis (*See* Appendix C for more detailed information).

Demographics

The population aged 0-19 of Indiana is expected to grow 4.8 percent from 2015 to 2025. The highest growth rates in population aged 0-19 appears to be in central Indiana counties, particularly Marion County and bordering counties.

Indiana Health Status and Access Indicators

In 2015 *Indiana Youth Risk Behavior Survey* (YRBS), overall Indiana averages are compared to national rates. Indiana compared unfavorably to national averages for several indicators, including the percent of children:

- Rarely or Never Wore a Bicycle Helmet
- Did not have 8 or More Hours of Sleep on Average
- Ever Tried a Cigarette
- Carried a Weapon
- Forced to have Sexual Intercourse
- Currently Used Cigarettes, Cigars, or Smokeless Tobacco
- Made a Plan about how they would Attempt Suicide
- Seriously Considered Attempting Suicide
- Currently Used Smokeless Tobacco
- Experienced Sexual Dating Violence
- Not Physically Active at least 60 Minutes Per Day

Indiana Youth Survey from 2013 through 2017 shows that while the use of many substances has dropped in recent years, marijuana, over the counter drugs, and hallucinogens and ecstasy usage has increased in recent years.

America's Health Rankings – Health in Women and Children provides state rankings for a number of health and social driver of health indicators. In the 2016 rankings, Indiana ranked in the bottom third of states nationally in the following indicators:

- Smoking During Pregnancy
- Maternal Mortality
- Protective Home Environment (Ages 0-5)
- Developmental Screening
- Immunizations - Children
- Well-Baby Check
- Household Smoke
- Neonatal Mortality
- Under Age 5 Mortality
- Community & Environment-Infants
- Adverse Childhood Experiences
- Health Status - Children
- Publicly-Funded Women's Health Services

Community Health Status Indicators (which compares indicators for each county with those for peer counties across the United States) were assessed for every county in Indiana. This analysis thus establishes the frequency with which certain community health problems benchmark unfavorably across Indiana's counties in comparison with peer counties across the United States. Based on this analysis, Indiana counties most frequently ranked in the bottom half of their peers for the following child-related community health problems:

- Average Daily PM2.5 (the average daily density of fine particulate matter in micrograms per cubic meter, a measure of air quality and pollution)
- Percent of adults who smoke
- Percent with some college education
- Teen birth rate
- Supply of mental health professionals
- Low birth weight

Relevant Findings of Other CHNAs
Several other health assessments were reviewed regarding health in Indiana.

In preparing its *State Health Assessment*, Indiana officials reviewed local health assessments conducted across the state to identify needs most frequently identified as significant. The ten needs most frequently identified were: access to care, mental and behavioral health, obesity, substance abuse disorders, nutrition and physical activity, diabetes, tobacco use, heart disease, cancer, and maternal and infant health.

A state health improvement plan (SHIP) subsequently was drafted that identified "final priorities," which were:
- Improve birth outcomes and reduce infant mortality
- Address the opioid epidemic
- Reduce rates of chronic disease
- Improve the public health infrastructure

The State of Obesity, a Robert Wood Johnson Foundation initiative, provides national and state-level information. Indiana was found to have the ninth highest childhood obesity and overweight rate.

The *Indiana Tobacco Control 2020 Strategic Plan* described the state of tobacco use in Indiana in 2015, and provided strategies to help lower tobacco use in the state by 2020. The Plan found that tobacco use is the most preventable cause of death and disease in Indiana, costing Indiana and its residents 11,100 lives and nearly $3 billion in health care costs annually. Despite a recent decline in Indiana smoking rates, more than one million adults in the state still smoke cigarettes. Smoking rates among pregnant women, those with any mental illness, and those with low education levels were found to be higher than the rate of smoking in the general population.

Primary Data Summary

Primary data were gathered in three ways: Community Meetings, Key Stakeholder Interviews, and a Community Survey.

Community Meetings
Between May 7th & 9th, 2018, three meetings of community representatives were held in Indianapolis, the county seat of Marion County. In total, the meetings were attended by 41 community members invited by IU Health in partnership with Community Health Network 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 these meetings, IU Health sought a breadth of perspectives on the community's health needs. The specific organizations represented at the meetings are listed below.

Organizations Represented at Community Meetings
- Adult and Child Health
- All Senior Citizens Connect
- Central Indiana Council on Aging (CICOA)
- City of Indianapolis
- Coburn Place
- Community Health Network
- Gennesaret Free Clinics
- Gleaners Food Bank
- Health by Design
- IU Health Methodist Hospital
- IU Health University Hospital
- Indiana Youth Institute
- Indianapolis Fire Department
- Indianapolis Metropolitan Police Department
- Indy Hunger Network
- Indianapolis Parks and Recreation
- Irvington Development Organization
- Jump IN for Healthy Kids
- Lawrence Community Gardens
- Marion County Public Health Department
- New Beginnings Church
- Paramount Schools of Excellence
- Progress House
- Purdue Extension
- Riley Hospital for Children at IU Health
- The Polis Center
- University of Indianapolis

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

- Access to healthy food
- Infant mortality (and associated causal factors)
- Low immunization rates
- Low public health resources
- Poverty and childhood poverty rates
- Prevalence of overweight children
- Racial and ethnic disparities in birth outcomes
- Tobacco use and exposure
- Unsafe and unhealthy behaviors

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:

Group 1	Group 2	Group 3
High school graduation rates	Built environment	Access to primary care
Injury prevention	Changed access to healthy food to food insecurity	Built environment
Mental health	Substance abuse	Dental care
Violence		Disparities in access to basic, affordable needs
		Education
		Education on communicable diseases
		Nutrition and cooking education
		Teen pregnancy

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

- Ability to address topics such as crime, poverty, and air pollution
- Aging population
- Teen pregnancy
- Water
- Parks
- Funding
- Walkability
- Social determinants of health
- Disparities
- Collaboration with community organizations
- Government affairs department
- Individuals with disabilities and their health needs
- Effects on children of opioid abuse

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 for the population and local community served by Riley at IU Health:

Group 1	Group 2	Group 3
1. (Tie) Low immunization rates	1. Food insecurity	1. Access to healthy food
1. (Tie) Poverty and childhood poverty rates	2. (Tie) Obesity and lack of physical activity	2. (Tie) Disparities in access to basic, affordable needs
3. (Tie) Injury prevention	2. (Tie) Poverty and high 'community need index'	2. (Tie) Obesity and lack of physical activity
3. (Tie) Mental health	4. Mental health and supply of mental health providers	4. Poverty and high 'community need index'
3. (Tie) Violence	5. Substance abuse	5. Mental health and supply of mental health providers

Interviews

An interview also was conducted with two representatives of the Marion County Public Health Department. The interviews were conducted to assure that appropriate and additional input was received from a governmental public health official. The results of the community meetings were discussed and insights were sought regarding significant community health needs, reasons why such needs are present, and how they can be addressed.

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

- The interviewees confirmed that the needs identified by the community meeting participants were significant. These needs were:
  - Access to healthy food (food insecurity) and its relation to obesity
  - Poverty
  - Mental health
  - Disparities in access to basic needs (housing, transportation, etc.)
  - Substance abuse
- Poverty has increased significantly since 2005, from one out of every five households to one out of every three with children in poverty. This increased poverty level has created a large issue with food insecurity.
- While unemployment rates are low, wages are an issue for many in the community. The minimum wage is not a living wage and many people who have low paying jobs still struggle with food insecurity and other issues.
- Mental health status and access to mental health care is a significant issue, with a particular focus on the lack of

providers, and issues surrounding suicide among children. Since many providers receive little in reimbursement from insurance for mental health treatment, finding providers and hospitals with a focus on mental health is difficult.

- There is a need for navigators who could help residents find needed services and sign up for state insurance plans.
- Substance abuse is a significant issue, as evidenced by drug overdose deaths. Additionally, while there were 500 ambulance trips for drug overdoses in 2013, this number is over 2,000 in recent years.
- Communicable disease linked to substance abuse is also an issue, as rates of hepatitis C and HIV have increased in part due to intravenous drug use.
- Despite great progress and policy around the issue, smoking is still an issue that many are no longer paying attention to because of a misbelief that the issue is solved. The recent rise of e-cigarettes also may contribute to increased smoking due to attracting teenagers.
- Transportation is a barrier to care. While the city has options, the bus system is inefficient and can take a long time.
- Cancer is also an issue, with large disparities in incidence rates among different demographic groups. In particular the incidence rates of lung, colon, and prostate cancers are significant needs in the community.
- The interviewees also identified several other significant issues in the community, including:
  - Dental care and access to dental care providers
  - Violence and homicide
  - Infant mortality, especially with the disparities present among different racial groups
  - Childhood obesity
  - Chronic diseases, particularly diabetes

Community Survey

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").
- Whether or not children were living in each household.
- 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).

Surveys were received from 359 Marion County households. According to the responses, these households included 644 adults. The vast majority of households that responded to the survey included one or more children.

Exhibit 5 portrays the community health needs considered most significant by survey respondents from Marion County.

Exhibit 5: Community Survey – Significant Health Needs

Community Health Need	Riley at IU Health Number of Responses	Riley at IU Health Percent of Respondents
Substance use or abuse	166	46.1%
Chronic diseases, like diabetes, cancer, and heart disease	163	45.5%
Obesity	160	44.6%
Mental health	146	40.6%
Assault, violent crime, and domestic violence	137	38.1%
Aging and older adult needs	121	33.7%
Poverty	114	31.9%
Food access, affordability, and safety	103	28.6%
Tobacco use	78	21.6%
Alcohol use or abuse	76	21.2%
Child neglect and abuse	71	19.8%
Homelessness	70	19.6%
Environmental issues	61	17.1%
Injuries and accidents	52	14.4%
Sexual violence, assault, rape, or human trafficking	42	11.8%
Disability needs	37	10.3%
Reproductive health and family planning	34	9.5%
Dental care	32	9.0%
Suicide	25	6.8%
Infant mortality	17	4.6%
Infectious diseases, like HIV, STDs, and hepatitis	12	3.4%

Source: Community Survey

The community survey indicates that substance use or abuse; chronic diseases; obesity; mental health; and assault, violent crime, and domestic violence represent top concerns in the community served by Riley at IU Health.

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%

Exhibit 6: Community Survey – Health Factors (continued)

Measure	Total	Female	Male	White	Black	Asian	Hispanic	$0 – $25k	$25 – $75k	$75k+	No High School Diploma
Are not satisfied with life	**12.8%**	12.3%	13.9%	12.6%	15.0%	23.4%	10.1%	19.0%	12.1%	11.2%	14.6%
Without Health Insurance	**4.2%**	4.2%	4.0%	4.1%	7.5%	0.9%	10.1%	6.6%	5.3%	2.1%	7.9%
Without Primary Care Physician	**11.0%**	10.5%	11.9%	10.9%	10.5%	20.7%	23.0%	11.2%	11.0%	12.0%	15.8%

Exhibit 7: Community Survey – Health Behaviors

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

OTHER FACILITIES AND RESOURCES IN MARION COUNTY

This section identifies other facilities and resources in Marion County that are available to address community health needs. The data sources identified below also have information about facilities and resources that are available statewide.

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. FQHCs throughout the state can be found at: https://www.findahealthcenter.hrsa.gov/.

There currently are 87 FQHC sites operating in Marion County (**Exhibit 8**).

Exhibit 8: Federally Qualified Health Centers, 2018

Facility
Adult and Child Health #1
Adult and Child Health #2
Allison Elementary School
Arlington Community High School Based Clinic – IPS
Aspire Indiana Health – Willowbrook
Avondale Meadows Academy School-Based Health Center
Barrington Health Center
Care Center at the Tower
Charles W. Fairbanks IPS School 105
Dayspring Center
Enlace Academy
Eskenazi Health Center 1650 College Avenue
Eskenazi Health Center Barton Annex
Eskenazi Health Center Blackburn
Eskenazi Health Center Cottage Corner
Eskenazi Health Center Forest Manor
Eskenazi Health Center Grassy Creek
Eskenazi Health Center North Arlington
Eskenazi Health Center Pecar
Eskenazi Health Center Primary Care
Eskenazi Health Center Westside
Farrington Middle School
Fisher Elementary School
Gambold Middle School
George Washington Community School
Global Preparatory Academy – Charter School
Harshman Middle School
HealthNet Administration
Holy Family Shelter
Homeless Initiative Program (HIP)
Indiana Health Centers, Inc.
Indiana Math and Science Academy North
Indiana Math and Science Academy West
Interfaith Hospitality Network
IPS School 27 – Center for Inquiry
IPS School 34 – Eleanor Skillen
IPS School 43 – James Whitcomb Riley
IPS School 79 – Carl Wilde
IPS School 88 – Anna Brochhausen
James Russel Lowell IPS School 51
Jane Pauley Community Health Center Administrative Offices
Jane Pauley Community Health Center at 16th Street
Jane Pauley Community Health Center at Arlington
Jane Pauley Community Health Center at Brook Park
Jane Pauley Community Health Center at Gallahue
Jane Pauley Community Health Center at Howe
Jane Pauley Community Health Center at Madison Avenue
Jane Pauley Community Health Center at Post
Jane Pauley Community Health Center at Shadeland
Jane Pauley Community Health Center Dental Clinic
Julian Center Shelter
Kindezi Academy – Charter School
KIPP School Based Health Center
Martindale Brightwood Health Center
Meridian Health Services – Suite 102A
Newby Elementary School
Northeast Health Center
Northwest Health Center
Peoples Health Center
Phalen Academy
Ralph Waldo Emerson IPS School 58
Raphael Health Center
Salvation Army Family Shelter Clinic (for women and children)
Salvation Army Harbor Light
Shalom 56th Street – New Access Point
Shalom Health Care Center, Inc.
Shalom Primary Care Center
Shortridge High School
Southeast Health Center
Southwest Health Center
Stephen Foster School #67

Exhibit 8: Federally Qualified Health Centers, 2018 (continued)

Facility
Tech Teen Clinic
Thomas D. Gregg School 15
Tindley Accelerated Academy – Charter School
Tindley Collegiate Academy (female) – Charter School
Tindley Genesis Academy – Charter School
Tindley Preparatory Academy (male) – Charter School
Tindley Renaissance Academy – Charter School
Tindley Summit Academy - Charter School
Vision Academy at Riverside School-Based Health Center
Washington Irving School 14
West Health Center
Wheeler Elementary School
Wheeler Shelter for Women and Children
William McKinley School 39
Windrose Health Network – Countyline
Windrose Health Network – Epler Parke

Source: HRSA, 2018

Hospitals

22 hospitals (including IU Health at Riley) are located in the community (Exhibit 9). Hospitals throughout the state can be found at: https://www.in.gov/isdh/reports/QAMIS/hosdir/.

Exhibit 9: Hospitals, 2018

Facility
Assurance Health Psychiatric Hospital
Community Health Network Rehabilitation Hospital
Community Hospital East
Community Hospital North
Community Hospital South
Eskenazi Health
Fairbanks
Franciscan Health Indianapolis
Indiana University Health Methodist Hospital
Indiana University Health University Hospital
Kindred Hospital Indianapolis
Kindred Hospital Indianapolis North
Larue D Carter Memorial Hospital
Midland House Inc.
Neuropsychiatric Hospital of Indianapolis, LLC
Options Behavioral Health System
Orthoindy Hospital
Riley Hospital for Children at IU Health
Rehabilitation Hospital of Indiana Inc.
St Vincent Hospital
St Vincent Hospital & Health Services
St Vincent Seton Specialty Hospital, Indianapolis

Source: Indiana State Department of Health, 2018

Local Health Departments (LHDs)

Exhibit 10 presents information on LHDs that provide services in the community served by Riley at IU Health. LHDs throughout the state can be found at: https://secure.in.gov/isdh/24822.htm/.

Exhibit 10: Local Health Departments, 2018

Public Health Department
Marion County Public Health Department

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 Riley at IU Health. 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 addiction treatment
- 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 opportunities

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.[3] In conducting a CHNA, each tax-exempt hospital facility must:

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

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

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

Methodology

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

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

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

Federal regulations allow hospital facilities to define the community they serve based on "all of the relevant facts and circumstances," including the "geographic location" served by the hospital facility, "target populations served" (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).[4]

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

Data from multiple sources were gathered and assessed, including secondary data[5] published by others and primary data obtained through community input. *See* Appendix B and Appendix C for assessments of secondary data. Input from the community was received through key informant interviews, community meetings, and a community survey.

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

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

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

- Secondary data[6] including demographics, health status, and access to care indicators,
- Findings from other community health assessments of areas served by the hospital,
- Input obtained from individuals who participated in one or more community meetings,
- Input obtained from individuals who were interviewed, and
- A community survey conducted in collaboration with other Indiana health systems.

Collaborating Organizations

For this assessment, Riley at IU Health collaborated with all IU Health hospitals and also with other Indiana health systems on a community survey.

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,

[3] *Internal Revenue Code, Section 501(r).*

[4] *501(r) Final Rule, 2014.*

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

[6] *"Secondary data" refers to data published by others, for example the U.S. Census and the Indiana Department of Health.*

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 and key informant interviews. 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).

Surveys were received from 359 Marion County households. According to the responses, these households included 644 adults. The vast majority of households that responded to the survey included one or more children.

Information Gaps

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

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

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

APPENDIX B – SECONDARY DATA ASSESSMENT (MARION COUNTY)

This section presents an assessment of secondary data regarding health needs in Marion County, the "local community" for Riley at IU Health.

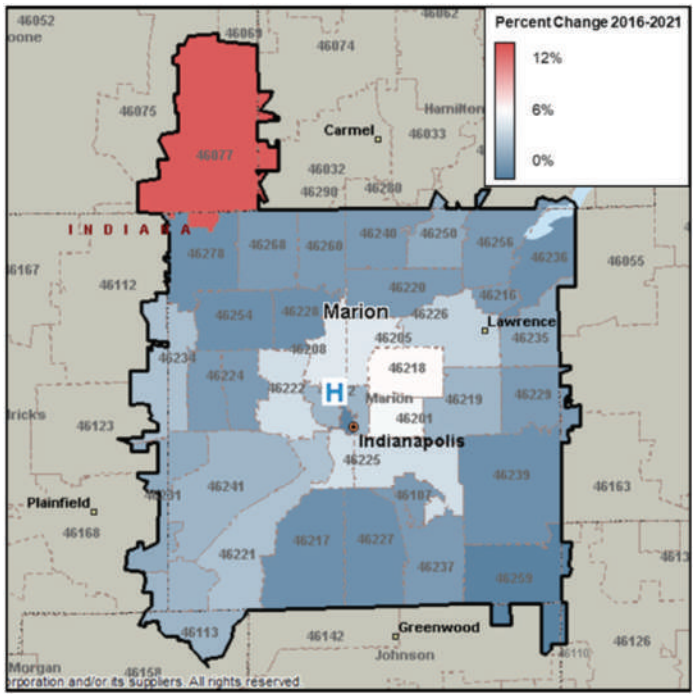
Demographics

Exhibit 11A: Percent Change in Population (Child and Total), 2015-2020

County	Estimated Population 2015	Projected Population 2020	Percent Change 2015-2020
Marion County – Total Population	938,058	963,732	2.7%
Marion County – Children (Age 0-17)	232,778	239,764	3.0%
Indiana – Total Population	6,612,768	6,738,573	1.9%
Indiana – Children (Age 0-17)	1,578,079	1,571,356	-0.4%

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

Exhibit 11B: Percent Change in Total (Child and Adult) Population by ZIP Code, 2016-2021



Healthcare Advisory Board, 2017

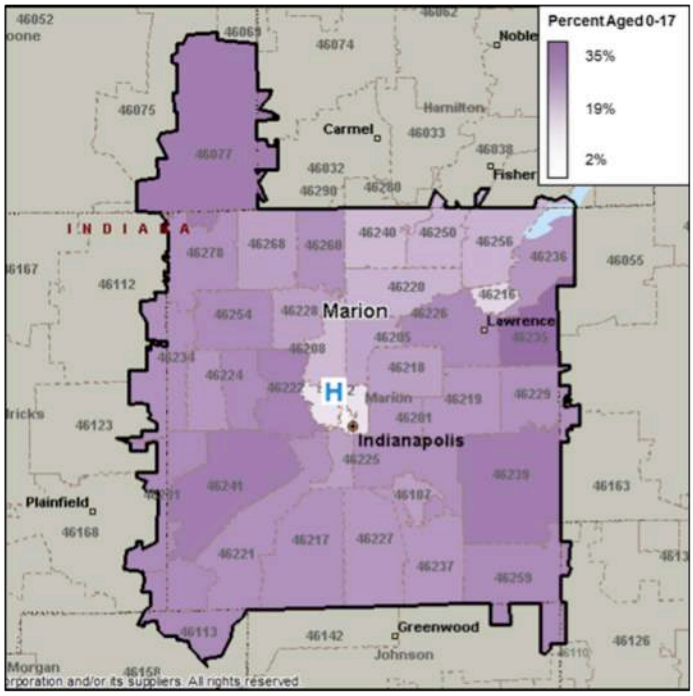
Description

Exhibit 11A shows the total and child population for Marion County and for Indiana in 2015 and as projected in 2020. Exhibit 11B maps the percent change in Marion County's adult and child (total) population by ZIP code between 2016 and 2021.

Observations

- The child population (aged 0 to 17 years) and the number of people in total is expected to grow in Marion County between 2015 and 2020.
- Population growth is anticipated in every Marion County ZIP code. Marion County ZIP code 46077 is anticipated to grow at the fastest rate (over 11 percent between 2015 and 2020).

Exhibit 12: Percent of Population Aged 0-17 by ZIP Code, 2015



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

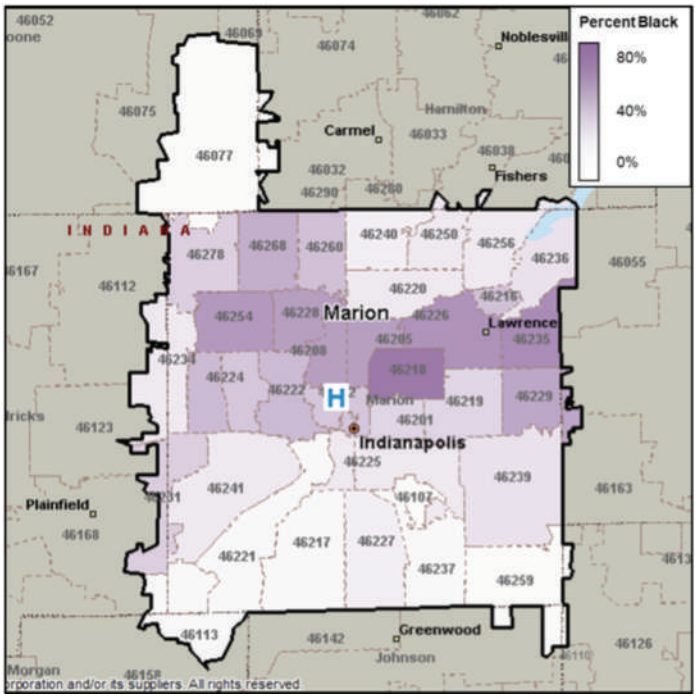
Description

Exhibit 12 portrays the percent of the population 0-17 years of age in Marion County by ZIP code.

Observations

- ZIP codes with the lowest proportions of the population aged 0-17 are concentrated in the center of the community in the areas proximate the hospital.
- Four community ZIP codes (46235, 46239, 46241, and 46077) had more than 30 percent of their population aged 0-17.

Exhibit 13: Percent of Total Population – Black, 2015



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

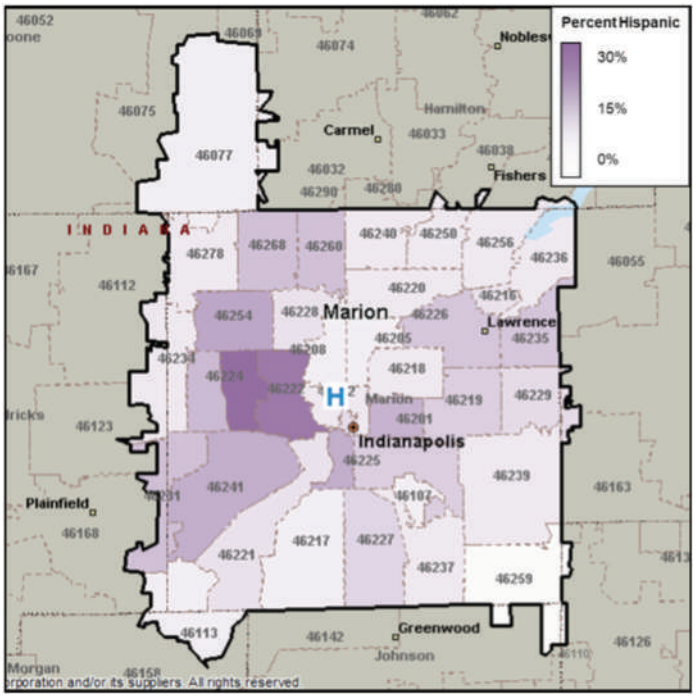
Description

Exhibit 13 portrays locations where the percentages of the total (child and adult) population that are Black were highest in 2015. Population diversity is important to recognize given the presence of health disparities and barriers to health care access experienced by different racial and ethnic groups.

Observations

- Over 50 percent of residents of six Marion County ZIP codes (46218, 46235, 46226, 46254, 46208, and 46205) in 2015 were Black.
- In 2015, the percent of residents that were Black was under two percent in three of Marion County's 38 ZIP codes (46077, 46107, and 46259).

Exhibit 14: Percent of Total Population – Hispanic (or Latino), 2015



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

Description

Exhibit 14 portrays locations in Marion County where the percentages of the population (child and adult) that are Hispanic (or Latino) were highest in 2015. Population diversity is important to recognize given the presence of health disparities and barriers to health care access experienced by different racial and ethnic groups.

Observations

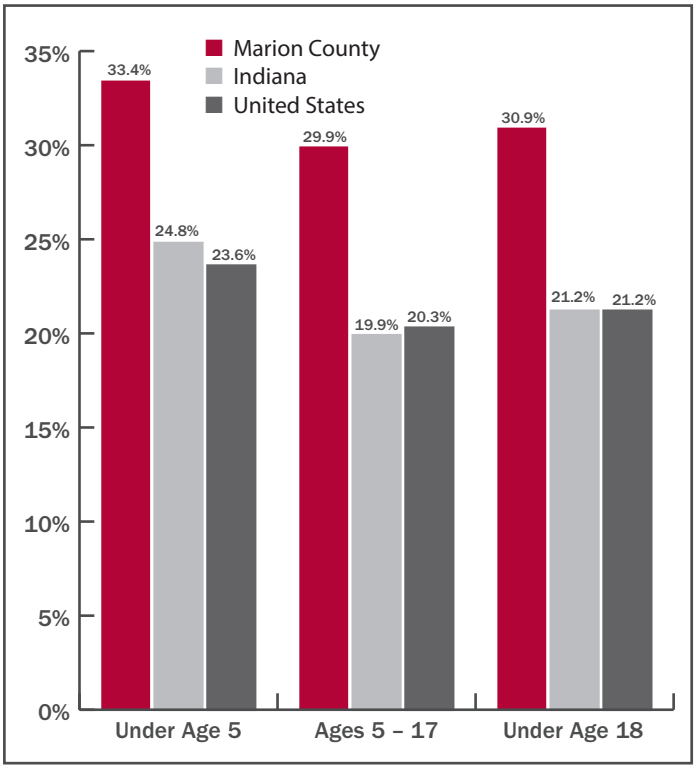
- The percentage of residents that are Hispanic (or Latino) was highest in ZIP codes 46224 (29.9 percent) and 46222 (26.5 percent) – both located west of the hospital.

Economic Indicators

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

People in Poverty

Exhibit 15: Percent of Children in Poverty by Age Group, 2012-2016



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

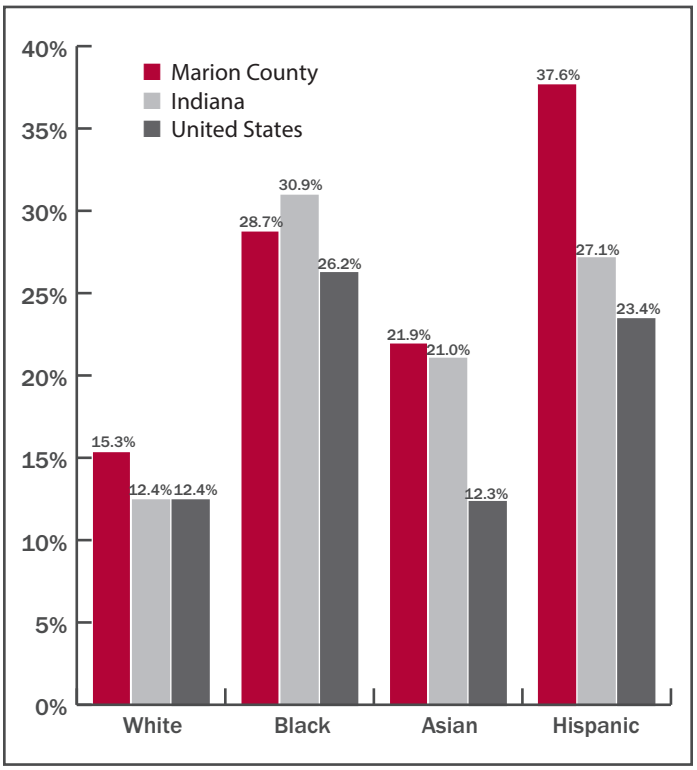
Description

Exhibit 15 portrays recent, average poverty rates for children in Marion County, Indiana, and the U.S.

Observations

- The percent of children in poverty in Marion County is significantly above Indiana and U.S. averages.

Exhibit 16: Poverty Rates for Total Population by Race and Ethnicity, 2012-2016



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

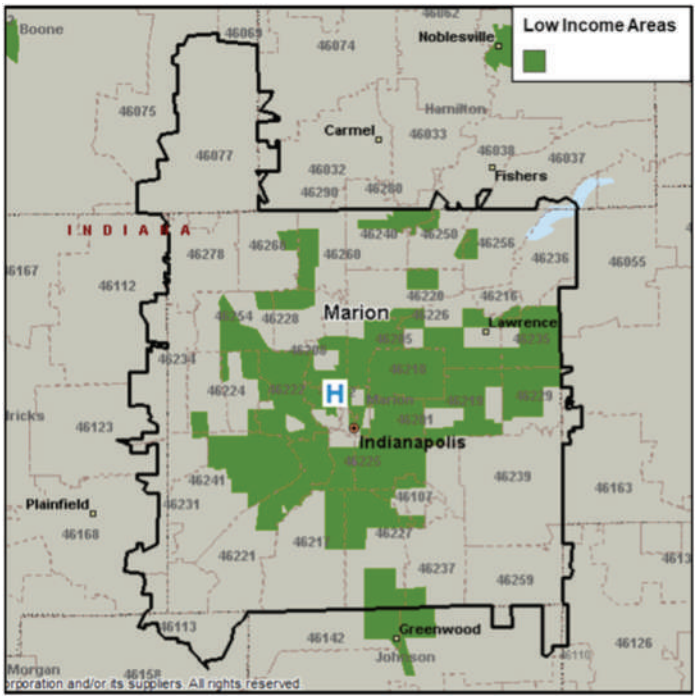
Description

Exhibit 16 portrays poverty rates in Marion County, Indiana, and the U.S. by race and ethnicity.

Observations

- Poverty rates in Marion County have been higher than national averages for all population cohorts.
- Poverty rates for Black and Hispanic (or Latino) residents of Marion County have been much higher than rates for White residents. While these statistics are for children and adults combined, higher than average poverty rates likely are present for children in non-White households.

Exhibit 17: Low Income Census Tracts, 2017



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

Description

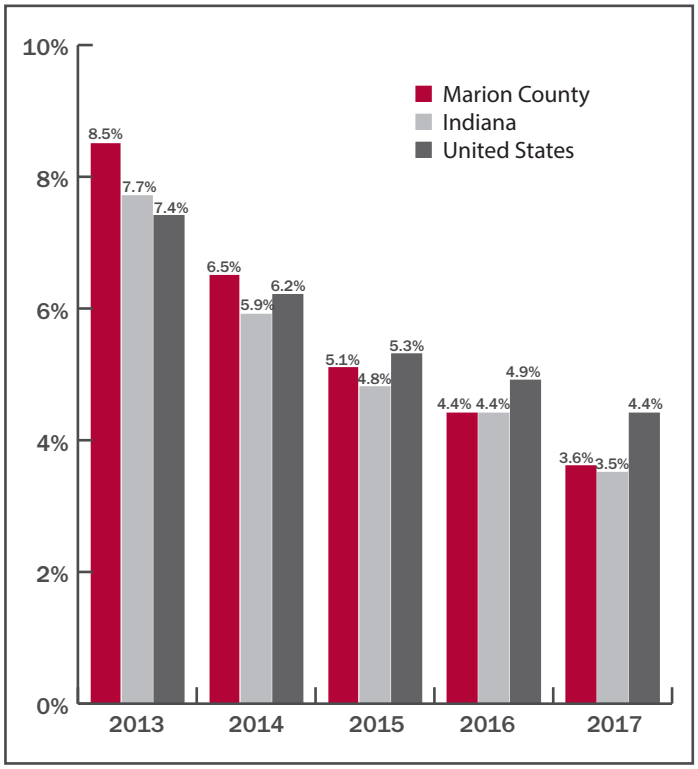
Exhibit 17 portrays the location of federally-designated low income census tracts in Marion County.

Observations

- Low income census tracts have been prevalent throughout Marion County and in areas surrounding the hospital.

Unemployment

Exhibit 18: Unemployment Rates, 2013-2017



Source: Bureau of Labor Statistics, 2018

Description

Exhibit 18 shows unemployment rates for 2013 through 2017 for Marion County, with Indiana and national rates for comparison.

Observations

- Between 2013 and 2017, unemployment rates at the local, state, and national levels declined significantly.
- Rates in Marion County have been at or above Indiana averages, but below U.S. averages. While these indicators apply to all households, unemployment affects poverty and resources available for households with children.

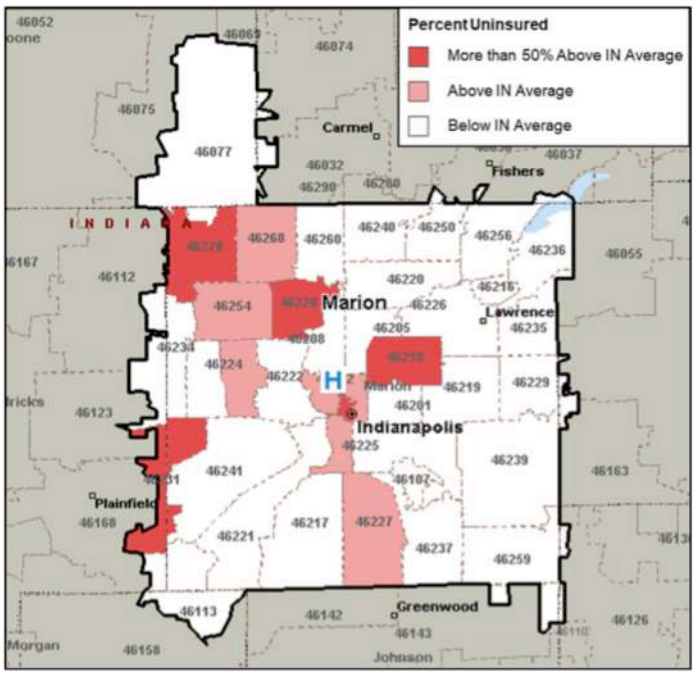
Insurance Status

Exhibit 19A: Percent of Children without Health Insurance, 2011-2016

County	Population	Population Uninsured	Percent Uninsured
Marion County	**231,567**	**14,699**	**6.3%**
Indiana	**1,578,190**	**115,030**	**7.3%**
United States	73,475,378	4,333,068	5.9%

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

Exhibit 19B: Percent of the Children without Health Insurance, 2011-2016



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

Description

Exhibit 19A presents the estimated percent of children uninsured in Marion County and Indiana in 2016. Exhibit 19B maps the 2016 child uninsured rates in Marion County by ZIP code.

Observations

- In 2016, child uninsured rates were comparatively high in ZIP codes 46231, 46228, 46218, 46278, and 46204.
- The overall child uninsured rate in Marion County was below the Indiana average, but higher than the national average.
- Hoosier Healthwise (HHW) was implemented statewide in 1997 and has been helpful in enhancing access to health services for children up to age 19 and pregnant women. The program covers medical care at little or no cost to the member or member's family. The Children's Health Insurance Program (CHIP) falls under the Hoosier Healthwise program for children up to age 19 whose families have slightly higher incomes. In CHIP, there is a low monthly premium and copays for certain services.
- Subsequent to the Affordable Care Act's passage, a June 2012 Supreme Court ruling provided states with discretion regarding whether or not to expand Medicaid eligibility. Indiana was one of the states that expanded Medicaid. Across the United States, uninsured rates have fallen most in states that decided to expand Medicaid.[7]

[7] *See: http://hrms.urban.org/briefs/Increase-in-Medicaid-under-the-ACA-reduces-uninsurance.html*

Crime

Exhibit 20: Crime Rates by Type and Jurisdiction, Per 100,000 Adults and Children, 2016

Indicator	Indianapolis (2016)	Indiana (2016)
Violent crime	1,374	407
Murder	17	7
Rape (revised definition)	79	38
Robbery	459	111
Aggravated assault	819	252
Property crime	4,795	2,607
Burglary	1,178	517
Larceny – theft	3,040	1,866
Motorvehicle theft	577	224

Source: Federal Bureau of Investigation, 2017

Description

Exhibit 20 provides selected crime statistics – for Indianapolis and for Indiana. Rates are calculated on a per-capita basis that includes both children and adults.

Observations

- 2016 crime rates in Indianapolis were well above Indiana averages.

Local Health Status and Access Indicators

This section assesses health status and access indicators for Marion County. Data sources include: (1) County Health Rankings, (2) the Indiana State Department of Health, and (3) the CDC's Youth Risk Behavior Survey. Only indicators directly relevant to child health are presented – including statistics regarding social determinants of health and measures such as adult smoking rates (due to risks associated with second-hand exposure) and environmental conditions.

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

County Health Rankings

Exhibit 21: County Health Rankings, 2015 and 2018

Measure	Marion County 2015	Marion County 2018
Health Outcomes	74	75
Health Factors	89	92
Length of Life	69	77
Quality of Life	74	79
Low birthweight	85	89
Health Behaviors	86	91
Adult smoking	47	76
Food environment index	92	89
Teen births	88	82
Clinical Care	32	24
Primary care physicians	12	11
Dentists	2	1
Mental health providers	2	3
Social & Economic Factors	92	92
High school graduation	90	92
Some college	19	20
Unemployment	54	48
Children in poverty	88	91
Income inequality	85	88
Children in single-parent households	92	92
Violent crime	71	69
Injury deaths	51	67
Physical Environment	68	90
Air pollution	57	91
Severe housing problems	87	90

Source: County Health Rankings, 2018

Description

Exhibit 21 presents a subset of the indicators available from *County Health Rankings*, a University of Wisconsin Population Health Institute initiative funded by the Robert Wood Johnson Foundation, that incorporates a variety of health status indicators into a system that ranks each county/city within each state in terms of "health factors" and "health outcomes." Indicators and composites are grouped into the following categories: health behaviors, clinical care,[8] social and economic factors, and physical environment.[9] *County Health Rankings* is updated annually. *County Health Rankings 2018* relies on data from 2006 to 2017, with most data from 2011 to 2016.

[8] *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.*

[9] *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.*

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

- In 2018, Marion County ranked in the bottom quartile of Indiana counties for a number of measures relevant to child health, including:
  - low birthweight births,
  - adult smoking,
  - food environment,
  - high school graduation rates,
  - children in poverty,
  - prevalence of children living in single-parent households,
  - violent crime,
  - injury deaths,
  - air pollution, and
  - severe housing problems.

Exhibit 22: County Health Rankings Data Compared to Indiana and U.S. Averages, 2018

Indicator Category	Indicator	Marion County	Indiana	U.S.
Health Outcomes				
Quality of life	Percentage of live births with low birthweight (< 2500 grams)	9.1	**8.0**	8.0
Health Factors				
Adult smoking	Percentage of adults who are current smokers	21.4	**21.1**	17.0
Food environment index	Index of factors that contribute to a healthy food environment, 0 (worst) to 10 (best)	6.6	**7.0**	7.7
Teen births	Number of births per 1,000 female population ages 15-19	41.4	**30.5**	27.0
Clinical Care				
Primary care physicians	Ratio of population to primary care physicians	1,245:1	**1,505:1**	1,320:1
Dentists	Ratio of population to dentists	1,179:1	**1,852:1**	1,480:1
Mental health providers	Ratio of population to mental health providers	402:1	**29.2**	470:1
Social and Economic Environment				
High school graduation	Percentage of ninth-grade cohort that graduates in four years	72.1	**87.2**	83.0
Some college	Percentage of adults ages 25-44 with some post-secondary education	62.3	**62.0**	65.0
Unemployment	Percentage of population ages 16 and older unemployed but seeking work	4.4	**4.4**	4.9
Children in poverty	Percentage of children under age 18 in poverty	28.0	**19.1**	20.0
Income inequality	Ratio of household income at the 80th percentile to income at the 20th percentile	4.8	**4.4**	5.0
Children in single-parent households	Percentage of children that live in a household headed by single parent	47.3	**33.7**	34.0
Violent crime	Number of reported violent crime offenses per 100,000 population	1,196.7	**356.2**	380.0
Injury deaths	Number of deaths due to injury per 100,000 population	83.3	**69.9**	65.0
Physical Environment				
Air pollution – particulate matter	Average daily density of fine particulate matter in micrograms per cubic meter (PM2.5)	12.3	**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	19.0	**14.0**	19.0

Source: County Health Rankings, 2018

Description

Exhibit 22 provides data for each underlying indicator of the composite categories in the County Health Rankings.[10] 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

- Marion County benchmarks unfavorably to Indiana and U.S. averages for most of the indicators incorporated into *County Health Rankings* that are relevant to child health.
- Marion County's rate of violent crime offenses per 100,000 population was more than 50 percent higher the Indiana average.

Community Health Status Indicators

Exhibit 23A: Community Health Status Indicators – Child Indicators, 2018

Indicator	Marion County
% Low Birth Weight	
Teen Birth Rate	
% Children in Poverty	
% Single-Parent Households	

Source: County Health Rankings and Verité Analysis, 2018.

Exhibit 23B: Other Community Health Status Indicator, 2018

Indicator	Marion County
% Smokers	
Food Environment Index	
% Uninsured	
Primary Care Physicians Rate	
Mental Health Professionals Rate	
High School Graduation Rate	
% Some College	
% Unemployed	
Income Ratio	
% Single-Parent Households	
Violent Crime Rate	
Injury Death Rate	

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. The indicators related to child health are presented above.

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 23 compares Marion 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

- Marion County ranks unfavorably compared to its peer counties for all child health indicators, particularly for its teen birth rate.
- Marion County ranks in the bottom quartile of its peer counties for the following other community health indicators:
  - Percent of adults smoking
  - Violent crime rate
  - Injury death rate
  - Average Daily PM2.5 (the average daily density of fine particulate matter in micrograms per cubic meter, a measure of air quality and pollution)

[10] *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*

Indiana State Department of Health

Exhibit 24: Maternal and Child Health Indicators, 2011-2015

Indicator	Marion County	Indiana
Infant Mortality Rate (per 1,000 Live Births)	8.6	**7.2**
Low Birthweight Percent	9.1%	**8.0%**
Preterm Births Percent	10.7%	**9.7%**
Early Prenatal Care Percent	64.3%	**68.1%**
Smoked During Pregnancy Percent	12.9%	**15.6%**
Unmarried Mothers Percent	54.5%	**43.2%**
Breastfeeding Percent	75.7%	**77.4%**
Mother on Medicaid Percent	57.9%	**44.3%**
Teen Birth Rate (15-17)	19.3	**13.6**
Teen Birth Rate (15-19)	41.5	**30.4**

Source: Indiana Department of Health, 2016

Description

Exhibit 24 presents various maternal and child health indicators. Light grey shading highlights indicators worse than Indiana averages.

Observations

- Nearly all of Marion County's maternal and child health indicators were higher than Indiana averages.

Exhibit 25: Maternal and Child Health Indicators by Race, 2015

Indicator	Indiana (2015) All	Indiana (2015) White	Indiana (2015) Black	Marion County (2015) All	Marion County (2015) White	Marion County (2015) Black
Infant Mortality Rate (per 1,000)	7.3	6.3	13.2	8.0	6.1	10.2
Neonatal Mortality Rate (per 1,000)	4.8	4.3	8.2	5.3	3.7	6.7
Post-Neonatal Mortality Rate (per 1,000)	2.5	2.1	5.0	2.8	2.4	3.5
Mothers Receiving Prenatal Care in 1st Trimester	69.3%	71.5%	59.4%	66.9%	71.8%	60.4%
Mothers who Breastfed at Discharge	80.5%	81.9%	68.5%	77.9%	81.0%	70.0%
Low Birthweight Infants	8.0%	7.4%	12.4%	9.2%	7.6%	12.8%
Very Low Birthweight Infants	1.5%	1.3%	2.7%	1.8%	1.4%	2.6%
Mothers Smoked During Pregnancy	14.3%	15.6%	11.1%	10.9%	12.9%	9.1%
Preterm Births	9.6%	9.2%	12.8%	11.1%	9.9%	13.9%

Source: Indiana Department of Health, 2016

Description

Exhibit 25 presents various maternal and child health indicators by race for Marion County and Indiana. Light grey shading highlights indicators worse than Indiana averages.

Observations

- Nearly all of Marion County's maternal and child health indicators were higher than Indiana averages.
- Rates of Black infant mortality, neonatal mortality, and post-neonatal mortality were nearly double the rates for Whites both in Marion County and Indiana.
- Marion County's rates of low birthweight births and preterm births were higher than Indiana averages both in total and by race.

Exhibit 26: Maternal and Child Health Indicators, 2010-2015

Indicator	Indiana 2010	Indiana 2015	Marion County 2010	Marion County 2015
All Races				
Infant Mortality Rate	7.5	7.3	9.7	8.0
Neonatal Mortality Rate	4.9	4.8	6.9	5.3
Post-Neonatal Mortality Rate	2.7	2.5	2.9	2.8
Mothers Receiving Prenatal Care in 1st Trimester	68.5%	69.3%	63.6%	66.9%
Mothers who Breastfed at Discharge	72.1%	80.5%	70.1%	77.9%
Low Birthweight Infants	8.0%	8.0%	9.6%	9.2%
Very Low Birthweight Infants	1.4%	1.5%	2.0%	1.8%
Mothers Smoked During Pregnancy	17.1%	14.3%	15.3%	10.9%
Preterm Births	10.0%	9.6%	11.8%	11.1%

Source: Indiana Department of Health, 2016

Description
Exhibit 26 provides 2010 and 2015 maternal and infant health indicators for Marion County and Indiana.

Observations
- Indicators for infant mortality, mothers receiving prenatal care, mothers who breastfed at discharge, mothers who smoked during pregnancy, and preterm births all improved between 2010 and 2015 in Marion County and Indiana.

Exhibit 27: Causes of Infant Deaths, 2006-2015

Cause of Infant Mortality	Marion County	Indiana
Perinatal Risks	53.5%	48.0%
Congenital Malformations	19.8%	22.8%
Sudden Unexpected Infant Deaths (SUIDs)	12.1%	13.5%
Assaults or Accidents	0.0%	4.7%
All Other Causes	14.7%	10.9%

Source: Indiana Department of Health, 2016

Description
Exhibit 27 depicts the distribution of causes of infant deaths for 2006 – 2015 in Marion County and Indiana.

Observations
- Perinatal risks and All Other Causes accounted for a higher proportion of infant deaths in Marion County than in Indiana.

Exhibit 28: Childhood Cancer Incidence, 2010-2014

Indicator	Marion County	Indiana	United States
Childhood Cancer (< age 15)	16.5	16.1	16.1
Childhood Cancer (< age 20)	18.1	17.3	17.6

Source: Indiana Department of Health, 2016

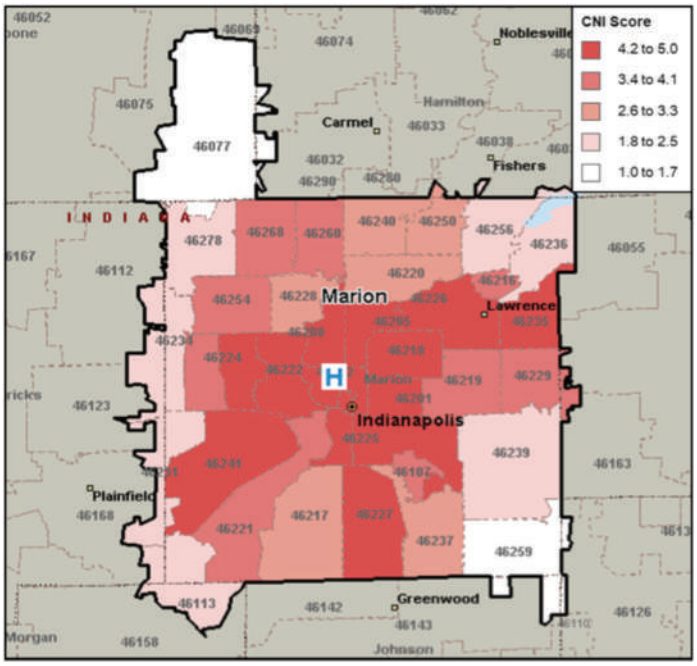
Description
Exhibit 28 shows incidence rates for childhood cancer by age group for Marion County, with Indiana and United States averages as comparison.

Observations
- Rates of childhood cancer for both age categories in Marion County were slightly higher than state and national averages.

Community Need Index™ and Food Deserts

Dignity Health Community Need Index

Exhibit 29: Community Need Index, 2017



Source: Microsoft MapPoint and Dignity Health, 2017

Description

Exhibit 29 presents the *Community Need Index*™ (CNI) score for each ZIP codes in Marion County. Higher scores (e.g., 4.2 to 5.0) indicate higher levels of community need. The national median score is calibrated to 3.0.

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

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

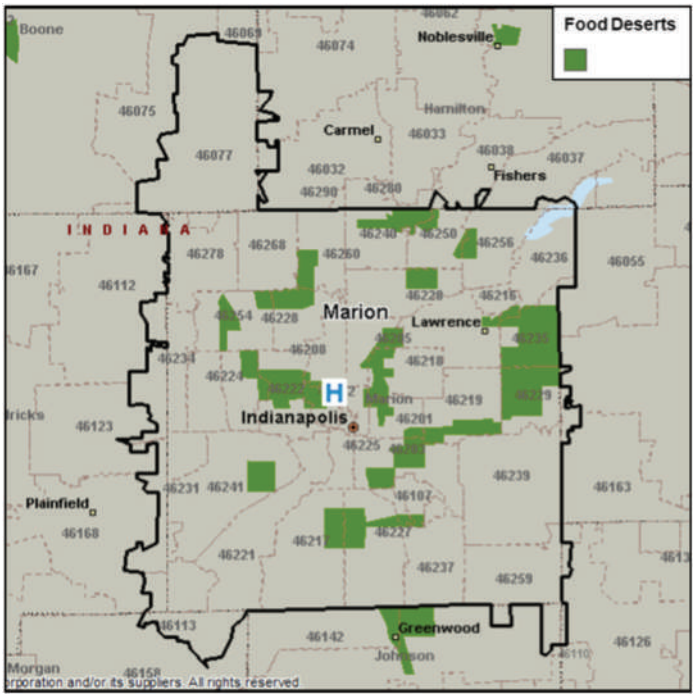
CNI scores are grouped into "Lowest Need" (1.0-1.7) to "Highest Need" (4.2-5.0) categories

Observations

- Marion County scored a 3.8 on the CNI scale (on a weighted average basis), indicating that higher than average need exists in the county.
- Fourteen of 38 Marion County ZIP codes scored in the "highest need" category. Many of these are located in Indianapolis and proximate to the hospital.

Food Deserts

Exhibit 30: Food Deserts, 2017



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

Description

Exhibit 30 shows the location of "food deserts" in the community.

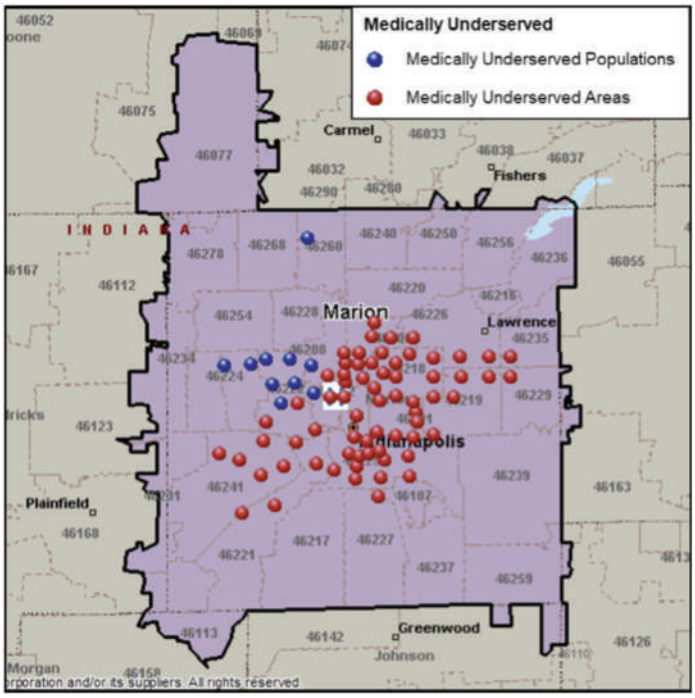
The U.S. Department of Agriculture's Economic Research Service defines urban food deserts as low-income areas more than one mile from a supermarket or large grocery store and rural food deserts as more than 10 miles from a supermarket or large grocery store. Many government-led initiatives aim to increase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

Observations

- Several census tracts in Marion County have been designated as food deserts, including several close to the hospital.

Medically Underserved Areas and Populations

Exhibit 31: Medically Underserved Areas, 2017



Source: Microsoft MapPoint and HRSA, 2017

Description

Exhibit 31 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.[11] 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."[12]

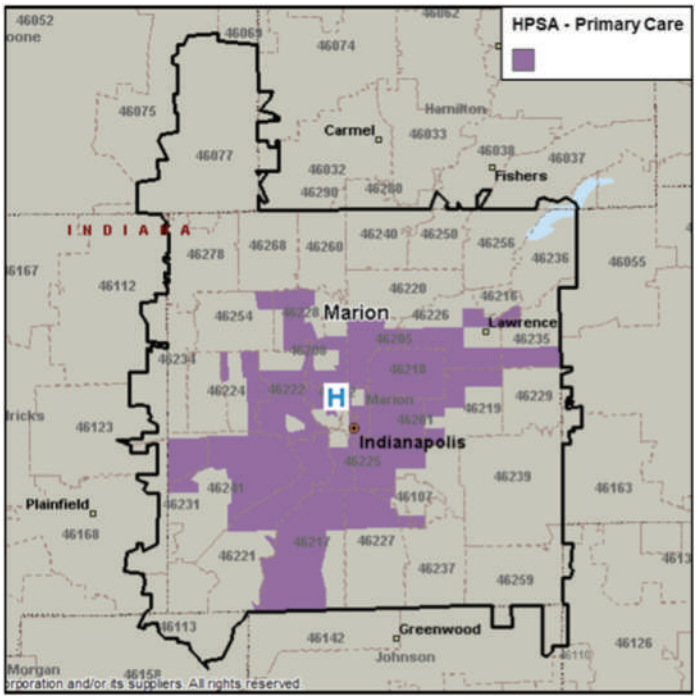
Observations

- Many census tracts throughout Marion County and Indianapolis have been designated as Medically Underserved, particularly in areas proximate to the hospital.

[11] *Heath Resources and Services Administration. See http://www.hrsa.gov/shortage/mua/index.html*

Health Professional Shortage Areas (HPSA)

Exhibit 32A: Primary Care Health Professional Shortage Areas, 2018



Source: Health Resources and Services Administration, 2018

Description

Exhibit 32A depicts the locations of federally-designated primary care HPSA areas.

A geographic area can receive a federal Health Professional Shortage Area (HPSA) designation if a shortage of primary medical care, dental care, or mental health care professionals is found to be present. In addition to areas and populations that can be designated as HPSAs, a health care facility can receive federal HPSA designation and an additional Medicare payment if it provides primary medical care services to an area or population group identified as having inadequate access to primary care, dental, or mental health services. HPSAs can be: "(1) An urban or rural area (which need not conform to the geographic boundaries of a political subdivision and which is a rational area for the delivery of health services); (2) a population group; or (3) a public or nonprofit private medical facility."[13]

Observations

- Primary Care HPSAs are present throughout Marion County

[12] *Ibid.*

[13] *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*

Exhibit 32B: Dental Care Health Professional Shortage Areas, 2018

Source: Health Resources and Services Administration, 2018

Description
Exhibit 32B shows the locations of federally-designated dental care HPSA areas.

Observations
- Several census tracts in the community have been designated as Dental Care HPSAs.

Exhibit 32C: Mental Health Care Health Professional Shortage Areas, 2018

County	HPSA Name	HPSA Type Description
Marion	Adult and Child Mental Health Center, Inc.	Federally Qualified Health Center Look A Like
Marion	Health and Hospital Corporation of Marion County	Comprehensive Health Center
Marion	Healthnet Inc.	Comprehensive Health Center
Marion	Jane Pauley Community Health Center	Comprehensive Health Center
Marion	Indiana Health Centers	Comprehensive Health Center
Marion	Indiana Women's Prison	Correctional Facility
Marion	Raphael Health Center	Comprehensive Health Center
Marion	Shalom Health Care Center, Inc.	Comprehensive Health Center

Source: Health Resources and Services Administration, 2018

Description
Exhibit 32C lists federally-designated mental health care HPSA facilities in Marion County.

Observations
- Several facilities located in Marion County have been designated as Mental Health Care HPSAs.

Findings of Other Community Health Needs Assessments

Marion County Community Health Assessment
An assessment of health in Marion County was published in 2014 by the Marion County Public Health Department.[14] Six work groups, representing community stakeholders, focused on specific age groups and identified key health issues using accepted, pre-set criteria. Health needs were identified for various children by age-group, summarized below:

Significant Needs for Ages 0 – 4 Years
- Expectant mothers are failing to get "timely and adequate" prenatal care.
- Marion County experiences high rates of premature birth among Black mothers, leading to inequity in birth outcomes. In Marion County, Black infants are almost three times more likely to die than white infants due to short gestation and low birth weight.
- The county also experiences high rates of maternal smoking, putting infants at risk of health complications. Over 24 percent of all low birth weight births in the county were associated with maternal smoking.

Significant Needs for Ages 5 – 11 Years
- There is a high prevalence of obesity and overweight children, and those at risk of being overweight. Over 40 percent of children in this age group were found to be overweight.
- Asthma prevalence and exposure to tobacco smoke is high, with over 19 percent of Marion County children in this age group diagnosed with asthma.
- Mental health issues, particularly ADHD and depression, are significant concerns among this age group.

Significant Needs for Ages 12 – 17 Years
- Poverty and hunger are widespread among this age group, as nearly a third of Marion County households with children met federal poverty guidelines in 2010 and about 30 percent reported occasional or frequent food insecurity.
- Homicide is the leading cause of death for 15 to 24 year olds in Marion County, and the third leading cause of death for 10 to 14 year olds.
- Depression and suicide risk rates are high for this age group, as 16 percent were diagnosed with depression. Suicide is the fourth leading cause of death for 10 to 14 year olds in the county, and third for 15 to 24 year olds.

The Marion County Public Health Department (MCPHD) is working to publish an updated Community Health Assessment by the end of 2018.

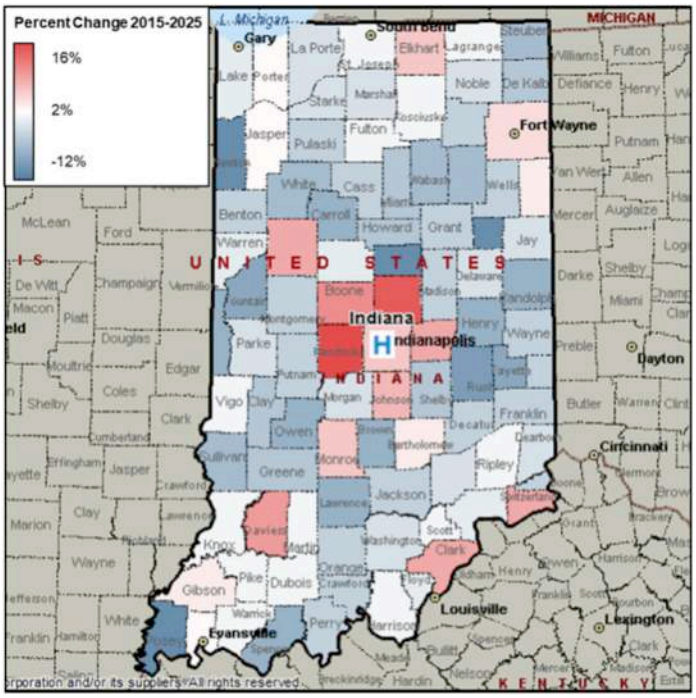
[14] *Available at: http://marionhealth.org/mcphd-community-health-assessment-2014/*

APPENDIX C – SECONDARY DATA ASSESSMENT (INDIANA)

This section presents an assessment of secondary data regarding child health needs in the State of Indiana.

Demographics

Exhibit 33: Projected Child Population (Aged 0-19) Change, 2015-2025



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

Description

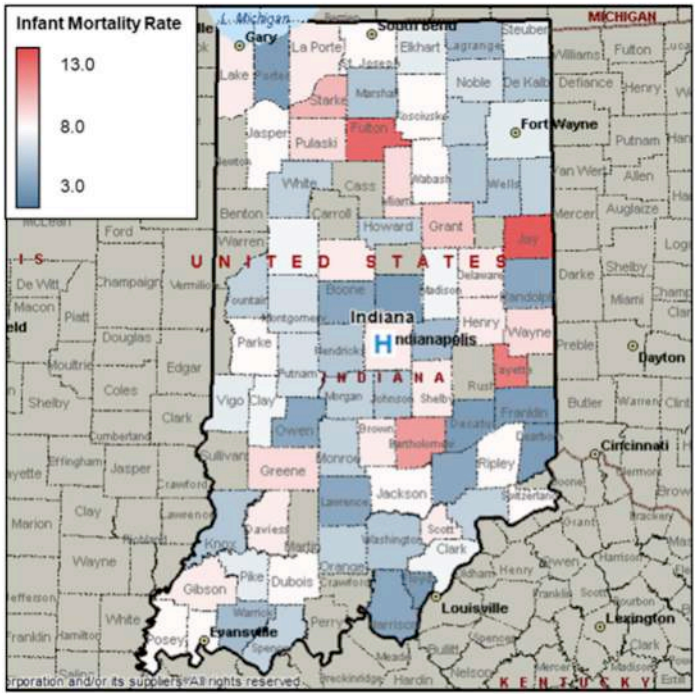
Exhibit 33 maps the percent change in children projected between 2015 and 2025. Overall, the Indiana aged 0-19 population is projected to increase 4.8 percent during this time period.

Observations

- The highest growth rates in population aged 0-19 appears to be in central Indiana counties, particularly Marion County and bordering counties.

Indiana Child Health Status and Access Indicators

Exhibit 34: Infant Mortality Rate, 2011-2015



Source: Indiana Department of Health, 2016

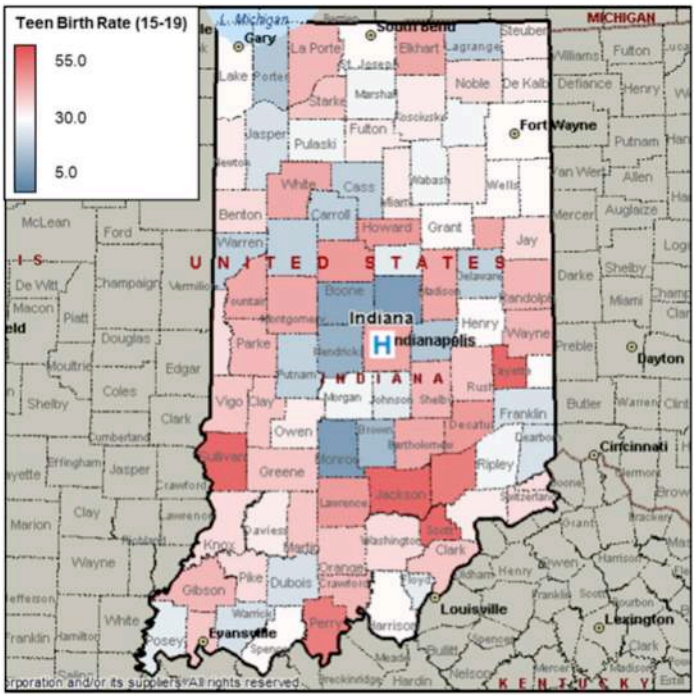
Description

Exhibit 34 maps infant mortality rates in Indiana for 2011-2015.

Observations

- Jay County, Fulton County, and Fayette County had the highest rates of infant mortality.

Exhibit 35: Teen Birth Rate, 2011-2015



Source: Indiana Department of Health, 2016

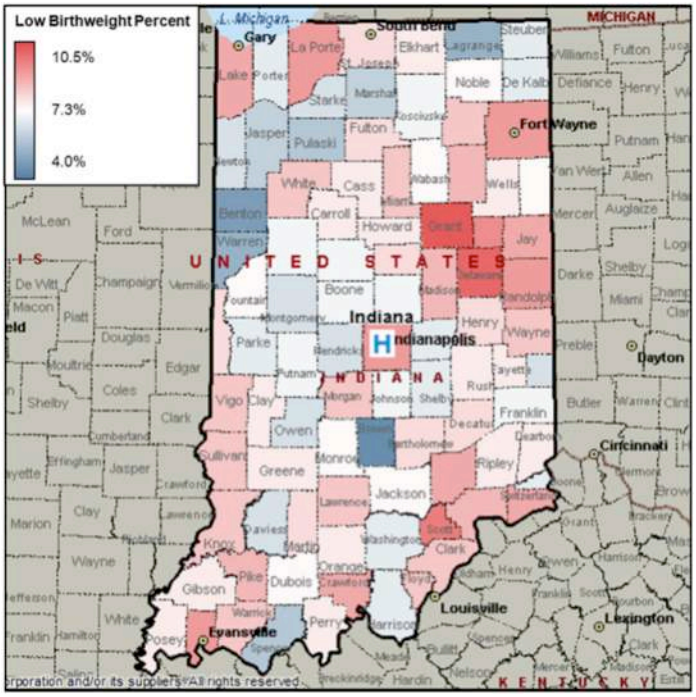
Description

Exhibit 35 maps the birth rate for females aged 15-19 for 2011-2015.

Observations

- The highest rates of teen births were seen in the southern portion of Indiana.

Exhibit 36: Low Birthweight Births, 2011-2015



Source: Indiana Department of Health, 2016

Description

Exhibit 36 maps the percent of low birthweight births in Indiana.

Observations

- Grant and Delaware Counties had the highest percentages of low birth weight births in the state.

Exhibit 37: Child Obesity Indicators, 2014-2016

Indicator	Indiana	United States	Indiana State Rank	States Ranked	Data Year
Obesity – Age 2-4 WIC Partici-pants	14.3%	14.5%	25	51	2014
Over-weight and Obesity – Age 10-17	33.9%	31.2%	42	51	2016
Obesity – High School Students	13.6%	13.9%	20	43	2015

Source: State of Obesity, 2018

Description

Exhibit 37 shows childhood obesity indicators for Indiana with national rates for comparison. The exhibit also provides a rank for Indiana among all ranked states (including the District of Columbia).

Observations

- Indiana had a higher rate of overweight and obese children aged 10-17 than the national average, ranking 42nd out of 51 ranked states.

Exhibit 38: Indiana Youth Risk Behavior Survey (YRBS), 2015

Category	Indicator	Indiana Total	Indiana Black	Indiana Hispanic (or Latino)	Indiana White	United States
Health Risks	Rarely or Never Wore a Bicycle Helmet	88.7	95.7	93.4	87.6	81.4
	Rarely or Never Wore a Seat Belt	5.9	7.0	9.6	5.1	6.1
	Rode with Driver who had been Drinking Alcohol	17.9	21.6	22.4	17.0	20.0
	Drove when Drinking Alcohol	6.3	–	6.5	6.3	7.8
	Texted or E-mailed while Operating Vehicle	43.1	–	39.3	46.0	41.5
Violence	Carried a Weapon	19.6	9.5	13.6	21.4	16.2
	Carried a Gun	6.2	4.4	5.4	6.4	5.3
	Carried a Weapon on School Property	5.6	2.1	5.0	6.0	4.1
	Did Not Go to School because Felt Unsafe	6.7	10.7	8.5	5.9	5.6
	Threatened or Injured with Weapon at School	6.6	8.5	5.7	5.9	6.0
	In a Physical Fight	18.1	24.3	16.2	16.9	22.6
	Injured in a Physical Fight	2.2	2.9	3.3	1.8	2.9
	In a Physical Fight on School Property	5.5	9.8	6.5	4.5	7.8
	Forced to have Sexual Intercourse	10.0	10.5	15.0	9.1	6.7
	Experienced Physical Dating Violence	10.0	15.0	6.9	9.3	9.6
	Experienced Sexual Dating Violence	12.6	12.7	13.8	12.2	10.6
	Bullied on School Property	18.7	14.3	19.2	18.7	20.2
	Electronically Bullied	15.7	8.9	14.0	16.1	15.5
Mental Health	Felt Sad or Hopeless	29.3	31.2	36.8	28.4	29.9
	Seriously Considered Attempting Suicide	19.8	22.2	23.8	18.9	17.7
	Made a Plan about how they would Attempt Suicide	17.0	19.1	20.9	15.8	14.6
	Attempted Suicide	9.9	14.5	15.5	8.7	8.6
Tobacco	Ever Tried a Cigarette	36.9	28.3	43.6	37.8	32.3
	Smoked a Whole Cigarette before Age 13	8.2	8.8	8.5	8.2	6.6
	Currently Smoked Cigarettes	11.2	7.1	8.6	12.1	10.8
	Frequently Smoked Cigarettes	3.4	1.3	1.0	3.9	3.4
	Smoked Cigarettes Daily	2.8	1.3	0.9	3.2	2.3
	Currently Used Smokeless Tobacco	9.4	4.8	8.1	10.1	7.3
	Currently Tried Cigars	11.4	12.0	12.7	11.7	10.3
	Ever Used Electronic Vapor Products	43.9	39.8	48.5	44.6	44.9
	Currently Used Electronic Vapor Products	23.9	14.9	26.0	25.3	24.1
	Currently Used Tobacco	32.4	24.7	34.7	33.8	31.4
	Currently Used Cigarettes, Cigars, or Smokeless Tobacco	21.4	16.1	20.3	22.7	18.5
	Currently Smoked Cigarettes or Cigars	17.6	14.4	16.3	18.6	16.0
Alcohol	Ever Drank Alcohol	62.3	54.6	62.4	63.6	63.2
	Drank Alcohol Before Age 13	15.4	18.7	25.2	13.1	17.2
	Currently Drank Alcohol	30.5	23.3	33.8	31.3	32.8
	Drank Five or More Drinks in a Row	17.4	9.9	19.2	18.7	17.7
	Ever had 10 or More Drinks in a Row	4.3	1.8	2.9	4.7	4.3
Drug Use	Ever Used Marijuana	35.1	43.3	45.8	32.7	38.6
	Tried Marijuana Before Age 13	6.2	6.7	10.1	5.4	7.5
	Currently Used Marijuana	16.4	23.2	18.1	14.9	21.7
	Ever Used Cocaine	4.0	3.7	7.8	3.6	5.2
	Ever Used Inhalants	7.4	12.1	6.7	6.7	7.0
	Ever Used Heroin	2.4	2.8	6.6	1.7	2.1
	Ever Used Methamphetamines	2.9	3.7	3.2	2.4	3.0

Exhibit 38: Indiana Youth Risk Behavior Survey (YRBS), 2015 (continued)

Category	Indicator	Indiana Total	Indiana Black	Indiana Hispanic (or Latino)	Indiana White	United States
Drug Use (cont.)	Ever Used Ecstasy	5.0	4.9	8.4	4.8	5.0
	Ever Used Synthetic Marijuana	10.8	10.0	14.9	10.3	9.2
	Ever Took Steroids (without prescription)	3.2	3.9	4.7	2.9	3.5
	Ever Took Prescription Drugs (without prescription)	16.8	14.1	22.0	16.7	16.8
	Ever Injected Any Illegal Drug	2.2	3.3	2.5	1.8	1.8
	Offered, Sold, or Given an Illegal Drug at School	22.5	31.1	28.2	20.2	21.7
Sexual Activity	Ever had Sexual Intercourse	41.7	47.2	42.9	41.7	41.2
	Had Sexual Intercourse Before Age 13	3.0	4.5	2.8	2.6	3.9
	Had Sexual Intercourse with Four or More Persons	8.7	12.2	10.3	8.0	11.5
	Currently Sexually Active	31.7	31.0	34.2	31.6	30.1
Healthy Living	Obese	13.6	12.7	20.7	12.7	13.9
	Overweight	17.3	21.9	18.0	17.1	16.0
	Described Themselves as Slightly or Very Overweight	31.6	27.9	40.7	31.2	31.5
	Trying to Lose Weight	46.9	43.7	58.3	46.0	54.4
	Drank Soda Once or More Per Day	20.0	20.4	14.8	20.9	20.4
	Not Physically Active at least 60 Minutes Per Day	74.7	85.1	80.6	72.6	72.9
	Watched Television 3 or More Hours Per Day	22.3	38.2	20.7	20.1	24.7
	Played Video Games or Used Computer 3 or More Hours Per Day	38.4	43.2	40.7	37.6	41.7
	Did not see a Dentist in Past Year	25.7	36.1	37.1	22.4	25.6
	Ever Been Told Have Asthma	23.9	30.7	23.7	23.4	22.8
	Did not have 8 or More Hours of Sleep on Average	78.6	82.4	85.2	77.4	72.7

Source: Indiana State Department of Health, 2016

Description

Exhibit 38 provides statewide data from the Indiana Youth Risk Behavior Survey (YRBS), part of a nationwide surveying effort led and funded by the Centers for Disease Control and Prevention (CDC) to monitor student health risks and behaviors in six categories, including:

- Weight and diet
- Physical activity
- Injury and violence
- Tobacco use
- Alcohol and other drug use
- Sexual behaviors

Light grey shading highlights indicators found to be worse than the national average; dark grey shading highlights indicators more than 50 percent worse than the national average.

Observations

- Indiana indicators were worse than national rates for the following youth risks:
  - Rarely or Never Wore a Bicycle Helmet
  - Did not have 8 or More Hours of Sleep on Average
  - Ever Tried a Cigarette
  - Carried a Weapon
  - Forced to have Sexual Intercourse
  - Currently Used Cigarettes, Cigars, or Smokeless Tobacco
  - Made a Plan about how they would Attempt Suicide
  - Seriously Considered Attempting Suicide
  - Currently Used Smokeless Tobacco
  - Experienced Sexual Dating Violence
  - Not Physically Active at least 60 Minutes Per Day

Exhibit 39: Indiana Youth Survey – 10th Grade Substance Use, 2013-2017

Indicator	2013	2015	2017	Percent Change 2015-2017	Percent Change 2013-2017
Cigarettes	12.6%	10.7%	8.0%	-25.2%	-36.5%
Smokeless Tobacco	6.7%	5.3%	3.8%	-28.3%	-43.3%
Cigars	5.8%	4.8%	3.7%	-22.9%	-36.2%
Pipe	5.7%	5.7%	3.0%	-47.4%	-47.4%
Electronic Vapor Products	–	18.2%	14.0%	-23.1%	–
Alcohol	24.7%	22.8%	22.4%	-1.8%	-9.3%
Binge Drinking	16.0%	10.1%	9.5%	-5.9%	-40.6%
Marijuana	13.7%	14.0%	14.1%	0.7%	2.9%
Synthetic Marijuana	2.8%	1.9%	1.2%	-36.8%	-57.1%
Cocaine/Crack	1.0%	0.7%	0.5%	-28.6%	-50.0%
Inhalants	1.1%	0.8%	0.7%	-12.5%	-36.4%
Methamphetamines	0.7%	0.5%	0.3%	-40.0%	-57.1%
Heroin	0.5%	0.3%	0.2%	-33.3%	-60.0%
Hallucinogens/Ecstasy	1.2%	1.8%	1.6%	-11.1%	33.3%
Prescription Drugs	4.3%	4.4%	3.5%	-20.5%	-18.6%
Over the Counter Drugs	2.4%	3.3%	3.4%	3.0%	41.7%

Source: Indiana Youth Survey, 2017

Description

Exhibit 39 provides statewide data for the Indiana Youth Survey for 2013, 2015, and 2017, depicting 10th grade cohort use of substances during this time. Light grey shading highlights indicators and substances that have shown an increase in usage according to the survey.

Observations

- Most of the indicators show a reduction in substance uses during the 2013-2017 time frame.
- Exceptions include electronic vapor products, Marijuana, hallucinogens, and over the counter (OTC) drugs.

Exhibit 40: America's Health Rankings, Health in Women and Children, 2016

Measure	Rank
Smoking During Pregnancy	46
Maternal Mortality	44
Protective Home Environment (Ages 0-5)	44
Developmental Screening	43
Immunizations – Children	42
Well-Baby Check	42
Household Smoke	41
Neonatal Mortality	40
Under Age 5 Mortality	40
Community & Environment-Infants	39
Adverse Childhood Experiences	38
Health Status – Children	38
Publicly-Funded Women's Health Services	38
Community & Environment-Children	37
Screen Time – Ages 1 to 5	37
Tobacco Use During Pregnancy	37
Behaviors – Infants	36
Infant Mortality	36
Outcomes – Children	35
Outcomes – Infants	35
Protective Home Environment (Ages 6-17)	35
Teen Births	35
Child Mortality	34
Overall – Infants	33
Overall – Children	31
Activities Outside School	30
Children with Health Insurance	30
Overweight or Obese-Youth	30
Clinical Care-Infants	30
Tobacco Use-Youth	30
Youth Mortality	30
Adequate Health Insurance	29
Preterm Birth	29
All Determinants – Children	28
All Determinants – Infants	28
Missed School Days	28
Teen Suicide	28
Clinical Care-Children	27
Prenatal Care Before 3rd Trimester	27
Low Birthweight	25

Exhibit 40: America's Health Rankings, Health in Women and Children, 2016 (continued)

Measure	Rank
Drug Dependence or Abuse – Youth	24
Low-Risk Cesarean Delivery	24
Adolescent Well-Visit	23
Behaviors – Children	23
Unintended Pregnancy	22
Infant Child Care Cost	21
Breastfed	20
Immunizations – Adolescents	16
Alcohol During Pregnancy	13
Home Health Visit	10
Homeless Family Households	8
Baby-Friendly Facility	7
Medical Home for Special Care Child	5

Source: Indiana Youth Survey, 2017

Description

Exhibit 40 depicts America's Health Rankings Health in Women and Children for the State of Indiana. Indiana was measured against each state in the nation and ranked for each indicator. Light grey shading indicates rankings in the bottom half of U.S. states; dark grey shading indicates rankings in bottom quartile.

Observations

- Within all states in the U.S., Indiana was ranked in the bottom quartile or half for more than two-thirds of the measures. The state ranked particularly unfavorably for:
  - Mothers Smoking During Pregnancy
  - Maternal Mortality
  - Protective Home Environment (Ages 0-5)
  - Developmental Screening
  - Immunizations – Children
  - Well-Baby Check
  - Household Smoke
  - Neonatal Mortality
  - Under Age 5 Mortality
  - Community & Environment-Infants
  - Adverse Childhood Experiences
  - Health Status – Children
  - Publicly-Funded Women's Health Services

Exhibit 41: Indiana-Wide CHSI, Counties in Bottom Half of Peers, 2018

Indicator	Counties Ranked in Bottom Half	Percent IN Counties in Bottom Half
Average Daily PM2.5	91	98.9%
% Smokers	85	92.4%
% Some College	66	71.7%
Teen Birth Rate	66	71.7%
Mental Health Professionals Rate	62	67.4%
% Low Birth Rate	59	64.1%
Primary Care Physicians Rate	54	58.7%
Dentist Rate	52	56.5%
% Children Living in Single-Parent Households	49	53.3%
% Children in Poverty	47	51.1%
Food Environment Index	47	51.1%
Injury Death Rate	46	50.0%
Social Association Rate	40	43.5%
% Severe Housing Problems	36	39.1%
% Unemployed	35	38.0%
Violent Crime Rate	29	31.5%
Income Ratio	29	31.5%
High School Graduation Rate	26	28.3%

Source: County Health Rankings and Verité Analysis, 2018.

Description

Exhibit 41 provides statewide data for the Community Health Status Indicators, depicting how many Indiana counties (out of 92) were ranked in the bottom half compared to their respective peer counties for each CHSI indicator. For further information on CHSI methodology, *see* Exhibit 25.

Observations

- The CHSI data indicate that Indiana counties rank particularly unfavorably for the following child-related indicators:
  - Average Daily PM2.5 (the average daily density of fine particulate matter in micrograms per cubic meter, a measure of air quality and pollution)
  - Percent of adults who smoke
  - Percent with some college education
  - Teen birth rate
  - Supply of mental health professionals
  - Low birth weight

Findings of Other Community Health Needs Assessments

Indiana State Health Assessment and Improvement Plan

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

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

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

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

- After reviewing assessments from local health assessments around the state, the IHIP observed that ten needs were most often identified as priorities:
  - Access to care
  - Mental and behavioral health
  - Obesity
  - Substance abuse disorders
  - Nutrition and physical activity
  - Diabetes
  - Tobacco use
  - Heart disease
  - Cancer
  - Maternal and infant health
- The initial prioritization of health needs by the IHIP steering committee focused on the following areas:
  - Social determinants of health and health equity
  - Improving public health infrastructure (funding and culture/equality of public health practices)
  - Improving health and reducing health disparities, particularly in the areas of chronic disease, birth outcomes and infant mortality, reduced injury and death due to opioid exposure, and improved access to mental health services
- When asked about barriers to achieving optimal health in their communities, key informants indicated that low staffing levels, low funding levels, not being able to break cultural barriers, increases in drug use, poverty and apathy, lack of free clinics, unaffordable healthcare and medications, lack of available affordable housing, provider billing, and limited local resources as major limitations.
- Social determinants of health were recognized as a key component to achieving optimal health in Indiana, with a recognition to improve population health, "the public health system must expand to include non-traditional partners such as transportation, workforce development, and housing."
- 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.

[15] *Available at: https://www.in.gov/isdh/18888.htm*

These priorities were:

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

The State of Obesity in Indiana

The State of Obesity database is an initiative from the Robert Wood Johnson Foundation to track obesity and comorbidities across the country. For more than a decade, an annual report, *The State of Obesity* (formerly *F as in Fat*) has raised awareness about the seriousness of the obesity epidemic, encouraged the creation of a national obesity prevention strategy and highlighted promising approaches for reversing the epidemic at the state and local level. The report series is a collaborative project of the Trust for America's Health and the Robert Wood Johnson Foundation and is supported by a grant from the Foundation.[16]

The initiative found the following about obesity in Indiana for 2017:

- Indiana had the 12th highest adult obesity rate in the nation overall at 33.6 percent.
- This obesity percentage has increased greatly in the past decades, with the rate in Indiana in 1990 at 13.3 percent, in 2000 at 20.5 percent, and in 2010 at 29.1 percent.
- Indiana also had the ninth highest overweight and obesity rate for youth (ages 10 to 17) as of 2016, at 33.9 percent overall.
- Disparities are evident in Indiana obesity rates. Over 42 percent of Black residents in Indiana were obese in 2017, while this rate was 32.1 percent for White residents and 28.2 percent for Latino residents.
- Several other conditions linked to obesity also display high rates in Indiana, including:
  - Diabetes has an incidence rate of 11.8 percent in Indiana adults, ranked the eleventh highest in the country
  - Hypertension has an incidence rate of 35.2 percent in Indiana adults, ranked the eleventh highest in the country
- Over 19 percent of children in Indiana are food insecure, and overall 14.4 percent of the state population is food insecure. Food insecurity is defined as "living in homes that had limited or uncertain access to food at some point during the year."

Indiana Tobacco Control 2020 Strategic Plan

The 2020 Indiana Tobacco Control Strategic Plan is a State plan coordinated by the Tobacco Prevention and Cessation Commission (TPC) of the Indiana State Department of Health. TPC seeks the input and collaboration of many partners, from state agencies to grassroots community organizations working together in implementing this plan to reduce Indiana's burden from tobacco.

Specific findings from the plan are described below:

- Tobacco use continues to be the single most preventable cause of death and disease in Indiana, costing Indiana and its residents 11,100 lives and nearly $3 billion in health care costs annually.
- Despite a decline in the rate of smoking in Indiana in the past 15 years, more than one million adults in Indiana still smoke cigarettes, with the smoking rates among pregnant women, those with any mental illness, and those with low education levels higher than the general population rate.
- Cigarette smoking among high school students has dropped to 12 percent; however, the trends with other tobacco products (such as electronic cigarettes) are concerning.
  - In 2014, 29.0 percent of high school youth and 11.2 percent of middle school youth in Indiana reported ever trying e-cigarettes.
  - Additionally, 15.6 percent of high school students and 5.2 percent of middle school students reported using e-cigarettes in the past 30 days.
- The Strategic Plan established specific strategies and measurable objectives for the time period 2014/2015 to 2020, including:
  - Decrease smoking among high school youth, from 12.0 percent to 9.0 percent.
  - Increase proportion of school districts with a tobacco free campus policy which includes Electronic Nicotine Delivery Systems, from 10 percent to 50 percent.
  - Decrease smoking among all adults (from 23 percent to 18 percent), among Medicaid members (from 47 percent to 35 percent), and among pregnant women (from 15 percent to 8 percent).

[16] *For more information, see https://stateofobesity.org/about/.*

APPENDIX D – INTERVIEWEES AND COMMUNITY MEETING PARTICIPANTS

Individuals from a wide variety of organizations and communities participated in the interview process and/or community meetings (**Exhibit 42**).

Exhibit 42: Interviewee and Community Meeting Participant Organizational Affiliations

- Adult and Child Health
- All Senior Citizens Connect
- Central Indiana Council on Aging (CICOA)
- City of Indianapolis
- Coburn Place
- Community Health Network
- Gennesaret Free Clinics
- Gleaners Food Bank
- Health by Design
- IU Health Methodist Hospital
- IU Health University Hospital
- Indiana Youth Institute
- Indianapolis Fire Department
- Indianapolis Metropolitan Police Department
- Indy Hunger Network
- Indianapolis Parks and Recreation
- Irvington Development Organization
- Jump IN for Healthy Kids
- Lawrence Community Gardens
- Marion County Public Health Department
- New Beginnings Church
- Paramount Schools of Excellence
- Progress House
- Purdue Extension
- Riley Hospital for Children at IU Health
- The Polis Center
- University of Indianapolis

APPENDIX E – EVALUATION OF PROGRAM IMPACTS

This appendix highlights Indiana University Health Academic Health Center's ("IU Health") initiatives and related impact, both expected and achieved, in addressing significant community health needs since the last Community Health Needs Assessment (CHNA) in 2015. This is not an inclusive list of all initiatives aligned with the 2015 CHNA. For purposes of this appendix, IU Health includes IU Health Methodist Hospital, IU Health University Hospital, and Riley Hospital for Children at IU Health.

Healthy Weight and Nutrition

- **Community Connections for Improved Health.** IU Health provided $30,000 in support to the YMCA of Greater Indianapolis for its Community Connections for Improved Health, a diabetes prevention program. The purpose of this program was to decrease the death rate from cardiovascular disease, increase access to fresh fruits and vegetables leading to increased consumption, and decrease obesity rates. During the grant period, 36 community members participated and completed the program. 40% of participants who began the program with uncontrolled hypertension reported controlled blood pressure at the end of the four month program.
- **Strong Schools.** Strong Schools, an initiative developed by IU Health, invested over $100,000, technical support, and staff time, in select Indiana school applicants, which proposed innovative programs to promote physical activities that help prevent obesity and assist school-age children to become active and healthy. Between 2016 and 2018, IU Health partnered with 41 schools to provide the program. Schools' reported showing the student's daily physical activity minutes were increased due to Strong Schools.
- **Jump IN for Healthy Kids.** IU Health provided a $100,000 grant to Jump IN between 2017 and 2018. Jump IN's goal is to reduce the child obesity prevalence rate in Central Indiana from a projected 53% to 38% by 2025. IU Health leaders are members of Jump IN's Executive Roundtable and Leadership Council and provide expertise and staff time.
- **Summer Youth Program Fund.** Collaborating with local funders, IU Health supported Indianapolis summer youth programs that aligned to community health priorities. Between 2016 and 2018, IU Health funded 44 summer youth programs. For example, in 2016, Felege Hiywot Center received a grant from IU Health and used the funds to operate an urban farming Science, Technology, Engineering and Mathematics (STEM) camp for 12 high school students. Students learned about growing food, healthy eating, nutrition, STEM topics, and leadership.

IU Health invested over $87,150, provided technical support, and staff time to the Summer Youth Program Fund.

- **CARE Mobile Pantry.** In 2016 and 2017, IU Health provided $125,348 in funding and nearly 150 volunteers to support the Gleaners Food Bank of Indiana, Inc's. CARE Mobile Pantry. Working in conjunction with the Indianapolis Metropolitan Police Department, Indianapolis Fire Department and Indianapolis Emergency Medical Services, other Public Safety agencies, and other organizations, Gleaners developed a mobile food pantry that moved between various locations in designated "focus area" neighborhoods. In 2017, 73,960 community members received food from the mobile pantry.
- **Summer Meals and Swim Safety.** Indianapolis Parks and Recreation Department provided lunches to youth, 18 years and younger, at 135 locations throughout the community during the summer break. The Department also created a new program at Riverside Park Pool, "Make A Splash", which offered free water safety instructions for residents along with free pool admission. IU Health dedicated $87,025 along with staff time and educational materials in support of summer meals and water safety training.
- **Playworks Partnership.** IU Health invested $150,000 to Playworks to support their engagement with students including youth enrolled in Indianapolis Public Schools (IPS). These funds allowed Playworks during the 2017-2018 school year to reach 5,200 children in 14 low-income elementary schools in Marion County and train 350 teachers and school staff to incorporate healthy play, physical activity, conflict resolution, and emotion management into their curriculum.
- **Kheprw Institute.** Kheprw Institute received two grant awards from IU Health totaling $35,000. Funding supported Kheprw Institute's efforts to provide access to healthy and fresh fruits and vegetables that the community previously did not have by giving urban farms the opportunity to sell their produce. Over 4,500 pounds of produce were sold to the community through this initiative. The second grant supported Growin' Good in the Hood, a program that taught the impact urban farming has on the community through teaching various aspects of urban farming and providing healthy produce to the community.
- **Education Days – 500 Festival.** IU Health awarded grants totaling $95,500 and staff time to support Education Days. Funding allowed students from across the State of Indiana to learn about and to participate in activities highlighting the importance of physical activity and nutrition. From 2016 through 2018 over 20,000 students, teachers, and chaperones participated in the program and walked over 250,000,000 steps.
- **Sustainable Food System.** IU Health awarded a $30,000 grant to Flanner House to support efforts to create a sustainable food system. The funding will be used to offer onsite healthy cooking classes, nutrition education programs, and to provide the community with access to locally grown healthy food. In addition, IU Health will dedicate technical support and volunteers.
- **Garden on the Go.** IU Health contracted with Green BEAN Delivery, LLC to subsidize a mobile produce delivery program that sold fresh fruits and vegetables in various low-resource neighborhood locations in the Indianapolis area. This initiative served over 2,300 community members and averaged 18,700 transactions a year before ending in 2016. IU Health dedicated staff time, expertise, and over $100,000 in funding towards this program in 2016.
- **Developing Impactful Youth.** IU Health invested $5,000 in Lawrence Community Gardens to support their Developing Impactful Youth (DIY) Gardening Program. This program teaches youth ages 5-18 years old organic gardening skills, operations of a farm stand, and serving the community through food donations.

Community Revitalization

- **Days of Service.** Days of Service is an IU Health initiative involving team members from across the organization and from around the State of Indiana. It is one of many opportunities team members have to give back to their communities. During the 2016 and 2017 DOS, Indianapolis and its neighbors were impacted by the work accomplished by IU Health team members including rehabilitating city parks, creating safe routes to schools, installing 20 free food boxes, cleaning neighborhood streets and empty lots, and packing and handing out more than 2,000 disaster relief bags to students. IU Health provided over $119,700 to accomplish these projects and technical assistance with over 2,000 employee volunteers per year.
- **JA JobSpark.** In 2016 and 2017, IU Health made grants totaling $70,000 to Junior Achievement of Central Indiana (JA), in support of JA JobSpark, a two-day hands-on career exposition for Marion County 8th graders. IU Health supplied and distributed healthy snack bags for students, stuffed and distributed student resource bags, served as student guides and BrainSpark leaders, and led hands-on activities in the Health and Life Sciences Career Cluster, sharing the importance of health and wellness to career success. Through participation in JA JobSpark, IU Health has educated over 15,000 eighth graders on careers and specifically healthcare opportunities.
- **Pre-K Scholarships.** Between 2016 and 2017, IU Health invested $800,000 in funding for the Pre-K Scholarship program lead by United Way of Central Indiana. Grant funds were expended to provide early childhood education scholarships to three and four-year olds in Marion County families at or below 127% of the federal poverty level. With funding from IU Health and others, for the 2017-2018 academic year, over 1,600 scholarships were granted to families across Marion County.
- **Culinary Job Training.** IU Health awarded a $10,000 grant in 2017 to Second Helpings, a nonprofit that is

focused on eliminating hunger. Second Helpings rescues and prepares food, cooks and delivers hot nutritious meals and offers a culinary job training program, to educate and enrich the lives of those struggling to find employment in the community. More than 800 adults have graduated from this program, and Second Helpings alumni are now working in Central Indiana as cooks, executive chefs, business owners and culinary instructors.

- **Habitat for Humanity of Greater Indianapolis.** IU Health partnered with Habitat for Humanity of Greater Indianapolis to build safe and affordable housing and revitalize neighborhoods. Between 2016 and 2018, IU Health assisted in building three homes and impacting three neighborhoods. IU Health made contributions of $125,000, dedicated staff time and 375 volunteers toward this partnership.

Behavioral Health & Substance Abuse

- **Perinatal Mood Disorder Screening.** In an effort to combat Perinatal Mood Disorder (PMD), IU Health invested in educating nurses on this screening and procedures and then screened mothers before discharging them from the hospital for PMD. Women who scored positive when screened received a follow-up phone call. The mothers and their families were educated on the signs and symptoms, risk factors for developing a PMD, and given resources for help. From 2016 through 2017, over 1,800 people were served. IU Health dedicated staff time and expertise towards this initiative.
- **Peer Led Support Group.** IU Health made a $3,000 grant to Brooke's Place for its Peer Led Support Group program. Grief support programming was held onsite at Arsenal Technical High School and thirty-one children and teens from five different school participated in this program during the 2016-2017 school year. Of the 31 students, 66% reported decreased feelings of isolation, 70%
reported increased self-esteem, and 69% reported acquisition of health coping skills.
- **Barrier Busters Program.** IU Health awarded a $25,000 grant to Volunteers of America (VOA) for its Barrier Buster Fund. The Fund was created to help women who successfully completed residential addiction treatment in VOA's Fresh Start Recovery Center, and their children transition into stable housing. Funds will be provided to mothers and their children to ensure they have their basic needs met.
- **Indiana Affiliation of Recovery Residence (INARR).** IU Health made an $86,500 grant in 2016 to the Indiana Affiliation of Recovery Residence (INARR). The funds were used to support recovery residence certification thereby helping to ensure those living in the residence with substance abuse issues receive quality care and services.
- **This is (Not) About Drugs Program.** IU Health awarded a $28,000 grant to Overdose Lifeline in support of its This Is (Not) About Drugs program. This goal of the initiative was to improve students' understanding of the risks associated with opioid and heroin use and alleviate some of the stigma surrounding overdose, drug addiction, and drug abuse treatment. This program was presented to 8th and 9th grade students in identified high risk counties that also have IU Health facilities. Approximately 21,700 students participated in the program during the 2016-2017 school year.
- **Safe2Talk.** IU Health made a $45,469 grant and provide technical assistance and staff time to Mental Health America of Great Indianapolis, which later merged with Families First, for the Safe2Talk suicide prevention texting hotline. This suicide prevention texting hotline was designed to connect teens in crisis with available resources and support in an effort to prevent suicide. Between September 2016 and April 2017, the hotline was utilized nearly 200 times. Pre-and-post-surveys indicated that, after they were educated about the hotline, more students said that they would feel comfortable talking to a trained professional through an anonymous telephone service.
- **Alcohol Tobacco and Other Drug Treatment Program.** IU Health supported Reach for Youth's Alcohol, Tobacco and Other Drug Treatment program. The $8,000 in financial support allowed ten low-income youth and families to access this treatment program that may not have been able to afford participation otherwise.
- **The Teaching Well.** IU Health made a $20,000 grant in 2017 to support The Mind Trust's collaboration with The Teaching Well, an organization that offered mental health and stress workshops and training to Fellows during 2017-2018. The support and workshops helped schools leaders and educators learn how to better manage stress and focus on their personal health and well-being. All of the workshop attendees indicated that the trainings were valuable and that they increased their knowledge of the topics covered.
- **Coburn Place.** IU Health provided a financial donation to Coburn Place to support the operational expenses incurred by providing mental health services onsite at Coburn Place's facility in a room specifically used for group and individual therapy sessions. Sessions from 2017 included domestic violence/healthy relationships support groups with 87 attendees, new beginning support groups with 131 attendees, new beginning family support group with 159 attendees, and a support group for children with 156 attendees. IU Health contributed $5,500 to fund these programs for 2017-2018.
- **Street Reach Indy.** IU Health awarded a $25,000 grant to the Coalition for Homelessness Intervention and Prevention (CHIP) to fund their Street Reach Indy Campaign. Street Reach Indy directly assists individuals living on the streets of Indianapolis by providing resources to help them overcome barriers to eventually obtaining housing. Through this partnership, 50 individuals have found permanent housing.

- **Modern Day Therapy Program.** IU Health made a $5,000 grant to John P. Craine House in support of the Modern Day Therapy program. This programs offered mental health and substance abuse programs, including an individualized treatment plan for substance abuse, depression, anxiety, anger management, coping skills, and effective parenting skills for nonviolent female offenders and their young children.

Access to Care

- **Indiana Poison Center.** A collaboration between the Indiana State Department of Health, IU Health, and the Federal HRSA Poison Control Program, the Indiana Poison Control Center provided coverage and services for the entire state of Indiana. Over 100,000 cases have been logged at the poison center's phone service between 2016 and 2017. IU Health provided over 60,000 staff hours and expertise by educating callers on what to do following exposure to a potentially harmful substance.
- **Health Insurance Enrollment.** In an effort to help community members better understand their health insurance options and increase the number of insured individuals in Indiana, IU Health's Financial Navigators met with and educated community members inside the hospital and in the community. Over 16,000 community members were educated by IU Health's Financial Navigators in 2016 and 2017 combined.
- **Operation Winter Ready.** IU Health partnered with the Indianapolis Public Safety Foundation and activated Operation Winter Ready. A "Winter-Ready Kit" is comprised of a humanitarian-grade blanket, socks, gloves, hat and other items needed by homeless individuals and families, to keep them safe during the harsh Indiana winter, especially from frost-bite. Over 2,000 kits were distributed to at-risk community members in 2016 and 2017 by the Indianapolis Metropolitan Police Department and the Indianapolis Fire Department. IU Health dedicated $45,000 and staff time to execute this project.
- **Connect2Help211.** IU Health made a $25,000 donation to support Connect2Help211's efforts to increase the size of their contact center staff. Connect2Help211 facilitates connections between people in need of human services and organizations that provide them. During the time the financial donation was awarded approximately 9,688 more calls were answered than during the same period in the prior year.
- **Gennesaret Free Clinic.** IU Health provided a $10,000 donation for medical supplies to Gennesaret Free Clinic and more than 20 clinical volunteers helped provided medical services in 2017. The purpose of these efforts was to increase access to dental and medical care services for low-income and homeless populations in Marion County. In 2017, Gennesaret's Dental Clinic provided dental care to 505 patients and the Medical Clinics provided care to 1,883 patients.
- **Indianapolis Mini Marathon and 5k Races.** IU Health healthcare providers were available at multiple-sites along the race course including the finish line at the Indianapolis Mini Marathon and 5K races. In 2016 and 2017 combined, over 300 race participants utilized these services. IU Health dedicated staff time and $8,000 in-kind in supplies to execute this initiative.
- **Bolt for the Heart.** IU Health provided funding to Bolt for the Heart to increase the number of AEDs available to Indiana State Police, in order for more lives to be saved through increased access to the medical device. IU Health dedicated $35,250 towards the project to purchase 30 AEDs for the Indiana State Police.
- **First Responder Kits.** IU Health provided $20,000 in 2017 to the Indianapolis Public Safety Foundation (Indianapolis Metropolitan Police Department and the Indianapolis Fire Department) for the purchase of QuikClot kits, carcinogen-removing wipes, and carbon monoxide tools. QuikClot hemostatic devices can help trained law enforcement officials, often the first points of care on a scene, provide assistance with controlling bleeding of a victim until additional medical personnel arrive. The wipes and tools have the ability when used on-scene to drastically reduce the risk of exposure.
- **Flu Shots.** To increase the availability of flu vaccines to members of the underserved population, IU Health provided vaccines to community members at no charge. Between 2016 and 2017, IU Health provided over 250 flu vaccines to community members. IU Health dedicated staff time and Marion County Health Department donated the flu vaccines.
- **Black and Minority Health Fair.** IU Health provided financial support, health services and programs, and volunteers to the Black and Minority Health Fair. Annually, approximately 16,500 people attended the Black and Minority Health Fair and participated in health screenings, dialogue, and/or educational opportunities relative to health and wellness. From 2016 through 2018, IU Health provided $20,000 to the Fair, provided educational materials and health promotions, and staff time to these efforts.
- **Smoke Detector Installation.** Nurses and team members from IU Health partnered with the American Red Cross to install smoke detectors in homes throughout Indianapolis. The goal of the project was to help reduce the number of deaths and injuries from fire in the Indianapolis community. Staff time was used to complete this project.
- **Pillowcase Project.** IU Health partnered with the American Red Cross to facilitate the Pillowcase Project. The Pillowcase Project involved packing and suppling disaster preparedness kits. The pillow cases were packed with items including flashlights, water bottles, whistles, and first aid kits. Two-thousand Pillowcases were

distributed throughout the community. IU Health provided supplies and dedicated volunteer staff time toward this initiative.

- **Sickle Cell Conference.** IU Health provided a total of $15,000 for the 2016, 2017 and 2018 Sickle Cell Conference hosted by Martin Center Inc. The primary goal of the conferences was to increase participant's knowledge of the sickle cell disease. IU Health funds were used to reduce or waive the registration fee for community members who had need to participate in the meetings. Over 250 community members were educated about sickle cell by attending these conferences.
- **Sport Physicals.** IU Health partnered with Indianapolis Public School (IPS) to provide sports physicals to high school students interested in joining school teams. This service was provided at no cost to the students. These physical examinations are required for students to participate on school teams. Between 2016 and 2018, 366 physicals were administered by physicians and health care providers. The IU Health dedicated staff time to offer this service.

APPENDIX F – CONSULTANT QUALIFICATIONS

Verité Healthcare Consulting, LLC (Verité) was founded in May 2006 and is located in Alexandria, Virginia. The firm serves clients throughout the United States as a resource that helps hospitals conduct Community Health Needs Assessments and develop Implementation Strategies to address significant health needs. Verité has conducted more than 60 needs assessments for hospitals, health systems, and community partnerships nationally since 2010.

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

Riley Hospital for Children
Indiana University Health