Putnam County Hospital

Community Health Needs Assessment
Putnam County, IN
Summer 2016

Putnam County Hospital – Greencastle, Indiana

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Contents

Introduction

History

The current geographical area that comprises Putnam County, IN was originally purchased through treaties in 1809 and 1818. In 1821, a general assembly approved an act that officially organized Putnam County. The name "Putnam" was designated to the county after the late General Israel Putnam. Greencastle was selected and currently remains the location of the county seat (Putnam County, 2016).

In 1908, 26 of Putnam County's female citizens started what would eventually become the founding of a hospital in order to serve their family and friends. This hospital would offer solutions to the ever-changing healthcare needs of the citizens of Putnam County, and would bring technologies only previously offered in larger cities to their rural community. Prior to the hospital opening, Putnam County residents depended on the house calls of local physicians to treat their ailments. Minor operations could be performed in the doctor's office, but if major surgery was required, the patient had to be transported to Indianapolis.

In 1924, Putnam County Hospital officially opened its doors to begin offering healthcare services to the citizens of Putnam County. The hospital operated at its original location on Shadowlawn Avenue for 55 years and served thousands of patients. In 1979, the Hospital expanded and was moved to its current location at 1542 South Bloomington Street.

Today, over 100 years after its founding, Putnam County Hospital still serves the same mission and values that were set forth by its founders: to provide exceptional healthcare to our friends and family in Putnam County by continuing to provide a number of outpatient and inpatient services as a Critical Access Hospital in Greencastle, Indiana (Putnam County Hospital, 2016).

Mission

The mission of Putnam County Hospital shall be:

- To establish and maintain a hospital in the county of Putnam and State of Indiana formed for "the treatment of sick, wounded and injured persons, and for the care of the infirm…." Also, to establish facilities which include inpatient beds and medical services, to provide diagnosis and treatment for patients as well as associated services, such as, but not limited to, outpatient care, long term care and home care. To deliver services to patients and customers in a high quality, efficient, appropriate and caring manner.
- To carry on any educational activities related to rendering care of the sick and injured, or to the promotion of health that is in the opinion of the Board of Trustees justified by the facilities, personnel, funds and other requirements, which are, or can be, made available.
- To participate, so far as circumstances may warrant, in any activity designed and carried on to promote the general health of the county (Putnam County Hospital, 2016).

Vision

The vision of Putnam County Hospital: The Continuous Quality Improvement program of Putnam County Hospital is on an organizational-wide quest to continuously improve the quality of services offered, expand professional knowledge, and exceed the expectations of our customers (Putnam County Hospital, 2016).

Values

The values of Putnam County Hospital are:

- Improving the health care status of individuals in the Hospital's service area.
- Respectful, courteous, professional inter-actions with all customers.
- Offering the highest quality services possible with efficient use of available resources.
- Pride, ownership, and enthusiasm in all endeavors (Putnam County Hospital, 2016).

Community Health Services

Putnam County Hospital (PCH) is a critical access hospital with 25 inpatient beds, full service emergency room, outpatient service lines, and a number of visiting medical specialists. PCH offers a number of various services to the community.

PCH hosts two outpatient clinic areas that bring in physicians from over 10 various specialties. These physicians come to Putnam County Hospital to see patients, giving our community the specialty care they need close to home.

PCH offers a support group that meets monthly for those affected by cancer. The hospital also offers emotional and spiritual support with our staffed Chaplain, along with individual educational support in areas such as nutrition and diabetes management.

In addition to specialty clinics and support, PCH also provides screenings. Skin cancer screens and prostate cancer screens are offered bi-annually through the Putnam County Cancer Center. The hospital also offers cardiac scoring and lung cancer screenings at a discounted price to encourage our community to be more proactive in their health. Community wellness screenings that include vitals, lab work (diabetes risk and cholesterol), nutritional education and health coaching, along with partnerships with area industry in their wellness needs are also a priority of PCH as the importance of population health becomes more of a concern.

Description of Putnam County

Putnam County is comprised of 482.69 square miles in West Central Indiana (National Association of Counties, 2013). Being that Putnam County Hospital is designated as a critical access hospital, there is at least a 35-minute drive to any other hospital or critical access hospital. According to the 2010 US Census Report, Putnam County is considered a metropolitan county. The following table depicts the population characteristics of Putnam County, along with a side-by-side comparison of Indiana and the United States. This data is based on the American Community Survey (ACS), which is a national survey that provides communities with data representing how they are changing over a period of time. It should be noted that the information on the number of students receiving free and reduced lunch reflects 2015 data from the Kids Count Data Center (2016). Also included below are pictures of Putnam County's location and geography.
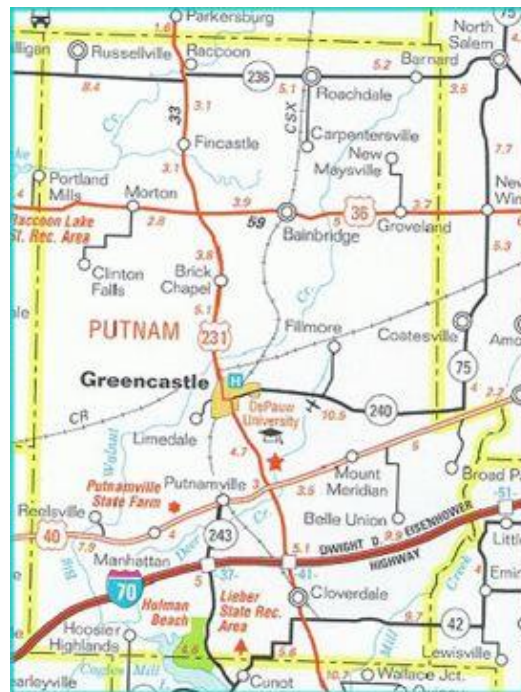
Table 1: 2010-2014 ACS Population Profiles for Putnam County, Indiana, and the United States

	Putnam County	Indiana	U.S
Total Population	37,700	6,500,000	314,100,000
Demographics			
Gender			
Male	53%	49%	49%
Female	47%	51%	51%
Race			
White	94%	86%	67%
Black/African American	4%	9%	13%
American Indian/Alaskan Native	<0.5%	<0.5%	1%
Asian	1%	2%	5%
Native Hawaiian/Other Pacific Islander	<0.5%	<0.5%	<0.5%
Other	<0.5%	2%	5%
Ethnicity			
Hispanic or Latino	2%	6%	17%
Age			
Under 18 Years	20%	24.3%	23.5%
18-24 Years	14.5%	10.1%	10%
25-44 Years	24.1%	25.5%	26.4%
45-64 Years	27.2%	26.5%	26.4%
65 and Over	14.3%	13.6%	13.7%
Median Age (Years)	38.1	37.2	37.4
Urban and Rural Population			
Rural	64.80%	27.65%	19.11%
Urban	35.20%	72.44%	80.89%
Socioeconomic Indicators			
Unemployed (≥ 16 Years Old)	8.2%	8.8%	9.2%
Median Household Income	$49,914	$48,737	$53,482
Poverty Rate	13.5%	15.2%	14.8%
Per Capita Income in Past 12 Months	$21,541	$24,953	$28,555
Students Receiving Free or Reduced Lunch	47.1%	49.1%	*Unavailable
Educational Attainment			
High School Graduate or Higher	87%	88%	86%
Housing			
Total Housing Units	14,800	2,800,000	132,700,000

Occupied Housing Units	85% (12,580)	89% (2,500,000)	88% (116,200,000)
Owner- Occupied	76%	69%	64%
Renter Occupied	24%	31%	36%
Health Insurance Coverage			
Insured	87%	86%	86%
Uninsured	13%	14%	14%

Source: US Census Bureau ACS 5-Year Estimates (United States Census Bureau, 2016)

Purpose

The Community Health Needs Assessment (CHNA) is designed to provide an understanding of the current health status and needs of the residents in the communities served by Putnam County Hospital. This report meets the current Internal Revenue Service requirements for tax-exempt hospitals, which is based on the Patient Protection and Affordable Care Act of 2010. More importantly, this document assists Putnam County Hospital in providing essential healthcare services to those most in need. With a better insight of the current health needs of those served, Putnam County Hospital can develop a strategic plan on meeting those heath needs as capacity and resources allow.

Partnerships

Putnam County Hospital partnered with the Putnam County Community Foundation to hire a student intern for the summer. The student, a graduate student in the Masters of Health Administration program at the Indiana University Richard M. Fairbanks School of Public Health, was in charge of coordinating the Community Health Needs Assessment with guidance and support from Putnam County Hospital staff.

Methods

Design

There were two main methods used to obtain a combination of quantitative and qualitative data for Putnam County in order to conduct this CHNA. To begin, secondary data was extracted from reliable, publicly available resources. These secondary data were used to depict and analyze information like population characteristics, health status, and mortality characteristics of the community. Secondly, key informant interviews were conducted with community stakeholders to further understand the health needs of the community.

Data Sources and Collection

Quantitative

Putnam County population data were acquired from the United States Census Bureau American Community Survey (ACS). To increase precision and account for a larger period of time, five year estimates were applied (2010-2014). Data pertaining to hospital service area and patient origination (zip codes and tables) were obtained from the Indiana Hospital Association (2016).

Health indicators and chronic disease burden data were obtained from multiple sources. The majority of health indicators data are reported based on the Center for Disease Control and Prevention's (CDC) Behavioral Risk Factor Surveillance Systems (BRFSS). This is a national survey that collects data from U.S. residents regarding their health-related risk behaviors, chronic health conditions, and use of preventative services. The last BRFSS data that is reported at the county level was 2012. The CDC BRFSS data collection methodology was changed in 2011, so comparison to data reported before that point will lack reliability. The reported figures were weighted based on the recommended BRFSS weighting methodology.

Several indicators were obtained from County Health Rankings & Roadmaps (2016), a collaborative program operated by the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute. County Health Rankings & Roadmaps provided county and state level data, as well as national benchmarks. Several indicators were also obtained from the Community Commons (2016), which is powered by IP3 and CARES – University of Missouri. This website was created to report the most recent community health data available for counties, states, and the nation. County and state level cancer incidence and mortality counts, as well as natality indicators, were both extracted from the Indiana State Department of Health. Mortality data were obtained, by ICD-10 codes, from CDC Wonder for the top eleven leading causes of death (counts and rates) in Putnam County, Indiana, and the United States from 2012-2014. The ICD-10 codes corresponding to each cause of death may be found in Appendix A.

Qualitative

PCH provided a list of community stakeholders that would be interviewed as key informants in this assessment. These identified key informants hold occupations in facilities and organizations throughout the community and were thought could provide insight and a reliable perspective on some of the health needs of Putnam County residents. All interviews were conducted in the period of a month. To ensure the accuracy of their statements, all interviewees consented to having the meetings recorded. These interviewees were chosen to give their insights on the health needs of the community due to their continuous and experienced work in the community. These individuals have held professions (typically health related) that allow them constant contact with the members of the community that PCH serves. A list of the key stakeholders interviewed may be found in Appendix B, and a list of key informant interview questions may be found in Appendix C.

Data Analysis

Upon retrieval and analysis, quantitative data were organized into frequency tables and graphical representations to help summarize and compare findings. Data from key stakeholder interviews was analyzed and organized in a summary table to help identify trends and common health concerns that were voiced throughout each meeting. A final table that summarizes the county health indicators was created based on perceived priority of both the quantitative and qualitative data.

Results

Hospital Service Area

According to IHA, the ZIP codes included in Putnam County are 46105 (Bainbridge), 46172 (Barnard), 46120 (Belle Union), 46121 (Coatesville), 46128 (Fillmore), 46135 (Greencastle), 46170 (Putnamville), 46171 (Reelsville), 46175 (Russellville). As the following tables will depict, the majority of patients seen at PCH originate from Putnam County. In addition to Putnam County, the tables will also indicate the number of patients that are seen from the surrounding area as well. This data was obtained from the Indiana Hospital Association (2016). It should be noted that inpatient discharge data (Table 2A) includes data from 2014-2015, while the ambulatory and emergency records (Table 2B & 2C) include 2014 and the first three quarters (January-September) of the 2015 calendar year.

Table 2A: 2014-2015 Inpatient In-Migration Discharge Records and Patient Origination

Year	2014	2015
Total Discharges from PCH	498	558
Patient Origination (County)		
Putnam	86.35%	84.05%
Owen	6.83%	8.96%
Parke	1.20%	1.08%
Clay	1.00%	1.25%
Other Counties	2.21%	4.12%
Other States	2.21%	0.54%

Note: Data extracted from Indiana Hospital Association: 2014-2015 Patient In-Migration and Discharge Study for Putnam County Hospital

Table 2B: 2014-2015 Ambulatory Surgery In-Migration Records and Patient Origination

Year	2014- 2015 (Q1-Q3)
Total Patients	2,285
Patient Origination (County)	
Putnam	79.87%
Owen	9.50%
Clay	3.5%
Montgomery	0.96%
Parke	0.92%
Other	5.25%

Table 2C: Emergency Room In-Migration Discharge Records and Patient Origination

Year	2014-2015 (Q1-Q3)
Total Patient Visits	19,286
Patient Origination (County)	
Putnam	77.63%
Owen	9.47%
Clay	2.08%
Marion	1.53%
Hendricks	1.23%
Other	8.06%

Source: Indiana Hospital Association: 2014-2015 Patient Discharge and Origination Reports for Putnam County Hospital. (Indiana Hospital Association, 2016).

Special Populations

Putnam County Hospital also provides healthcare services to two specific special populations living within the service area:

1. <u>DePauw University</u> – DePauw University is a liberal arts college located in Greencastle, IN. Previously known as Indiana Asbury University, the higher education institution has been in Greencastle for 175 years. DePauw currently houses nearly 2,300 students and employs 225 faculty members. Although DePauw does have its own health services center to offer immediate care to students and faculty, emergencies and other major illnesses and traumas are directed to Putnam County Hospital. For this reason, DePauw is considered a special population for the Community Needs Health Assessment. The following table presents the current enrollment profile for DePauw University students and staff (DePauw University, 2016).

Students	
Total Enrollment	2,264
Men	46%
Women	54%
Faculty and Administration	
Total Faculty	225

2. <u>Putnamville Correctional Facility</u> – Putnamville Correctional Facility (PCF) is a medium-security level penitentiary located in Greencastle, IN. Originally founded in 1913, PCF is currently an accredited facility that reports an average daily census of nearly 2,500. Similarly to DePauw University, PCF is considered a special population for the CHNA because Putnam County Hospital is the closest place for this population to receive healthcare services in emergency situations. It should also be noted that even though PCF receives healthcare services from PCH, according to the Health Resources and Services Administration (2016), PCF is currently designated as a health professional shortage area (Indiana Department of Correction, 2016).

General Health Indicators

Perception of General Health

According to the CDC BRFSS data in 2014, an age-adjusted percentage of 15% of Putnam County adults age 18 and older self-report having poor or fair health in response to the question, "Would you say that in general your health is excellent, very good, good, fair, or poor?" This indicator is relevant because it is a measure of general poor health status in the county. Putnam County's percentage (15%) is lower than Indiana's reported level of 19% but higher than the 90th percentile of top U.S. performers who reported 12%. The following

graphical representation illustrates these percentages along with a comparison of state-wide and national responses to how many residents perceive their general health as poor/fair (County Health Rankings and Roadmaps, 2016).

Figure 1: Reported General Health Levels in Putnam County, Indiana, and the U.S for 2014
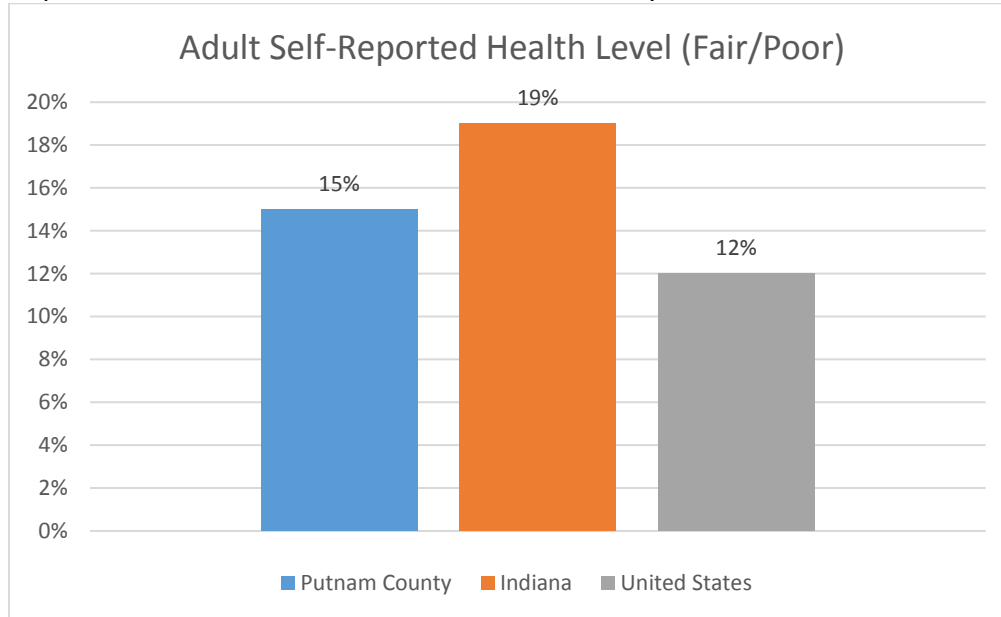
Note: Data reflects 2014 CDC BFRSS

Perception of Physical and Mental Health

According to the CDC BRFSS data in 2014, the average number of physically unhealthy days reported in the past 30 days (age-adjusted) for Putnam County residents is around 3.5 days. Although this lower than the Indiana state average of 4.1 days, the 90th percentile of US counties reported only 2.9 days. Similarly, the average number of days Putnam County's respondents reported that their mental health was not good in the past 30 days was 3.7. Again, Putnam County's average is slightly lower than Indiana's average of 4.3 days but higher than the top performers in the U.S. who reported only 2.8 poor mental health days in the past 30 days (County Health Rankings and Roadmaps, 2016).

Figure 2: The Number of Poor Physical and Mental Health Days self-reported in the past 30 days (age-adjusted) for 2014
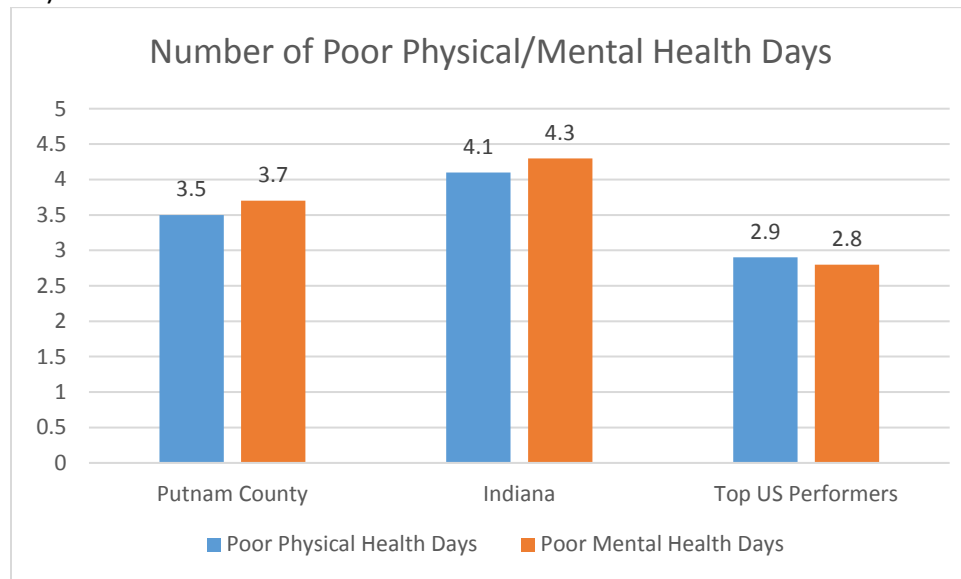
Note: Data reflects 2014 CDC BRFSS

Weight Status

Body mass index (BMI) is used by the BRFSS to determine overweight and obesity status in adults. BMI is calculated by dividing an individual's weight (in kilograms) by their height (in meters). Results of this calculation are then compared to a benchmark that determines if the individual is standard weight, overweight, or obese. Excess weight may indicate an unhealthy lifestyle and puts individuals at risk for further health issues. According to the BRFSS 2011-2012, 43.4% of Putnam County residents are classified as overweight with a BMI between 25-30. This is higher than both the Indiana and U.S. averages of 34.4% and 35.8%, respectively. Additionally, 31.2% of Putnam County residents are classified as obese with a MBI greater than 30. This is higher than the Indiana average of 31%, and the United States average of 27.1%. The following graphical representations depict the percentages of Putnam County, Indiana, and U.S. residents who were determined to be overweight or obese (Community Commons, 2016).

Figure 3: Weight Status classified as Overweight by Body Mass Index of adults in Putnam County, Indiana, and the U.S. for 2011-2012
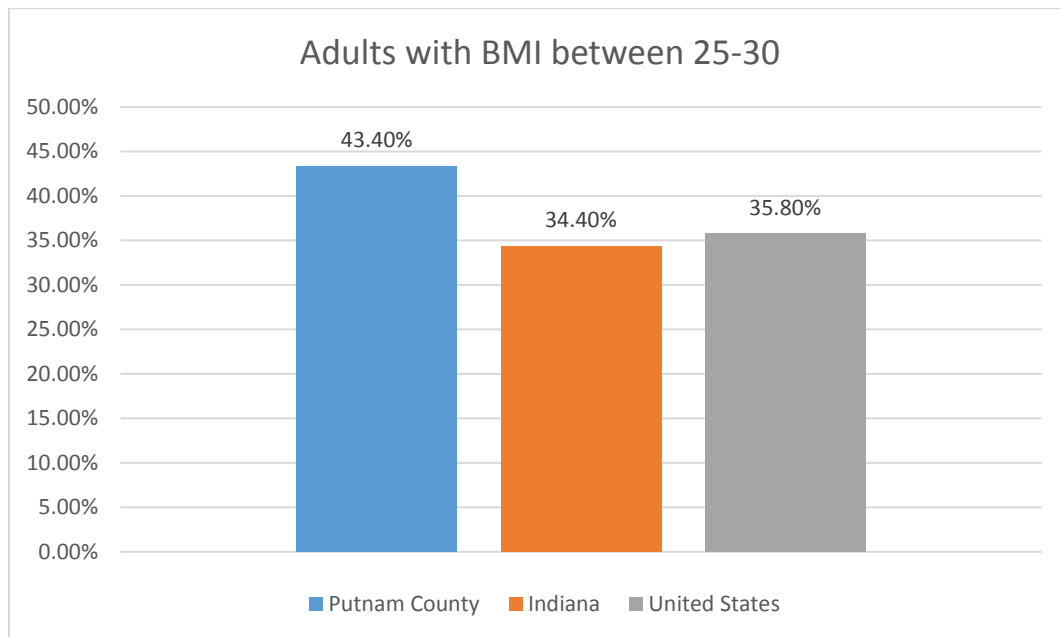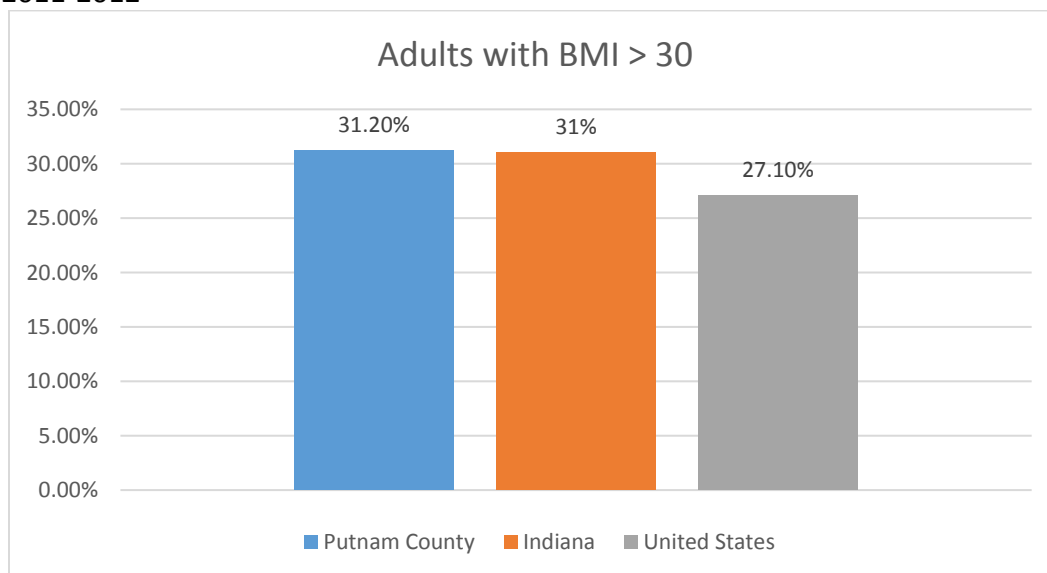

Figure 4: Weight status classified as Obese by BMI of adults in Putnam County, Indiana, and the U.S. in 2011-2012

Note: Data extracted from CDC BRFSS Annual Survey Data 2011-2012

Health Behaviors

Smoking Prevalence

The following figure displays the percent of adults 18 years and older who are current smokers in Putnam County, Indiana, and the 90th percentile of top US performers according to the CDC BRFSS in 2014. Putnam County respondents reported that 20% of residents are current smokers. Indiana reports that 23% of their respondents are current smokers, which is much higher than the national benchmark of 14% of residents that are currently smoking. (County Health Rankings and Roadmaps, 2016).

Figure 5: Percent of Current Smokers in Putnam County, Indiana, and the U.S.
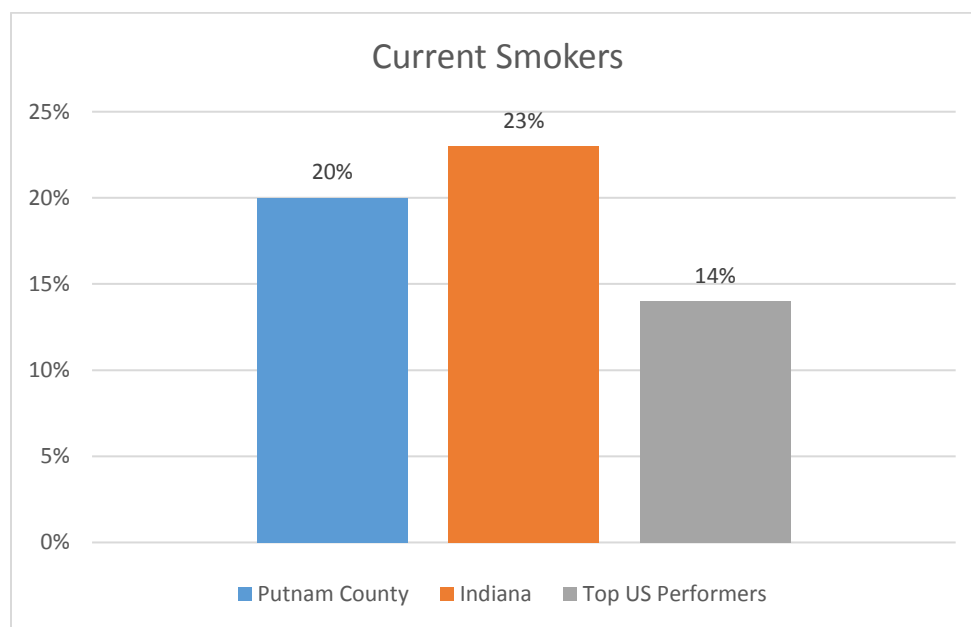
Note: Figure reflects 2014 CDC BRFSS data

Exercise

As far as exercise, 31% of Putnam County adults aged 20 and over reported no leisure-time physical activity in 2012. This percentage was slightly higher than the Indiana average of 28%, and 11% higher than the 90th percentile of U.S counties of 20% (Community Commons, 2016). The following figure summarizes these findings.

Figure 6: Percentage of adults aged 20 and over reporting no leisure-time physical activity for Putnam County, Indiana, and the U.S. in 2012

Physical Inactivity

Bar chart: Putnam County 31%, Indiana 28%, Top US Performers 20%
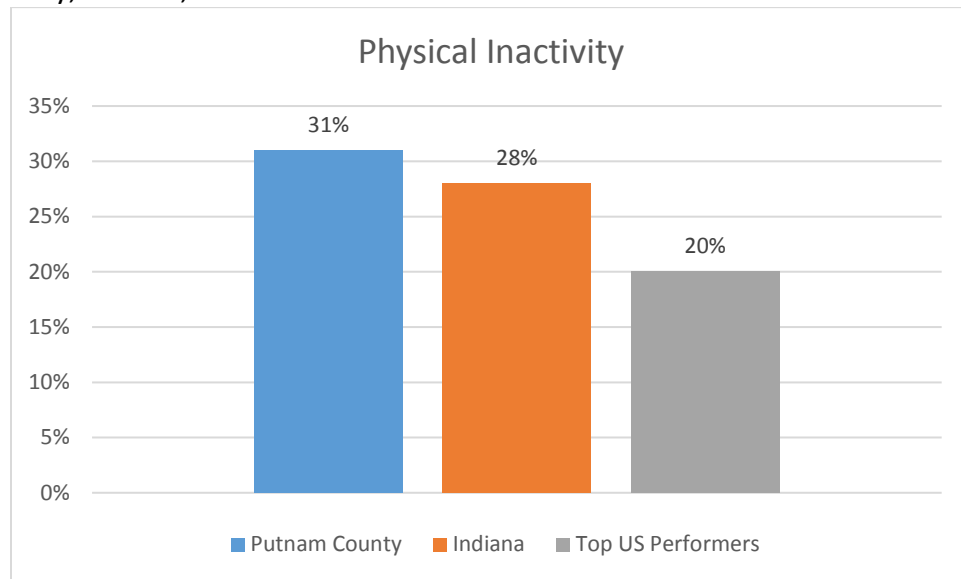
Alcohol Consumption

According to the BRFSS, binge drinking is defined as consuming more than four (women) or five (men) alcoholic beverages on a single occasion in the past 30 days. Heavy drinking is defined as drinking more than one (women) or two (men) drinks per day on average. Excessive drinking is the percentage of adults that classify as either binge or heavy drinkers. 2014 BRFSS data reports that 18% of Putnam County residents identify themselves as excessive drinkers, which is higher than the Indiana average of 16% and the 90th percentile of U.S. counties which reported only 12% of respondents reported themselves as excessive drinkers (County Health Rankings and Roadmaps, 2016). The following figure summarizes these findings.

Figure 7: Prevalence of Residents Reporting Heavy or Binge Drinking for Putnam County, Indiana, and U.S. Residents in 2014
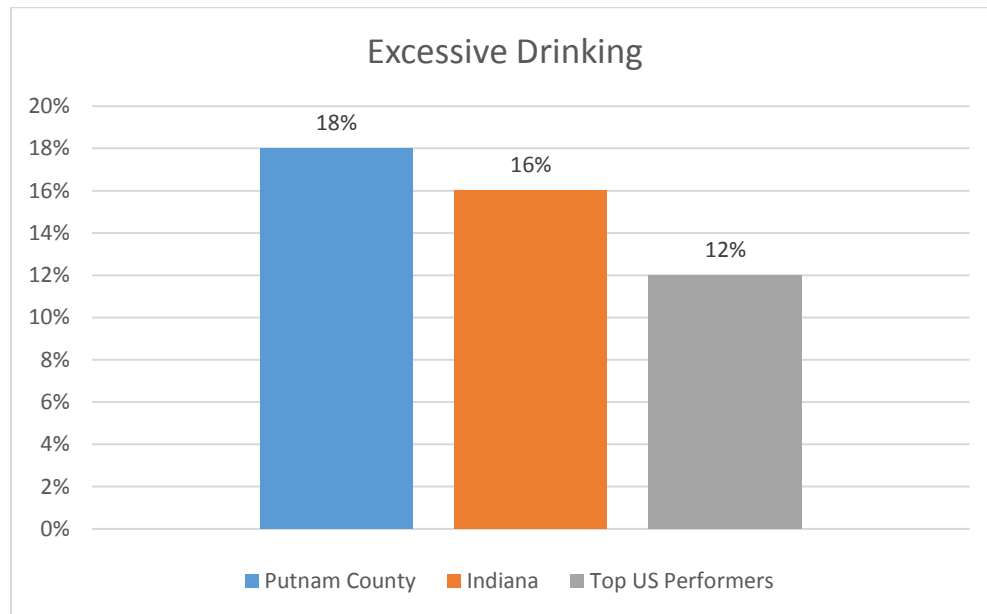
Note: Figure reflects 2014 CDC BRFSS data

Walking and Biking to Work

According to the US Census Bureau's American Community Survey (2010-2014), 6.84% of the residents of Putnam County age 16 and older commute to work by either walking or riding a bicycle. This percentage was much higher than the Indiana average of 2.58% and the United States average of 3.37% (Community Commons, 2016). The following table provides a summary of these findings.

Figure 8: Percentage of the Population that Commutes to Work by Either Walking or Riding a Bicycle
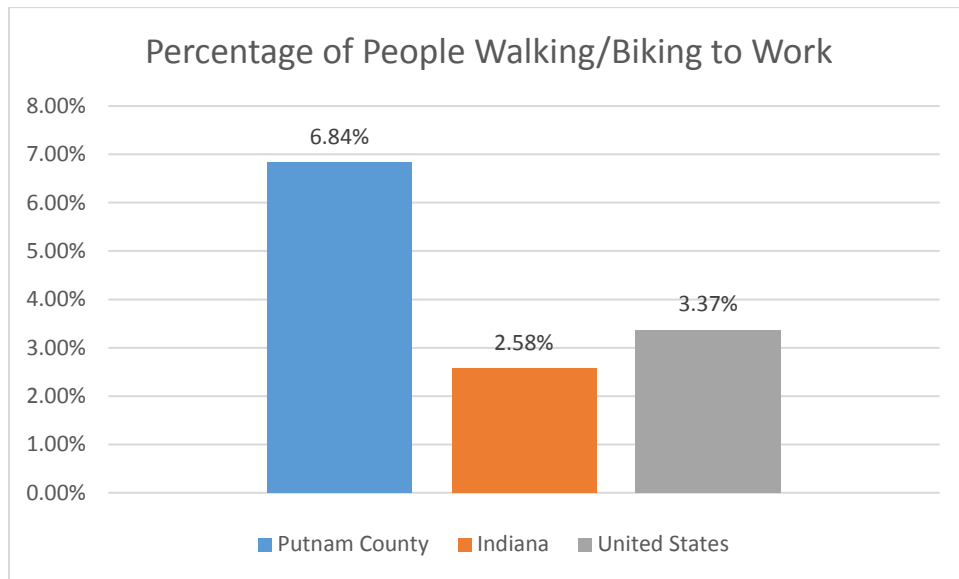
Note: Data extracted from the US Census Bureau's ACS (2010-2014)

Sexually Transmitted Infections

According to County Health Rankings and Roadmaps (2016), the 2013 weighted number of newly diagnosed chlamydia cases per 100,000 residents in Putnam County was 317.9. This is well below the Indiana average of 428.7, but higher than the reported U.S. Benchmark of 134.1. The following table displays these findings for comparison.

Table 3: Chlamydia Incidence per 100,000 Population for Putnam County, Indiana, and the U.S.

	Putnam County	Indiana	U.S. Benchmark*
Chlamydia Rate per 100,000 Residents	317.9	428.7	134.1

Note: 2013 Data Extracted from the County Health Rankings and Roadmaps
*U.S. Benchmark defined as 90th percentile among states

Teen Birth Rate

Also reported by the County Health Rankings and Roadmaps (2016) were teen birth rates per 1,000 female residents (ages 15-19) for Putnam County and Indiana. 2007-2013 data was used to calculate the rate of 27 for Putnam County, which was lower than the Indiana average of 37. Both Putnam County and Indiana were above the reported national benchmark of 19. Table 4 presents this data below.

Table 4: Teen Birth Rate per 1,000 Female Population ages 15-19 for Putnam County, Indiana, and the U.S 2007-2013

	Putnam County	Indiana	U.S. Benchmark*
Teen Birth Rate per 1,000 (Female Population ages 15-19)	27	37	19

Note: 2013 Data Extracted from the County Health Rankins and Roadmaps (County Health Rankings and Roadmaps, 2016).
*U.S. Benchmark defined as 90th percentile among states

Cancer Screening

The following graphical representation is a depiction of Putnam County, Indiana, and U.S. residents' reported cancer screening statistics. Available data included mammograms, pap smears, and colonoscopies/sigmoidoscopies. Mammogram data for 2012 reports the percentage of female Medicare enrollees (age 67-69) who have received one or more mammograms in the past two years. Putnam County reported at 61.8%, Indiana reported at 61.4%, and the United States average was slightly higher at 63%.

The 2006-2012 Pap smear data reports the percentage of women aged 18 and older who self-reported they have had a pap test in the past three years. This includes the Putnam County report of 72.2%, with Indiana averaging slightly higher at 74.4%, and the United States report of about 78.5%

The final screening data presented is the percentage of adults age 50 and older who self-report that they have ever had a sigmoidoscopy or colonoscopy. According to the 2006-2012 data, 52.2% of Putnam County residents have had this procedure administered, compared to a higher average of 58.2% for Indiana, and even higher average of 61.3% for the United States.

Figure 9: Percentage of Putnam County, Indiana, and U.S. Residents that reported having a Mammogram, Pap Smear, or Colonoscopy/Sigmoidoscopy performed.

Cancer Screening

Mammogram	Pap Smear	Colonoscopy/Sigmoidoscopy
Putnam County: 61.8%	72.2%	52.2%
Indiana: 61.4%	74.4%	58.2%
United States: 63.0%	78.5%	61.3%

■ Putnam County ■ Indiana ■ United States
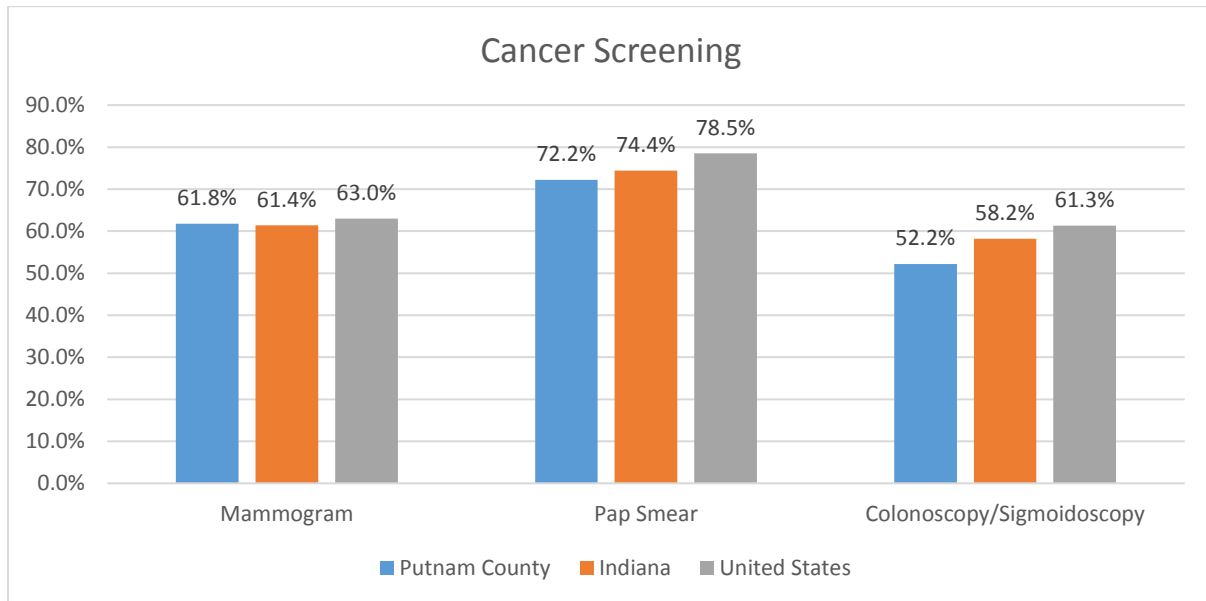
Note: Data Extracted from Community Commons (2016)

Chronic Disease Burden

Diabetes Prevalence

Diabetes is a prevalent health concern in the U.S that can reflect unhealthy lifestyles, and can put individuals at risk for more health concerns the future. According to the CDC, the 2013 age-adjusted percentage of adults age 18 years and older that have been diagnosed with diabetes in Putnam County is 10%. This is equal to the Indiana average of 10%, but above the national average of 8.7%. The following figure outlines these numbers for comparison (Centers for Disease Control and Prevention, 2016).

Figure 10: Prevalence of Diagnosed Diabetes in 2013
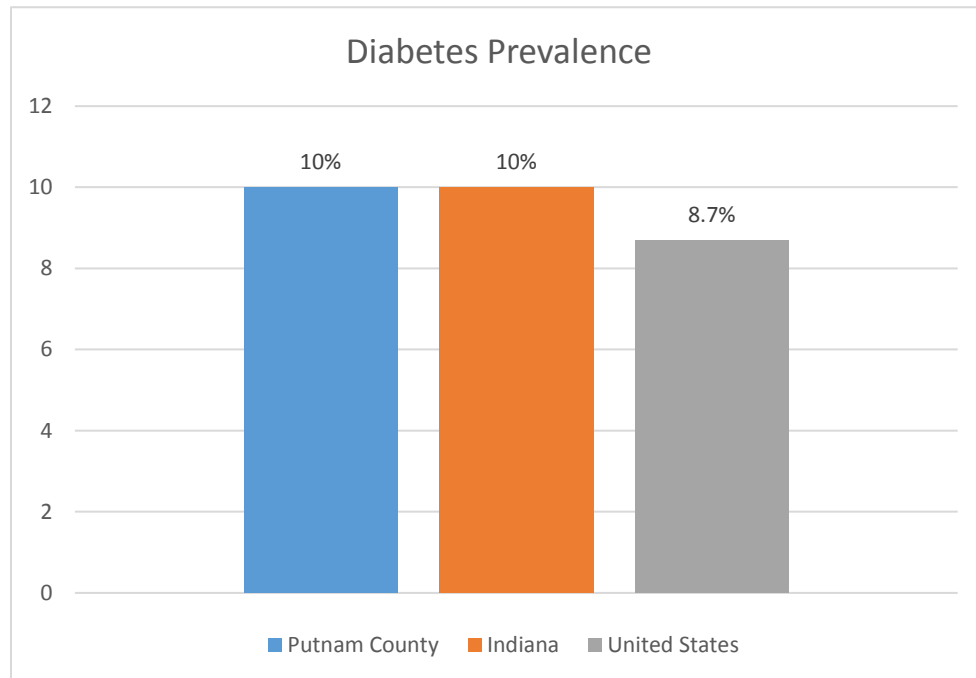
Note: Data Extracted from the CDC's Diabetes Data and Statistics

Asthma Prevalence

Asthma is a common problem in the U.S that can be exacerbated by poor health and environmental conditions. According to the CDC BRFSS data from 2012, the estimated percentage of Putnam County adults aged 18 and older who self-reported they had been told by a doctor, nurse, or other health professional that they had asthma was 16.6%. The state average was reported at 13.4%, which was equal to the national average of 13.4%. The following figure is graphical representation of the asthma prevalence data.

Figure 11: Prevalence of Asthma Reported by Putnam County, Indiana, and U.S. Residents
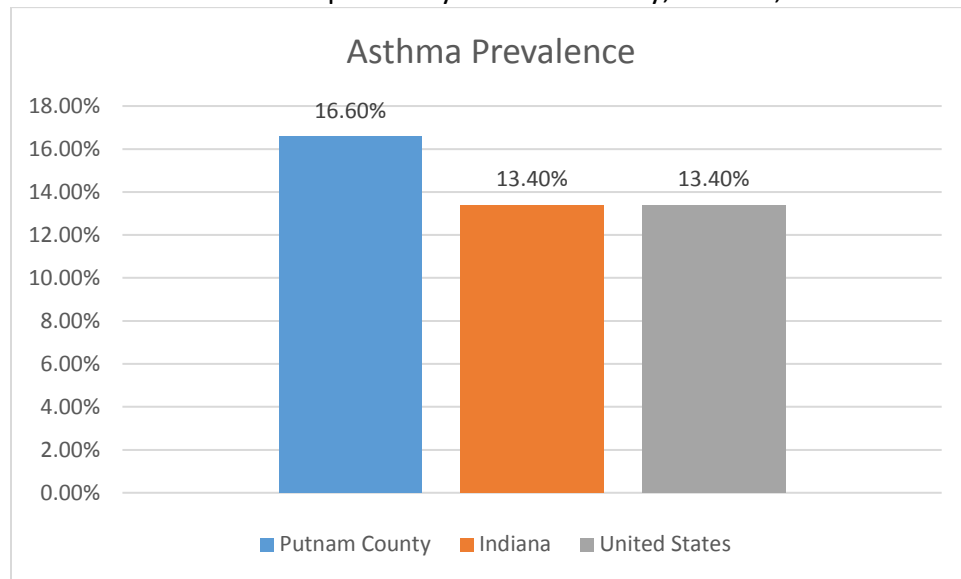
Note: Figure reflects 2012 CDC BRFSS data

Heart Disease/High Blood Pressure/High Cholesterol

According to the 2012 data from the CDC BRFSS, 5.7% of adults aged 18 and older have been told by a doctor that they have coronary heart disease or angina. This indicator is relevant because coronary heart disease is one of the leading causes of death in the nation. Putnam County's percentage is slightly higher than the Indiana percentage of 5.1%, and 1.3% higher than the United States national rate of 4.4% (Community Commons, 2016).

High blood pressure is related to heart health and other chronic health conditions. According to 2012 BRFSS data, 27.9% of Putnam County adult respondents aged 18 and older have been told by a doctor that they have high blood pressure or hypertension. Putnam County's percentage of 27.9% is slightly lower than both the Indiana and United States averages of 29.2% and 28.16%, respectively (Community Commons, 2016).

High Cholesterol is another indicator that is also related to heart health and other chronic health conditions. The 2012 BRFSS data reports that 65.85% of Putnam County residents aged 18 and older have at one point been told by a doctor, nurse, or other healthcare professional that they have high cholesterol. That puts Putnam County at a significantly higher percentage of residents with high cholesterol than the Indiana state average of 39.11%. It would also put Putnam County well above the United States average as well, which reported a value of 38.52% (Community Commons, 2016).

Figure 12: Prevalence (percentage) of Heart Disease, High Blood Pressure, and High Cholesterol in Putnam County, Indiana, and U.S. Residents
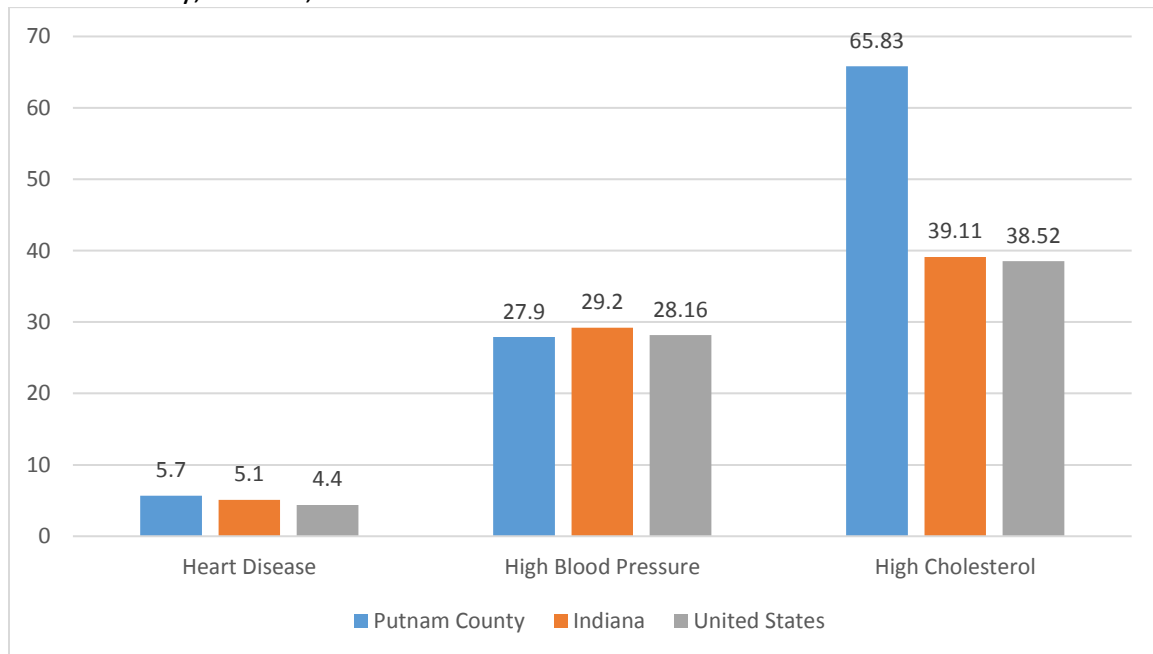
Note: Figure reflects 2012 CDC BRFSS data

Stroke

Through 2011-2013, the CDC's Division for Heart Disease and Stroke Prevention presented the stroke hospitalization rate per 1,000 Medicare Beneficiaries aged 65 and older for Putnam County, Indiana, and the United States. As displayed in the following figure, Putnam County reported a hospitalization rate of 9.7, which was lower than the Indiana average of 12. It was also lower than the U.S. average which was reported to be a rate of 10.6 hospitalizations per 1,000 Medicare Beneficiaries.

Figure 13: Stroke Hospitalization Rate per 1,000 Medicare Beneficiaries, 65+, 2011-2013 for Putnam County, Indiana, and U.S.
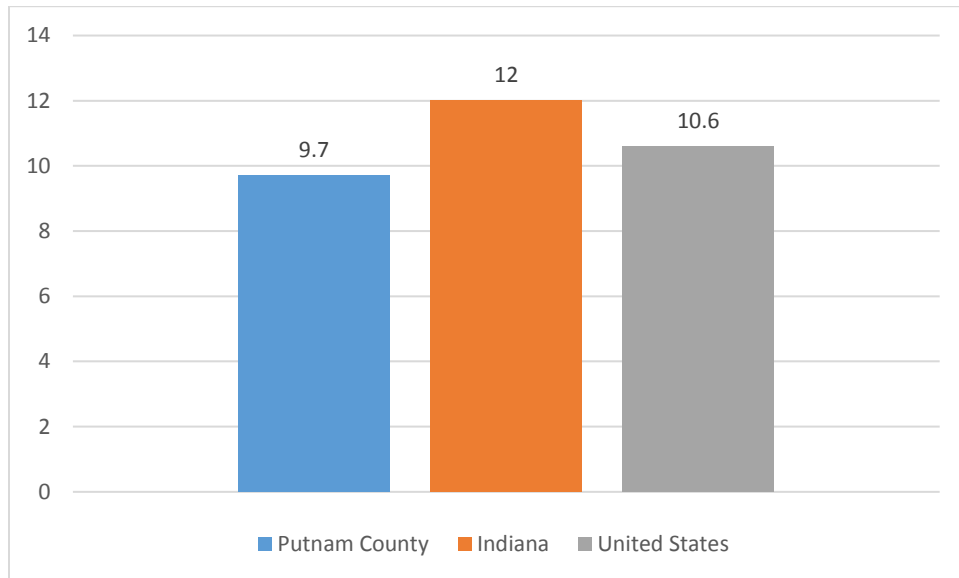
Note: Figure Reflects data from the CDC's Division of Heart Disease and Stroke Prevention

Cancer

Cancer is a leading cause of death in the United States and is a constant health concern of residents. In addition to the 2012 cancer incidence rates outlined in the following figure, the following table reports the 2014 highest cancer mortality rates for Putnam County and Indiana. The incidence rates are reported by the Community Commons (2016) using data from the National Cancer Institute. The mortality table was created using data from the Indiana State Department of Health 2014 Mortality Report.

The following figure reflects the 2008-2012 age-adjusted cancer incidence rates (cases per 100,000 population per year) for breast, colon and rectum, lung, and prostate cancer. Putnam County fell below the state and national averages for breast and prostate cancer incidence rates. However, Putnam County had a slightly higher rate of colon and rectum cancer at 48.6, compared to the Indiana rate of 45.1 and the national rate of 41.9. The most significant difference was the lung cancer incidence rate, which was reported to be 96.3 for Putnam County. This is significantly higher than the Indiana and national averages of 75.2 and 63.7, respectively (Community Commons, 2016).

Table 5 reflects the 2014 top cancer mortality rates for Putnam County and Indiana. Included are the top ten mortality rates for Putnam County and how those rates compare to the state totals. Putnam County has a higher mortality rate for all sites combined, but more specifically, lung, pancreas, cervical, urinary tract, leukemia, and non-Hodgkin's lymphoma (Indiana State Department of Health, 2016).

Figure 14: 2012 Age-Adjusted Cancer Incidences for Putnam County, Indiana, and the U.S.
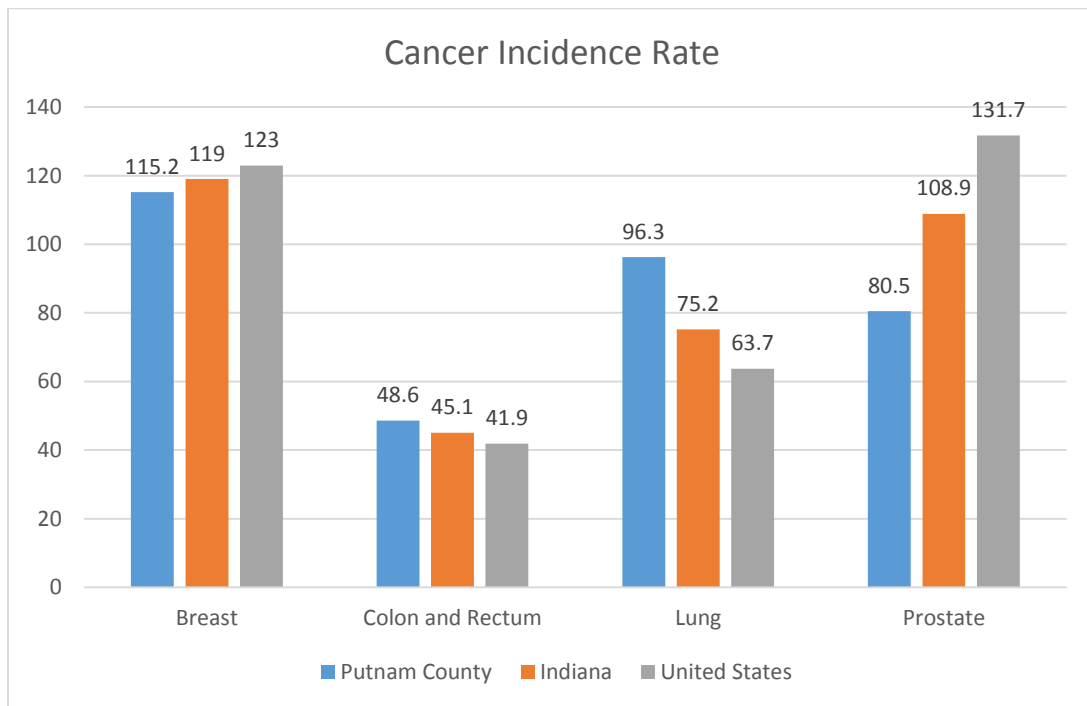
Table 5: 2014 Age-Adjusted Cancer Death Rates (Per 100,000) for Putnam County and Indiana

	Putnam County	Indiana
Total (All sites)	192.53	179.41
Trachea, Bronchus, and Lung	62.65	53.19
Pancreas	20.73	11.49
Cervix Uteri, Corpus Uteri, and Ovary (Female)	14.67	8.19
Urinary Tract	11.95	9.2
Leukemia	11.31	7.15
Breast	8.63	11.66
Non-Hodgkin's Lymphoma	8.32	6.8
Colon, Rectum, and Anus	7.83	16.7
Prostate (Male)	6.89	8.02
Other	39.55	45.14

Note: Data extracted from Indiana State Department of Health 2014 Mortality Report

Natality Indicators

Table 6 below presents the 2014 natality data that is reported by the Indiana State Department of Health (ISDH). According to ISDH natality report, Putnam County recorded 353 total live births in 2014. Of these 353 births, 7.9% were classified as preterm while 6.8% were low birth weight. Due to less than 5 births, there was no percentage available for very low birth weight. Both of those values fell below the Indiana state average for preterm and low birth weight. In addition, 78.2% of Putnam County mothers received prenatal care during their first trimester, which was higher than the Indiana average of 67.5%. Also, 21% of mothers reported smoking during their pregnancy, which was nearly six percent higher than the Indiana average of 15.1%. Putnam County reported 40.2% of mothers were unmarried, which was slightly below the state average of 43.3%. There was only one reported infant (less than a year) fatality and one neonatal (less than 28 months) fatality reported for Putnam County.

Table 6: 2014 Natality Statistics for Putnam County and Indiana

Natality Indicators	Putnam County	Indiana
Crude Birth Rate (Live Births per 1,000 population)	9.4	12.7
Total Live Births	353	83,927
Percentage of Preterm Births (Delivery of a liveborn infant prior to 37 weeks gestation)	7.9%	9.7%
Percentage of Low Birth Weight (Birthweight less than 2,500 grams : 5lb 8oz)	6.8%	8%
Percentage of Very Low Birth Weight (Birthweight less than 1,500 grams: 3lb 5oz)	** Unavailable (less than 5 births)	1.4%
Percentage of Mothers Who Received Prenatal Care During First Trimester	78.2%	67.5%
Percentage of Mothers Who Smoked During Pregnancy	21%	15.1%
Percentage of Mothers Who Were Unmarried	40.2%	43.3%
Mortality Number: Infant (<1 year) Neonatal (<28 days) Post-neonatal (28-364 days)	1 1 0	597 388 209

Note: Data obtained from Indiana State Department of Health: 2014 Natality and Mortality Reports (Indiana State Department of Health, 2016).

Physical Environment Indicators

       In order to determine the physical environment status of Putnam County, key data was gathered from the County Health Rankings and Roadmaps. Table 7, which is featured below, displays the data of air pollution, access to exercise opportunities, food environment index, and the violent crime rate for Putnam County, Indiana, and the national benchmark. The U.S. benchmark for each category is defined as the 90th percentile among states.

       In terms of air pollution, measurements of the particulate matter have been made. Particulate matter is measured as the average daily density of particulate matter in micrograms per cubic meter. These particles can be directly emitted from sources such as forest fires, or they can form when gases emitted from power plants, industries, and automobiles react in the air. Putnam County's particulate matter indicator is 13.7, which is slightly higher than the Indiana state average of 13.5. The national benchmark for this indicator is a value of 9.5, which indicates that Indiana's air is slightly more polluted than the 90th percentile among states in 2011.

       Additionally, access to exercise opportunities is another key physical environment indicator that was also taken into consideration. Access to exercise opportunities is defined as the percentage of individuals who live reasonably close to parks or recreational facilities. Individuals who are considered to have adequate access for opportunities for physical activity include those who reside a census block within a half mile of a park, or depending on an urban/rural census tract, individuals who reside within one (urban) or three (rural) miles of a recreational facility. 2014 data reports that only 49% of Putnam County residents have access to exercise opportunities. This is significantly less than the 75% of Indiana residents and the national benchmark of 91%.

       Also provided in the table below are the 2012/2013 values for each area's food environment index. The food environment index is a value from 1 (worst) to 10 (best) that equally weights two indicators of an area's food environment. The first of those indicators is limited access to healthy foods, which is the percent of the population who are low income and do not live close to a grocery store. The second indicator is food insecurity, which is the percentage of the population who lack adequate access to food. The food environment rating for Putnam County is 8.1, which is higher than the Indiana average of 7.2. The Putnam County rating is just short of the national benchmark of 8.3. Also included in the table is the number of SNAP-authorized food stores as a rate per 100,000 population as reported by the Community Commons (2016). SNAP-authorized stores include grocery stores as well as supercenters, specialty food stores, and convenience stores that are authorized to accept SNAP (Supplemental Nutrition Assistance Program) benefits. In 2016, Putnam County ranks higher than the Indiana average and the national benchmark in this indicator with a value of 8.43.

       Finally, according to County Health Rankings and Roadmaps (2016), the violent crime rate per 100,000 residents in Putnam County is 61. This is slightly lower than the Indiana average of 63, but does not meet the national benchmark of 51. Reported violent crime include offenses that involve face-to-face confrontation between the victim and the perpetrator, including homicide, forcible rape, robbery, and aggravated assault.

Table 7: Key Physical Environment Indicators of Health for Putnam County, Indiana, and the U.S

Physical Environment Indicator	Putnam County	Indiana	U.S. Benchmark*	Data Source/ Year
Air Pollution – Particulate Matter (Average daily density of particulate matter in micrograms per cubic meter)	13.7	13.5	9.5	County Health Rankings / 2011
Access to Exercise opportunities (Percentage of individuals who live reasonably close to parks or recreational facilities)	49%	75%	91%	County Health Rankings / 2014
Food Environment Index (Range from 0-worst to 10-best, equally weights two indicators of food environment 1)Limited access to healthy foods 2)Food Insecurity)	8.1	7.2	8.3	County Health Rankings / 2012-2013
SNAP Authorized Food Stores (per 100,000 population)	8.43	8.12	8.29	Community Commons / 2016
Violent Crime Rate (Number of reported violent crime offenses 100,000 population)	61	63	51	County Health Rankings / 2011-2012

*U.S. Benchmark defined as 90th percentile among states

Mortality Indicator: Leading Causes of Death

       The following table contains the top eleven leading causes of death among Putnam County residents during the period of 2012-2014, as reported by CDC Wonder. Excluding the residual diseases, the top three causes of death for Putnam County residents include cancer, heart disease, and chronic lower respiratory disease. In fact, cancer and heart disease alone accounted for 54% (514) of the 934 total deaths represented in the table below. For comparative analysis, also included in the table are the corresponding Indiana and United States cause of death data for the same diseases.

       Also listed in table 8 are the age-adjusted rates (per 100,000 residents) for the top 11 causes of death in Putnam County, Indiana, and the United States. You can see that Putnam County has a higher rate than Indiana and the United States in every cause of death besides

Alzheimer's disease and diabetes mellitus. Also worth noting is the significantly high rates for cancer and heart disease in Putnam County.

Table 8: Counts and Age-adjusted Rates (Per 100,000) for the Top 11 Leading Causes of Death among Putnam County, Indiana, and U.S. Residents (2012-2014)

Cause of Death	Putnam County		Indiana		U.S.	
	Count	Rate	Count	Rate	Count	Rate
Cancer	262	232.1	13,519	204.9	1,759,203	185.4
Heart Disease	252	223.2	13,764	208.6	1,825,164	192.3
Chronic Lower Respiratory Disease	65	57.6	4,029	61.1	439,795	46.3
Cerebrovascular Disease (Stroke)	58	51.4	3,107	47.1	390,627	41.2
Accidents	52	46.1	2,974	45.1	394,402	41.6
Alzheimer's Disease	29	25.7	2,204	33.4	261,945	27.6
Kidney Disease	27	23.9	1,392	21.1	140,880	14.8
Influenza and Pneumonia	25	22.1	1,063	16.1	162,842	17.2
Diabetes Mellitus	21	18.6	1,819	27.6	225,998	23.8
Suicide	20	17.7	948	14.4	124,522	13.1
All Other Diseases (Residual)	123	109	7,944	120.4	947,620	99.9

Note: Data Obtained from CDC Wonder – Detailed Mortality Database (Centers for Disease Control and Prevention, 2016)

Premature Death

Premature death is measured as the age adjusted years of potential life lost before the age 75 per 100,000 population. Every death occurring before the age of 75 contributes to the total number of years of potential life lost. According to data reported on County Health Rankings and Roadmaps (2016), in 2013 Putnam County had 7,800 years of potential years of life lost. This is higher than the Indiana average of 7,600, and the national benchmark of 5,200 potential years of life lost. The following figure is a graphical representation of this data.

Figure 15: Years of Potential Life Lost Before the Age of 75 in 2013 for Putnam County, Indiana, and the Top Performers in the U.S
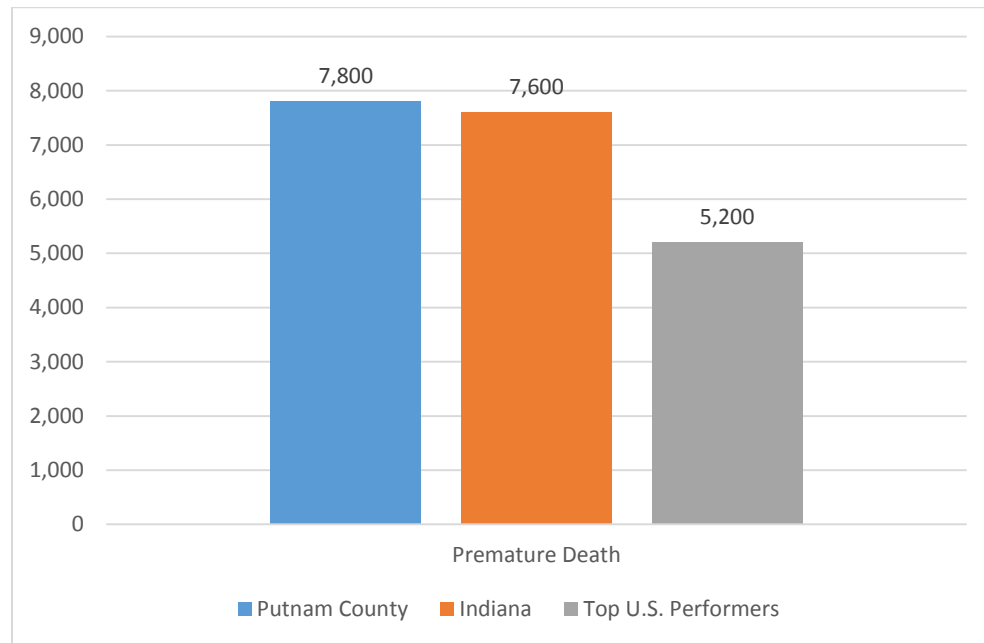
*National benchmark defined as the 90th percentile of U.S. counties.

Access to Care

The following figures in Table 9 reflect data reported by the County Health Roadmaps and Rankings (2016). These figures provide an insight on the ratios of the population to total health care professionals and providers in Putnam County, Indiana, and the 90th percentile of the United States. The table indicates the most current ratios available for primary care physicians, mental health providers, dentists, and other primary care providers. Primary care physicians include non-federal, practicing physicians (M.D.'s and D.O.'s) under age 75 specializing in general practice medicine, family medicine, internal medicine, and pediatrics. The ratio of the population to total primary care physicians in Putnam County is 2,680:1. This is significantly higher than the Indiana average of 1,490:1 and the top U.S. performers of 1,040:1.

Mental Health Providers is the ratio of the county population to the number of mental health providers including psychiatrists, psychologists, licensed clinical social workers, counselors, marriage and family therapists and advanced practice nurses specializing in mental health care. In 2015, marriage and family therapists and mental health providers that treat alcohol and other drug abuse were added to this measure. The ratio for mental health providers in Putnam County is 1,500:1, which is also well above the Indiana average of 710:1 and the U.S. 90th percentile of 370:1. Dentists are measured as the ratio of the county population to total dentists in the county. For Putnam County this measure is 3,420: 1, which is again higher than both the Indiana (1,930:1) and national benchmark (1,340:1).

Ratio of population to primary care providers other than physicians includes nurse practitioners (NPs), physician assistants (PAs), and clinical nurse specialists. Putnam County's ratio is 2,894:1, which is significantly higher than the 1,661:1 of Indiana and the 866:1 of the national benchmark. The following table shows all of these ratios. Also included in the following maps (1-4) are visuals of how Putnam County compares to other counties around the state.

Table 9: Ratios of the Putnam County, Indiana, and U.S. population to primary care physicians, mental health providers, and dental care providers

	Putnam County	Indiana	U.S. Benchmark*
Primary Care Physicians (2013)	2,680:1	1,490:1	1,040:1
Mental Health Providers (2015)	1,500:1	710:1	370:1
Dentists (2014)	3,420:1	1,930:1	1,340:1
Other Primary Care Providers (2015)	2,894:1	1,661:1	866:1

Note: Data extracted from the County Health Rankings and Roadmaps (2016)
*U.S. Benchmark defined as the 90th percentile among states

Finally, table 10 indicates the health insurance statistics for Putnam County, the state of Indiana, and the benchmark for the United States. 15% of the Putnam County population under the age of 65 was reported to not have health insurance in 2013. That was slightly lower than the Indiana average of 16%, but higher than the national benchmark of 11%. Similarly, 9% of Putnam County children under the age of 19 are without health insurance. This was slightly higher than both the Indiana average and the National benchmark. However, data shows that Putnam County has a price adjusted Medicare spending of $9,144 per enrollee, which is lower than the Indiana average of $9,753.

Table 10: 2013 Health Insurance Statistics in Putnam County and Indiana

	Putnam County	Indiana	U.S. Benchmark*
Percent of population under age 65 without health insurance	15%	16%	11%
Percent of children under age 19 without health insurance	9%	8%	5%

Price-adjusted Medicare spending per enrollee	$9,144	$9,753	Not reported

Note: Data extracted from the County Health Rankings and Roadmaps (2016).

*U.S. Benchmark defined as the 90th percentile among states

Map 1: Estimated Ratio of Primary Care Physicians per 100,000 Population by County, 20

BEST ▬▬▬▬▬▬▬▬▬▬▬ WORST   MISSING
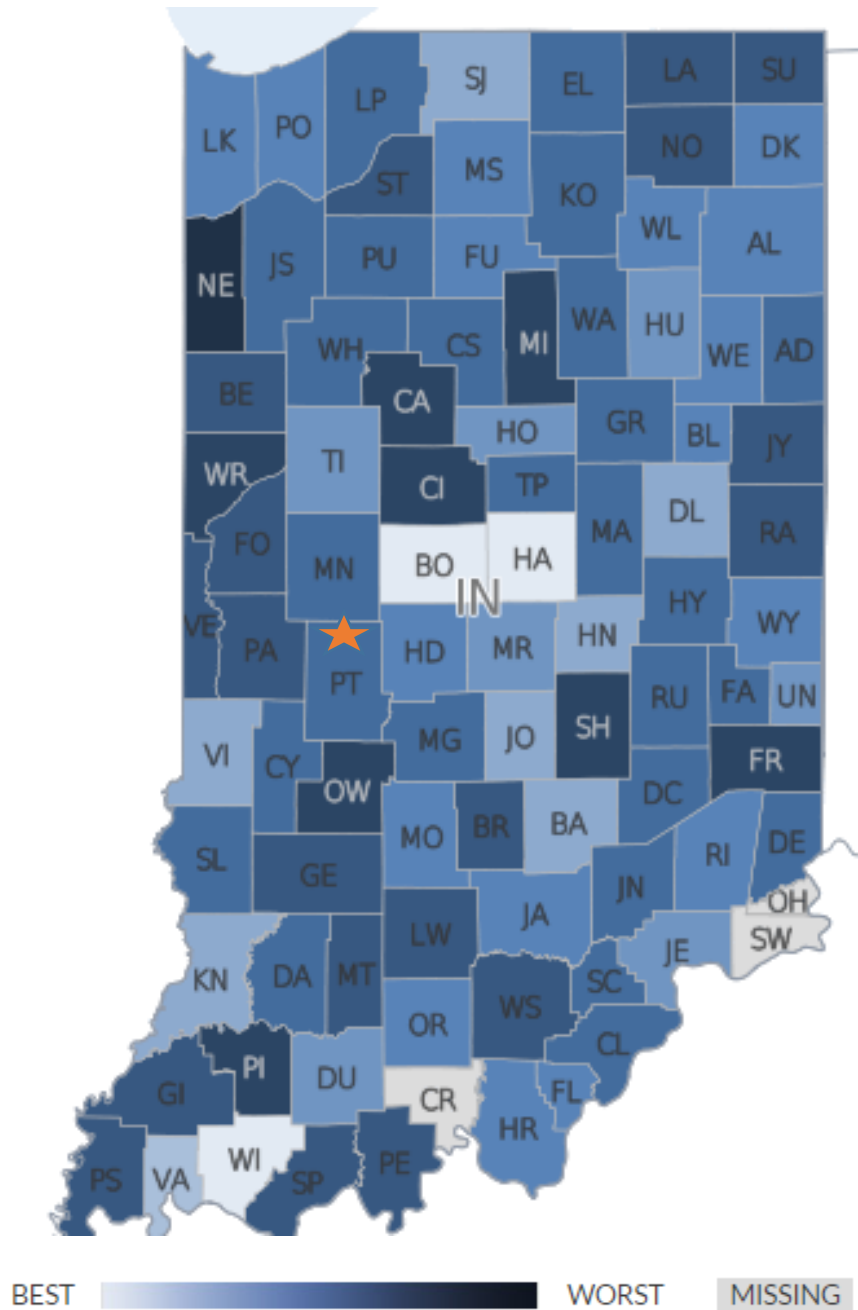
Map 2: Estimated Ratio of Dentists per 100,000 Population by County

BEST ▬▬▬▬▬▬▬▬▬▬▬ WORST   MISSING
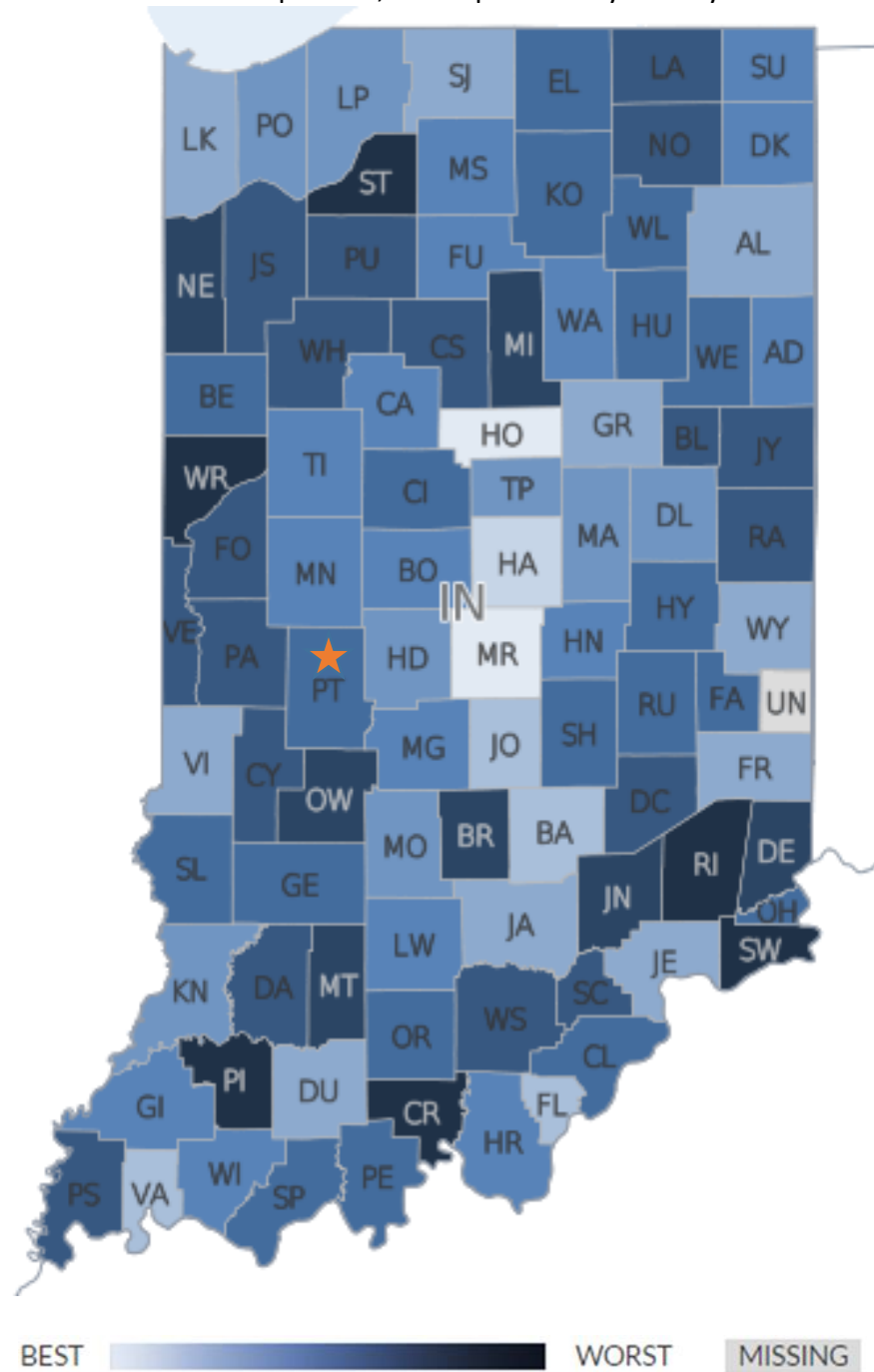
Map 3: Estimated Number of Mental Health Providers per 100,000 Population by County

BEST | WORST | MISSING

Map 4: Indiana Population to Primary Care Physician Ratio by County 2013

Indiana Population to Primary Care Physician Ratio By County

Full-Time-Equivalent (FTE) Ratio

- ▢ Greater than 2,500:1
- ▢ Less than 2,500:1

The number in each county indicates the number of FTE primary care physicians that are needed to equal a 2,500:1 ratio. A normal work week (e.g. 40 hours) for 1 physician is equivalent to 1 FTE.

A positive number indicates a need in the county.

A negative number indicates a surplus in the county.

County	Value
St Joseph	7.5
La Porte	11.1
Elkhart	25.4
Lagrange	8.0
Steuben	5.3
Lake	18.0
Porter	12.0
Noble	7.6
De Kalb	3.1
Starke	-0.1
Marshall	1.2
Kosciusko	7.0
Whitley	4.5
Allen	39.8
Jasper	3.2
Pulaski	1.8
Fulton	1.4
Newton	4.6
Wabash	3.3
Huntington	8.3
Wells	4.1
Adams	5.7
White	5.2
Cass	1.0
Miami	6.3
Benton	3.5
Carroll	8.0
Grant	15.4
Blackford	-3.5
Jay	4.5
Howard	-6.6
Warren	2.4
Tippecanoe	38.8
Clinton	6.8
Tipton	1.4
Delaware	-5.7
Madison	-6.3
Randolph	5.2
Fountain	3.7
Montgomery	-0.3
Boone	1.2
Hamilton	-20.5
Henry	0.0
Wayne	-3.2
Verm.	0.9
Parke	-0.7
Putnam	2.4
Hendricks	4.9
Marion	-114.0
Hancock	-7.2
Rush	0.6
Fayette	0.1
Union	2.7
Vigo	0.7
Clay	4.5
Owen	8.3
Morgan	16.8
Johnson	22.9
Shelby	4.6
Decatur	3.9
Franklin	3.4
Sullivan	2.5
Greene	7.7
Monroe	12.1
Brown	2.8
Bartholomew	-1.4
Ripley	-4.8
Dearborn	-0.5
Jennings	2.9
Ohio	2.2
Jackson	5.2
Lawrence	10.1
Jefferson	11.8
Switzerland	4.2
Knox	4.6
Daviess	-1.1
Martin	0.9
Scott	4.5
Washington	3.7
Orange	3.7
Clark	-0.1
Pike	2.1
Dubois	1.9
Floyd	1.0
Gibson	-1.0
Crawford	2.2
Harrison	0.7
Posey	5.2
Vanderburgh	-4.2
Warrick	-9.6
Spencer	3.1
Perry	4.0

Map Author: ISDH ERC Public Health Geograph
FTE Data Source: 2013 Physician Relicensure Surv
County Population Source: U.S. Census 2014 Estimates for 20

Findings from Key Stakeholder Interviews

Upon collaboration with the leadership team at Putnam County Hospital and other community leaders, a list a key informants was developed to seek further input on the health needs of Putnam County residents. A full list of these key stakeholders and their occupations can be found in Appendix B. The full list of the questions asked to help facilitate the interviews can be found in Appendix C. The key stakeholders held a variety of occupations throughout Putnam County, and were able to share their insights on the health concerns that they have encountered in their interactions with Putnam County residents. All of the stakeholders interviewed are well established and highly respected members of the community, and graciously gave their time and knowledge on the current health status of the county.

The first question that key stakeholders were asked had them identify what they thought the most common or most pressing health concerns were in Putnam County. 10 out of the 13 interviewees mentioned that obesity was a primary health concern in Putnam County. 11 of the 13 informants stated they believe a lack of physical activity and smoking/tobacco use are health concerns prevalent in Putnam County residents.   Although online data commonly reports the number of residents who smoke, stakeholders also wanted to draw attention to the use of smokeless tobacco because they felt it is often overlooked. Another common response during the interviews was the poor nutritional and exercising habits of county residents. Similarly, many interviewees stated many residents need more education on the value of making good nutritional and healthy decisions. Respondents also stated access to care is a concern for many Putnam County residents. This includes access to care to affordable health services for those who live in the less populated areas of the county and also access to mental health services. It was also mentioned that the lack of access could also be attributed to the shortage of primary care physicians, especially in rural areas.

 In summation, the five top health concerns most commonly given were:

1. Smoking/tobacco use
2. Physical inactivity
3. Obesity
4. Nutritional/Health education
5. Access to exercise opportunities.

Other responses given by key informants include:
-   Access to care (Mental &Physical)   - Teen birth/family planning
-   Lack of family support   - Poor Diet
-   Transportation   - Cancer
-   Diabetes   - Drug/Substance abuse
-   Heart disease   - Industrial wellness

Key informants were also asked to identify some of the factors that might contribute to these common health issues and conditions. Many informants stated they often see economic

constraints playing a large role in the common poor health behaviors. These constraints included a lack of funding and smaller budget spending for programs and organizations that offer healthy choices or prevention/intervention services to improve the health status of Putnam County residents. It was also identified there are economic constraints on residents themselves that can lead to poor health decisions (e.g. choosing fast food, not attending a costly gym, unable to receive preventative care).

A common thought among informants during the interviews was the lack of coordination between community resources in addressing health issues. There are many organizations and programs that offer valuable services to the residents of the county, but there is a lack of communication and awareness between these common efforts. Informants voiced that integrating community efforts would be beneficial in order to maximize results and perpetuate a healthy community culture. Coordination between schools, faith based organizations, the hospital, and other community organizations that are already trying to address these issues by themselves would help integrate health initiatives and ensure that services are exposed to the greatest number of residents possible.

Another common dialogue that occurred during many of the interviews was about the culture or tolerance for poor health behaviors in the area. Informants shared that in a small, rural area like Putnam County, a culture of poor health decisions is a hard cycle to break. Informants wanted to point out that health literacy and education on the value of making proper nutritional and healthy choices, for both children and adults, seems to be an issue that is commonly overlooked. Stakeholder interviews also allowed informants to voice a concern over the lack of access to exercise opportunities. There are a number of trail systems and parks in the Putnam County area, but many are not within a reasonable distance of all county residents. The same can be said about the number of gyms, and memberships to these facilities may be unfeasible for residents of lower socioeconomic status.

Finally, although the key informant interviews helped highlight some of the most pressing health concerns facing Putnam County, they also made it clear that Putnam County is putting forth the effort to make positive steps in increasing the health status of its residents.

The informants expressed their gratitude towards the continued effort that many organizations, including the hospital, are giving to continue building a healthy Putnam County, and remain optimistic about the future of the community.

Identified Community Health Needs

The following table displays a summary of the health indicators that have been reported by online research – quantitative data from existing public sources – and health indicators that were reported throughout the key stakeholder interviews. In order to help demonstrate the perceived urgency of the health indicators reported by existing public data, priority markers were included in the table. Health indicators perceived as those that have a high significance on the current health status of residents were designated as "I" to indicate high priority. Similarly, health indicators were marked with "II" to indicate moderate priority and "III" to indicate lower priority. Additionally, health status indicators that were mentioned by key stakeholders during their interviews were labeled with a check mark. Finally, information

gap notes were added to rows that showed differences between the information reported by secondary data and the key stakeholder interviews.

Table 11: Summary of Health Indicators Identified by Existing Data and Key Informant Interviews for Putnam County

Health Indicator	Existing Public Data[1]	Key Informant Interviews[2]	Information Gap
Perception of Poor General Health	II	√	
Perception of Physical/Mental Health	II	√	
Obesity	I	√	
Smoking/Tobacco Use	I	√	
Physical Inactivity	I	√	
Alcohol Consumption	II		Key informants did not mention as a primary health concern in the community
Sexually Transmitted Infections	III		Key informants did not mention as a primary health concern in the community
Teen Birth Rate/Family Planning	II	√	
Cancer	I	√	
Diabetes	II	√	
Asthma	III		Key informants did not mention as a primary health concern in the community
Heart Disease	I	√	
Access to Care	II	√	
Stroke	III		Key informants did not mention as a primary health concern in the community

Geriatric Care		√	Lack of supporting public data on the status of geriatric care
Lack of Family Support		√	Lack of supporting public data
Nutritional/Health Education		√	Lack of supporting public data on nutrition/health education
Poor Eating Habits/Diet		√	Lack of supporting public data on diet and eating habits
Drug/Substance Abuse		√	Lack of supporting public data on drug and substance abuse
Poverty	II	√	
Transportation	II	√	
Access to Exercise Opportunities	I	√	
Industrial Wellness		√	Lack of supporting public data on industrial wellness

[1]Quantitative Data: I = High Priority; II = Medium Priority; III = Low Priority

[2]Qualitative Data: Identified health concern/need for the community by key informants during interviews

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Pictures courtesy of Putnam County Hospital

Appendix

Appendix A: 2014 Leading 10 causes of death with ICD-10 coding

Causes of Death   ICD-10 Codes

1. Malignant Neoplasms (Cancer)…………………………………………………………….C00-C97
2. Diseases of the Heart…………………………………………………………I00-I09,I11,I13,I20-I51
3. Chronic Lower Respiratory Disease………………………………………………….J40-J47
4. Cerebrovascular Diseases (Stroke)………………………………………………….I60-69
5. Accidents………………………………………………………………………V01-X59,Y85-Y86
6. Alzheimer's Disease……………………………………………………………………G30
7. Nephrotic Syndrome and Nephrosis (Kidney Disease)………….N00-N07,N17-N19,N25-N27
8. Influenza and Pneumonia…………………………………………………………J09-J18
9. Diabetes Mellitus……………………………………………………………………E10-E14
10. Intentional Self-harm (Suicide)……………………………………………………….*U03,X60-X84,Y87.0

Appendix B: Key Informant List

        Name

1. Dr. Robert Heavin   County Health Officer
2. William B. Dory   Mayor of Greencastle, IN
3. Dr. Keith Landry   Medical Staff/Board Member of PCH
4. Cathy Clodfelter   Nurse Practitioner at PCH
5. Karen Martoglio   Mental Health America Director
6. Sue Murray   Former Mayor of Greencastle, IN
7. Sharon Pitcock   Senior Citizen Center Director
8. Jennifer Cannon   Purdue Extensions- Putnam County
9. Dr. Lisa Martin   Putnam Pediatrics and Internal Medicine
10. Tammy Hunter   Access to Care & Insurance Navigator at PCH
11. Vicki Timm   Johnson-Nichols Health Clinic
12. Judy Purvis   Transformers Greencastle
13. Putnam County Health Department Staff

Appendix C: Key Informant Interview Questions

1. To begin our discussion, what do you think are the most pressing/most common health needs in your community?
2. What are the behaviors in the community that you think are connected to these health concerns?
3. What factors in the community do you think contribute to these behaviors? (e.g. cultural, economic, environmental)
4. So you know of any facilities, organizations, and/or programs that are currently contributing efforts to address these health concerns?
5. Do you feel these efforts are succeeding?
6. What do you think needs to be done to close the gap between "health needs' and implementing solutions?
7. What do you think the drawbacks in implementing solutions are?
8. Can you think of any other health topics/issues and/or underlining factors that online data may not depict?
9. Finally, off the top of your head, can you think of one or two things that would dramatically improve the status of Putnam County residents?