



**Indiana University Health Arnett Hospital  
Community Health Needs Assessment**

**2011-2012**



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# 1 INTRODUCTION

## 1.1 Purpose

This report provides an overview of findings from a community health needs assessment (CHNA) conducted on behalf of Indiana University Health (IU Health) Arnett Hospital (IU Health Arnett) in order to assess health needs in the county service areas served by the hospital. This assessment was initiated by IU Health Arnett to identify the community's most important health issues, both overall and by county, in order to develop an effective implementation strategy to address such needs. It was also designed to identify key services where better integration of public health and healthcare can help overcome barriers to patient access, quality, and cost-effectiveness. The hospital also has assessed community health needs to respond to the regulatory requirements of the Patient Protection and Affordable Care Act of 2010 (PPACA), which requires that each tax-exempt hospital facility conduct an independent CHNA.

IU Health Arnett completed this assessment in order to set out the community needs and determine where to focus community outreach resources. The assessment will be the basis for creating an implementation strategy to focus on those needs. This report represents IU Health Arnett's efforts to share knowledge that can lead to improved health and the quality of care available to their community residents while building upon and reinforcing IU Health Arnett's existing foundation of healthcare services and providers.

## 1.2 Objectives

The 2011 IU Health Arnett Hospital CHNA has four main objectives:

1. Develop a comprehensive profile of health status, quality of care, and care management indicators overall and by county for those residing within the IU Health Arnett service area, specifically within the primary service area (PSA) of Tippecanoe County, Indiana.
2. Identify the priority health needs (public health and healthcare) within the IU Health Arnett PSA.
3. Serve as a foundation for developing subsequent detailed recommendations on implementation strategies that can be utilized by healthcare providers, communities, and policy makers in order to improve the health status of the IU Health Arnett community.
4. Supply public access to the CHNA results in order to inform the community and provide assistance to those invested in the transformation of the community's healthcare network.

## 2 EXECUTIVE SUMMARY

### 2.1 Overall IU Health Arnett Community

- Service Area Counties: Tippecanoe, Clinton, White, Carroll, Benton, Fountain, Montgomery, and Jasper
- Service area population in 2010: 348,498
- 62% of the IU Health Arnett inpatient discharge population resides in Tippecanoe County
- Of the eight service area counties, only three are expected to increase in population by 2015: Tippecanoe, Montgomery, and Jasper
- The 65+ population is projected to increase substantially by 2015 for all counties, and the 5- to 19-year-old population is anticipated to decrease for all counties except Tippecanoe County
- Similar to poverty rates for Indiana and the US, rates for five of the eight counties have increased from 2008 to 2009
- 12% of community discharges were for patients with Medicaid, 31% were for patients with Medicare, and 8% were for uninsured/self-pay patients

IU Health Arnett's entire community service area extends into seven counties: Tippecanoe, Clinton, White, Carroll, Benton, Fountain, Montgomery, and Jasper. Social and economic factors may contribute to the poor lifestyle choices that are prevalent in the community, such as substance abuse, poor diet, and lack of physical activity.

### Top Community Health Needs

The needs listed below specify the health issues identified by the assessment as priority needs across the entire community served by the hospital. These problems affect most of the community service area counties, but particularly apply to the PSA of Tippecanoe County.



**Access to healthcare**



**Mental health**



**Obesity and lack of physical activity**



**Substance abuse**



**Senior health**

## 2.2 Primary Service Area

Tippecanoe County comprises the majority of the IU Health Arnett community. It accounts for all of the PSA's total population, and 62% of the inpatient discharge population of the total community service area.



Tippecanoe County has lower rates of unemployment than the state of Indiana and the national average; however, poverty rates for the county are above both state and national averages. Both the per capita personal income and median household income for Tippecanoe County are also below the state and national averages. The county is adversely affected by a combination of chronic health conditions, low levels of community safety, low educational attainment, and the low availability of higher paying jobs.

Other characteristics of Tippecanoe County are as follows:

- Tippecanoe County has seen a 16% increase in population since 2000—a rate much higher than the average rate for the entire IU Health Arnett service area (7.7%), the state of Indiana (6.6%), and the entire nation (10%)
- The senior population (65+) is projected to increase at a faster rate for Tippecanoe County compared to the total IU Health Arnett service area and the entire state
- Approximately 6% of Tippecanoe County community discharges were ambulatory care sensitive conditions (ACSC) in 2007, which was lower than many of the other service area counties
- Based on County Health Rankings, Tippecanoe County ranked 20th out of 92 counties in the state of Indiana for overall health outcomes, and 10th out of 92 counties for overall health factors
- Tippecanoe County compared unfavorably for many Community Health Status Indicators, and this was especially so for factors related to prenatal and infant care (eg, no care in the first trimester, infant mortality, White non-Hispanic infant mortality, Hispanic infant mortality, and neonatal infant mortality) and chronic/morbid health conditions (eg, lung cancer and stroke)
- Among the nine ZIP code areas included within Tippecanoe County, the city of Lafayette has the highest community health needs based on CNI assessment of economic and structural health indicators, with scores ranging from moderately high to high
- Only nine Tippecanoe County community members responded to IU Health Arnett's CHNA survey, and 78% of them rated their community as "Somewhat Unhealthy" or "Very Unhealthy"

## **3 STUDY METHODS**

### **3.1 Analytic Methods**

In order to provide an appropriate overarching view of the community's health needs, conducting a local health needs assessment requires the collection of both quantitative and qualitative data about the population's health and the factors that affect it. For this CHNA, quantitative analyses assessed the health needs of the population through data abstraction and analysis, and qualitative analyses were conducted through structured interviews and conversations with community leaders in areas served by IU Health Arnett. The qualitative community orientation portion of the analysis was critically important to include in this assessment's methodology, as it provides an assessment of health needs from the view of the community rather than from the perspective of the health providers within the community.

### **3.2 Data Sources**

CHNAs seek to identify priority health status and access issues for particular geographic areas and populations. Accordingly, the following topics and data are assessed:

- Demographics, eg, population, age, sex, race
- Economic indicators, eg, poverty and unemployment rates, and impact of state budget changes
- Health status indicators, eg, causes of death, physical activity, chronic conditions, and preventive behaviors
- Health access indicators, eg, insurance coverage, ambulatory care sensitive condition (ACSC) discharges
- Availability of healthcare facilities and resources

Data sets for quantitative analyses included:

- Dignity Health (formerly Catholic Health West)—Community Needs Index
- Centers for Disease Control and Prevention
- Centers for Medicare & Medicaid Services
- Community Health Status Indicators Project
- Dartmouth Atlas of Health Care
- Indiana Department of Workforce Development
- Indiana Hospital Association Database
- Kaiser Family Foundation
- National Research Corporation—Ticker
- Robert Wood Johnson Foundation—County Health Rankings
- STATS Indiana data—Indiana Business Research Center, IU Kelley School of Business
- Thomson Reuters Market Planner Plus and Market Expert
- US Bureau of Labor Statistics
- US Census Bureau
- US Department of Commerce, Bureau of Economic Analysis



- US Health Resources and Services Administration

While quantitative data can provide insights into an area, these data need to be supplemented with qualitative information to develop a full picture of a community's health and health needs. For this CHNA, qualitative data were gathered through surveys of members of the public, and a focus group with health leaders and public health experts.

### **3.3 Information Gaps**

To the best of our knowledge, no information gaps have affected IU Health Arnett's ability to reach reasonable conclusions regarding community health needs. While IU Health Arnett has worked to capture quantitative information on a wide variety of health conditions from a wide array of sources, IU Health Arnett realizes that it is not possible to capture every health need in the community and there will be gaps in the data captured.

To attempt to close the information gap qualitatively, IU Health Arnett conducted community conversations and community input surveys. However, it should be noted that there are limitations to these methods. If an organization from a specific group was not present during the focus group conversations with community leaders (such as seniors or injury prevention groups), then that need could potentially be underrepresented during the conversation. Furthermore, due to the community survey's very small sample size, extrapolation of these results to the entire community population is limited.

### **3.4 Collaborating Organizations**

The IU Health system collaborated with other organizations and agencies in conducting this needs assessment for the IU Health Arnett community. These collaborating organizations are as follows:

DWA Healthcare Communications Group

Hanna Community Center

Indiana House of Representatives

IU Health Arnett Hospital

Lafayette School Corporation

Mental Health America of Tippecanoe County

Purdue Extension of Tippecanoe County

Temple Israel, West Lafayette

Tippecanoe County Commissioners

Tippecanoe County Health Department

United Way of Greater Lafayette

Verité Healthcare Consulting, LLC

West Lafayette Community School Corporation

## 4 DEFINITION OF COMMUNITY ASSESSED

This section identifies the community assessed by IU Health Arnett. The PSA of IU Health Arnett includes Tippecanoe County. The secondary service area (SSA) is comprised of seven contiguous counties. The community definition is consistent with the inpatient discharges for 2010, as illustrated in *Table 1* and *Figure 1* below.

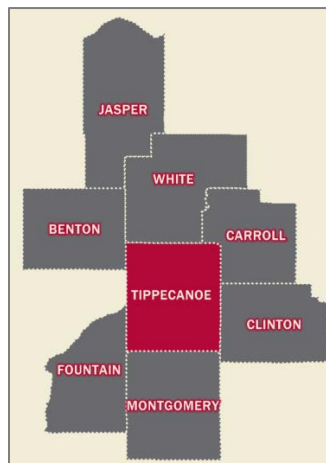
**Table 1**  
IU Health Arnett Inpatient Discharges by County and Service Area, 2010

Discharge Area	County	Discharges	Percent of Total
Primary Service Area	Tippecanoe	5394	61.7%
	<b>Subtotal</b>	<b>5394</b>	<b>61.7%</b>
Secondary Service Area	Clinton	614	7.0%
	White	605	6.9%
	Carroll	594	6.8%
	Benton	398	4.6%
	Fountain	238	2.7%
	Montgomery	225	2.6%
	Jasper	213	2.4%
	<b>Subtotal</b>	<b>2887</b>	<b>33.0%</b>
All Other Areas	<b>Subtotal</b>	<b>463</b>	<b>5.3%</b>
<b>Total Discharge Population</b>		<b>8744</b>	<b>100.0%</b>

Source: IHA Database, 2010.

In 2010, the IU Health Arnett PSA included 5394 discharges and its SSA included 2887 discharges. The community was defined based on the geographic origins of IU Health Arnett inpatients. Of the hospital's inpatient discharges, approximately 62% originated from the PSA and 33% from the SSA (*Table 1*).

**Figure 1**  
Counties in the IU Health Arnett Service Area Community, 2010



## 5 SECONDARY DATA ASSESSMENT

### 5.1 Demographics

IU Health Arnett Hospital is located in Tippecanoe County, a county located in northwest Indiana. Tippecanoe County includes ZIP codes within the towns of Battle Ground, Clarks Hill, Dayton, Lafayette, Romney, West Lafayette, and Westpoint. Based on the most recent Census Bureau (2010) statistics, Tippecanoe County's population is 172,780 persons with approximately 49% being female and 51% male. The county's population estimates by race are 79.8% White, 7.7% Hispanic or Latino, 6.5% Asian, 4.4% Black, 0.4% American Indian or Alaska Native, and 1.9% persons reporting two or more races.

Tippecanoe County has relatively moderate levels of educational attainment. The level of education most of the population has achieved is a high school degree (29%). An additional 19% had some college, but no degree. As of 2010, 26% of the population had an associate's or bachelor's degree, and 16% hold a graduate or professional degree.

Within the entire service area, the total population for the PSA is 172,780 and the total population for surrounding counties is 175,718, as illustrated in *Table 2* below.

**Table 2**  
Service Area Population, 2010

Service Area	County	Population	Percent of Total
Primary	Tippecanoe	172,780	49.6%
	<b>Subtotal</b>	<b>172,780</b>	<b>49.6%</b>
Secondary	Clinton	33,224	9.5%
	White	24,643	7.1%
	Carroll	20,155	5.8%
	Benton	8854	2.5%
	Fountain	17,240	4.9%
	Montgomery	38,124	10.9%
	Jasper	33,478	9.6%
	<b>Subtotal</b>	<b>175,718</b>	<b>50.4%</b>
<b>Total Service Area</b>		<b>348,498</b>	<b>100.0%</b>

Source: US Census Bureau, 2012.

Population growth can help to explain changes in community characteristics related to health status, and thus plays a major role in determining the specific services that a community needs. The Tippecanoe County population has increased 16% since 2000, when the population was estimated to be 148,954 persons. Comparatively, Tippecanoe County's population has increased faster than the average population across the total service area, which increased by approximately

7.7% from 2000 to 2010. Indiana’s total 2010 population estimate of 6,483,802 was up by 6.6% from 2000, and population growth was up by 10% for the entire nation. Tippecanoe County’s population is projected to increase 5.45% by 2015. Its population is expected to decline only for infants and young children ages 0-4 (-0.96%).

At almost 20%, the 65+ population is expected to grow the fastest among all Tippecanoe County age cohorts between 2010 and 2015. In general, an older population can produce increased demand for healthcare services and a potential increase in the prevalence of certain chronic conditions. The rate of population growth in Tippecanoe County for persons 65+ is expected to increase more rapidly than both the combined IU Health Arnett service area (15.5%) and the state of Indiana (15.4%) as illustrated in **Table 3** below.

**Table 3**  
Projected 2010-2015 Service Area Population Change

Service Area	County	Overall		Projected 2010-2015 Change by Age Cohort					
		2010 Total Population	Projected 2010-2015 Change	0-4	5-19	20-24	25-44	45-64	65+
Primary	Tippecanoe	172,780	↑ 5.45%	-0.96%	7.11%	1.96%	3.51%	4.62%	19.79%
	<b>Subtotal</b>	<b>172,780</b>	<b>↑ 5.45%</b>	<b>-0.96%</b>	<b>7.11%</b>	<b>1.96%</b>	<b>3.51%</b>	<b>4.62%</b>	<b>19.79%</b>
Secondary	Clinton	33,224	↓ -0.69%	-1.52%	-1.34%	-4.71%	-3.58%	-0.75%	7.35%
	White	24,643	↓ -1.01%	6.96%	-6.42%	-1.66%	-7.68%	-2.22%	13.64%
	Carroll	20,155	↓ -0.18%	-5.81%	-5.17%	1.47%	-4.88%	-0.94%	16.44%
	Benton	8854	↓ -1.67%	1.30%	-3.54%	-7.84%	-8.19%	1.31%	5.95%
	Fountain	17,240	↓ -1.94%	-0.88%	-7.16%	-2.35%	-8.11%	0.89%	7.56%
	Montgomery	38,124	↑ 0.67%	-4.81%	-4.61%	3.12%	-1.99%	0.89%	12.62%
	Jasper	33,478	↑ 4.57%	1.66%	-0.73%	9.35%	0.96%	2.96%	21.57%
	<b>Subtotal</b>	<b>175,718</b>	<b>↑ 0.45%</b>	<b>-0.78%</b>	<b>-3.71%</b>	<b>1.23%</b>	<b>-3.72%</b>	<b>0.32%</b>	<b>12.94%</b>
<b>Total Service Area</b>		<b>348,498</b>	<b>↑ 2.93%</b>	<b>-0.87%</b>	<b>1.58%</b>	<b>1.79%</b>	<b>-0.02%</b>	<b>2.12%</b>	<b>15.51%</b>
<b>Indiana</b>		<b>6,483,802</b>	<b>↑ 3.00%</b>	<b>2.20%</b>	<b>0.10%</b>	<b>3.10%</b>	<b>0.30%</b>	<b>2.00%</b>	<b>15.40%</b>

Source: Indiana Business Research Center, IU Kelley School of Business, 2012 (based on US Census data for 2010).

## 5.2 Economic Indicators

The following topics were assessed to examine various economic indicators with implications for health: (i) Employment, (ii) Household Income and People in Poverty, (iii) Indiana State Budget; and (iv) Uninsurance.

### 5.2.1 Employment

In 2010, the share of jobs in Tippecanoe County was highest within the areas of manufacturing, healthcare and social assistance, retail trade, accommodation and food services, administrative and support for waste management and remediation services, and professional, scientific, and

technical services. Tippecanoe County has a diverse group of major employers reported by the Indiana Department of Workforce Development, including: Purdue University of West Lafayette, Subaru-Indiana Automotive, Caterpillar Incorporated, Home Hospital Rehabilitation, Fairfield Manufacturing Company, St. Elizabeth Medical Center, Fairfield Manufacturing Corporation, Alcoa—Lafayette, State Farm Operations Center, and Lafayette Venetian Blind Incorporated.

Tippecanoe County reported a slightly lower unemployment rate than the rates of most surrounding counties, the state of Indiana, and the national average rates. **Table 4** summarizes unemployment rates at December 2010 and December 2011.

**Table 4**  
Unemployment Rates, December 2010 and December 2011

Service Area	County	December 2010	December 2011	% Change from 2010-2011
<b>Primary</b>	Tippecanoe	7.8%	7.4%	↓ -0.4%
	<b>Secondary</b>			
	Clinton	9.1%	8.7%	↓ -0.4%
	White	9.5%	8.7%	↓ -0.8%
	Carroll	8.2%	7.6%	↓ -0.6%
	Benton	9.6%	8.6%	↓ -1.0%
	Fountain	10.3%	9.2%	↓ -1.1%
	Montgomery	8.7%	8.4%	↓ -0.3%
	Jasper	9.1%	8.1%	↓ -1.0%
<b>Indiana</b>		9.3%	8.9%	↓ -0.4%
<b>USA</b>		9.4%	8.5%	↓ -0.9%

Source: US Bureau of Labor Statistics, 2012.

### 5.2.2 Household Income and People in Poverty

Areas with higher poverty rates tend to have poorer access to healthcare, lower rates of preventive care, higher rates of preventable hospital admissions, and poorer health outcomes in general. According to the US Census, in 2009, the national poverty rate was at 14.3%, increasing from 13.2% in 2008. In Indiana, 14.4% of the state population lived in poverty, which was a 1.9% increase from the 2008 poverty rate (12.9%).

For Tippecanoe County, a poverty rate of 20.9% was reported in 2009, rising from 18.2% in 2008 (+2.7%). Comparatively for Indiana, Hendricks County has the lowest poverty rate at 5.1% and Monroe County has the highest poverty rate at 21.9%. **Table 5** below illustrates the poverty rates by year between 2007 and 2009.

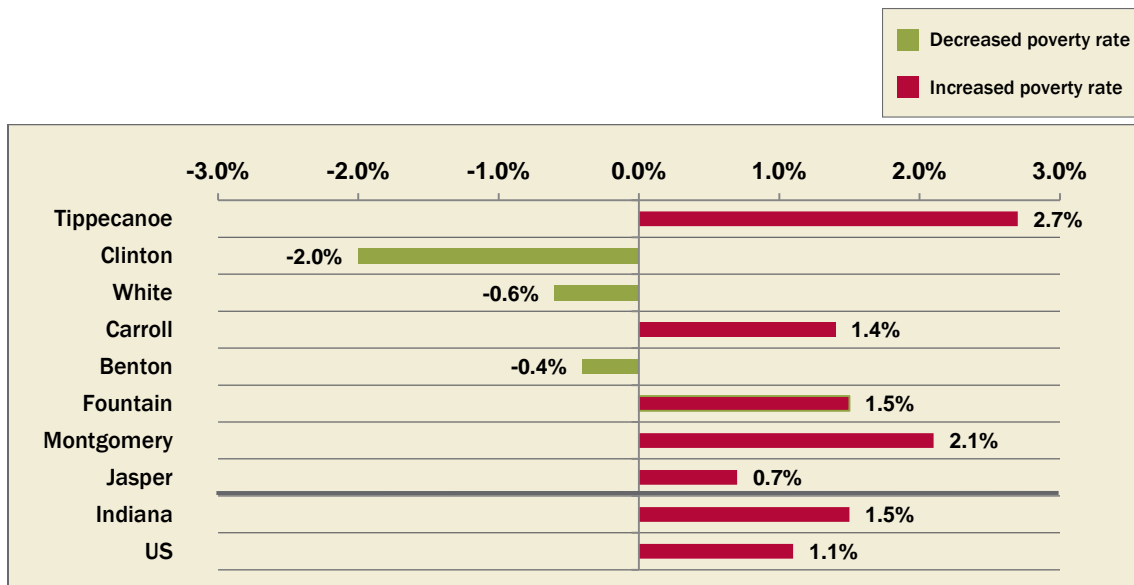
**Table 5**  
Percentage of People in Poverty, 2007-2009

Service Area	County	2007	2008	2009	% Change from 2008-2009
Primary	Tippecanoe	19.0%	18.2%	20.9%	↑ 2.7%
	Clinton	11.2%	14.5%	12.5%	↓ -2.0%
Secondary	White	9.4%	11.4%	10.8%	↓ -0.6%
	Carroll	9.1%	8.5%	9.9%	↑ 1.4%
	Benton	10.2%	10.4%	10.0%	↓ -0.4%
	Fountain	12.2%	11.5%	13.0%	↑ 1.5%
	Montgomery	10.4%	11.5%	13.6%	↑ 2.1%
	Jasper	8.2%	8.9%	9.6%	↑ 0.7%
Indiana		12.3%	12.9%	14.4%	↑ 1.9%
USA		13.0%	13.2%	14.3%	↑ 1.1%

Source: US Census Bureau, 2012.

Clinton County had the largest poverty rate decrease in the IU Health Arnett service area between 2008 and 2009, actually decreasing by 2%, followed by White County (-0.6%) and Benton County (-0.4%). Comparisons of each service area county's poverty rates, as well as those for the state of Indiana and the entire US, are displayed in *Figure 2*.

**Figure 2**  
Percent Change in Poverty Rates between 2008 and 2009



Source: US Census Bureau, 2012.

Income level is an additional economic factor that has been associated with the health status of a population. Based on US Census Bureau data (2009), Tippecanoe County’s per capita personal income was estimated to be \$29,182, with a median household income around \$41,917, which are both below the state and US national rates. The rates are lower than the Indiana state average per capita income of \$33,323, with a median household income around \$45,427, and the US national average per capita income of \$38,846, with a median household income of \$50,221.

### 5.2.3 Insurance Coverage

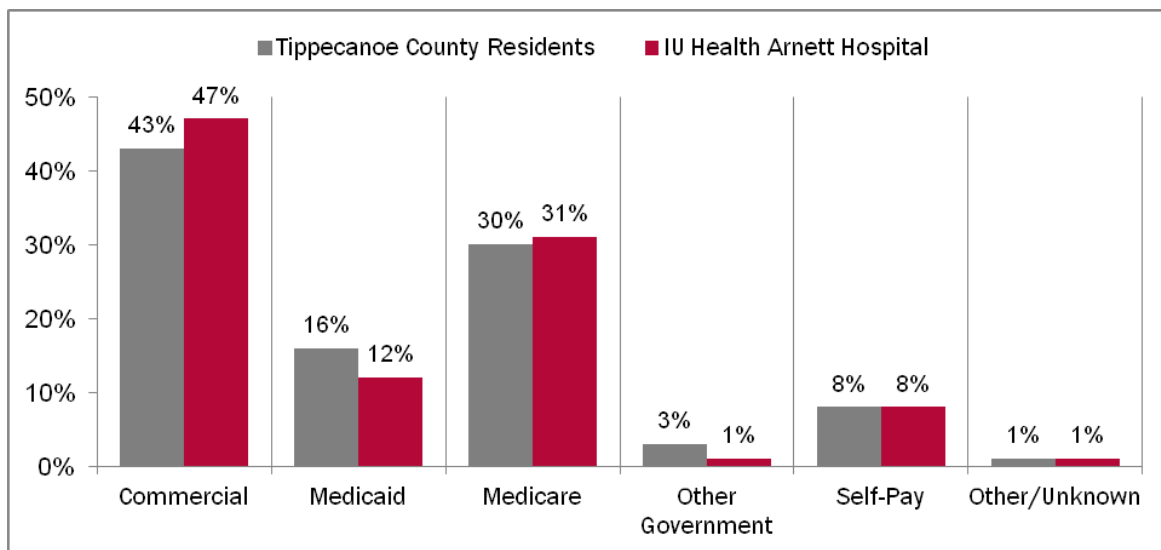
National statistics on health insurance indicate that 16% of the United States population is uninsured. Of the US population that is insured, 49% are insured through an employer, 5% through individual providers, 16% through Medicaid, 12% through Medicare, and 1% through other public providers.

In Indiana, it is estimated that 14% of the population are uninsured, 7% of which are children. Of the Indiana residents who are insured, 16% are insured through Medicaid, 14% through Medicare, 52% through their employer, 3% through individual providers, and 1% through other public providers.<sup>1</sup>

Based on inpatient discharge data from the Indiana Hospital Association (IHA), 43% of Tippecanoe County residents have commercial insurance, 16% are insured through Medicaid, 30% are insured through Medicare, 8% pay out-of-pocket (uninsured), and 4% have other government insurance or are unknown.

At IU Health Arnett Hospital, it is estimated that 47% of discharged patients have commercial insurance, 12% are insured through Medicaid, 31% are insured through Medicare, 8% pay out-of-pocket (uninsured), and 2% have other government insurance or are unknown (see *Figure 3*).

**Figure 3**  
Insurance Coverage  
2009 Tippecanoe County and IU Health Arnett Hospital Inpatient Discharges



Source: IHA Discharge Database, 2010.

1. Kaiser State Health Facts 2009-2010, Kaiser Family Foundation. <http://www.statehealthfacts.org>.

## **5.2.4 Indiana State Budget**

The recent recession has had major implications not only for employment, but also for state budget resources devoted to health, public health, and social services. Outlined below are findings from the fiscal year (FY) 2010-2011 health service expenditures and achievements, as well as pertinent changes related to healthcare within the FY 2012-2013 biennium budget.

### **Fiscal Year 2010-2011 Health Services**

- In FY 2010, Health and Welfare accounted for 38.9% of expenses or \$10.2 billion
  - The change in expenses from FY 2009 was a decrease of \$19.1 million, or 0.2%
  - Some of the major expenses were Medicaid assistance (\$6.0 billion), the US Department of Health and Human Services Fund (\$1.4 billion), and the federal food stamp program (\$1.5 billion)
- The Medicaid Assistance Fund received \$4.5 billion in federal revenue in FY 2011, as compared to \$4.0 billion in FY 2010
  - The Fund distributed \$6.0 billion in Medicaid assistance during the year, which is an increase of \$598.3 million over FY 2010
  - The total change in the fund's balance was an increase of \$114.4 million from FY 2010 to FY 2011
- The US Department of Health and Human Services Fund is a new fund created during the 2011 fiscal year with the implementation of the new statewide accounting system to account for federal grants that are used to carry out health and human services programs
  - The fund received \$1.2 billion in federal grant revenues and expended \$1.4 billion
  - The change in fund balance from FY 2010 to FY 2011 was an increase of \$134.9 million
- The Children's Health Insurance Plan (CHIP) spent \$138.1 million in FY 2011
  - At the end of FY 2011, CHIP was serving 83,494 clients, an increase of 4.7% compared to the average number of clients served by CHIP in FY 2010
- From 2005 to 2011, the Department of Child Services (DCS) has increased the total number of filled Family Case Manager (FCM) positions in Indiana by 838, from 792 to 1630
- In January 2010, DCS established the Indiana Child Abuse and Neglect Hotline to serve as the central reporting center for all allegations of child abuse or neglect in Indiana; the Hotline is staffed with 62 FCMs, also known as Intake Specialists, who are specially trained to take reports of abuse and neglect

### **Fiscal Year 2012-2013 Budget**

- Pension obligations are fully met and the Medicaid forecast is fully funded; this 2012-2013 budget increases funding in key areas such as K-12 education, student financial aid, Medicaid, and pensions
- The budget does not include any appropriations for the implementation of the Patient Protection Affordable Care Act (PPACA); however, it is projected that costs will begin to be incurred during this biennium, with General Fund appropriations needed in the FY 2014-2015 biennium budget



- The budget removes statutory restrictions that prevented the Family and Social Services Administration (FSSA) from reducing staffing levels at either the Evansville State Hospital or the Evansville Psychiatric Children’s Center, regardless of the number or type of patients being treated at each facility
- The budget eliminates the Indiana Tobacco Prevention and Cessation (ITPC) Board, and transferred its responsibilities to the Indiana State Department of Health (ISDH) on July 1, 2011; the ISDH totals include annual appropriations of \$8.1 million from the Tobacco Master Settlement Fund for tobacco prevention and cessation efforts
- The ISDH budget saw a 16.6% decrease in general fund appropriations for the FY 2012-2013 biennium budget
- The budget appropriates \$48.8 million annually for The Community and Home Options to Institutional Care for the Elderly and Disabled (CHOICE) In-Home Services, one of very few programs to not be reduced compared to FY 2011 appropriation levels
- FY 2012 HHS divisional and program budgets that have been reduced as compared to FY 2011 appropriation levels include:
  - Division of Aging Administration (-33%)
  - Tobacco Use Prevention & Cessation Program (-25%)
  - Community Health Centers (-25%)
  - Department of Child Services (-24%)
  - Residential Care Assistance Program for the elderly, blind, and disabled (-22%)
  - Child Psychiatric Services Fund (-17%)
  - Minority Health Initiative (-15%)
  - Prenatal Substance Abuse & Prevention (-15%)
  - Office of Women’s Health (-15%)
  - Children With Special Healthcare Needs (-15%)
  - Cancer Education & Diagnosis—Breast (-15%)
  - Cancer Education & Diagnosis—Prostate (-15%)
  - Disability and Rehabilitation Services (-11%)

### 5.3 Discharges for Ambulatory Care Sensitive Conditions

Ambulatory care sensitive conditions (ACSC) are health issues that, in theory, do not require hospitalizations if adequate ambulatory (primary) care resources are available and accessed. Methodologies for quantifying ACSC discharges have been well-tested for more than a decade. Disproportionately large numbers of ACSC discharges indicate potential problems with the availability or accessibility of ambulatory care services. *Table 6* illustrates the estimated percentage of 2007 ACSC discharges per Medicare enrollee for the IU Health Arnett PSA, SSA, and the overall service area.

**Table 6**  
Percentage of ACSC Discharges per Medicare Enrollee in 2007

Service Area	County	ACSC Discharges Per 1000
Primary	Tippecanoe	63.1
	<b>Subtotal</b>	<b>63.1</b>
Secondary	Clinton	78.4
	White	89.3
	Carroll	59.5
	Benton	60.3
	Fountain	101.9
	Montgomery	84.1
	Jasper	85.7
	<b>Subtotal</b>	<b>79.9</b>
<b>Total Service Area Average</b>		<b>77.8</b>
<b>Indiana</b>		<b>85.9</b>
<b>USA</b>		<b>76.0</b>

Source: Dartmouth Atlas of Health Care, 2007.

### 5.4 County Level Health Status and Access Indicators

#### 5.4.1 County Health Rankings

The Robert Wood Johnson Foundation, along with the University of Wisconsin Population Health Institute, created County Health Rankings to assess the relative health of county residents within each state for all 50 states. These assessments are based on health measures of health outcomes, specifically length and quality of life indicators, and health factors, including indicators related to health behaviors, clinical care, economic status, and the physical environment.

Based on the 92 counties in the state of Indiana, counties may be ranked from 1 to 92, where 1 represents the highest ranking and 92 represents the lowest. *Table 7* below summarizes County Health Ranking assessments for Tippecanoe and surrounding counties in Indiana; rankings for counties were converted into quartiles to indicate how each county ranks vs others in the state. The table also illustrates whether a county's ranking worsened or improved from rankings in 2011.

**Table 7**  
Relative Health Status Indicators for Tippecanoe County and Surrounding Counties

Key	
>75th Percentile	
50th to 74th Percentile	
25th to 49th Percentile	
<25th Percentile	
Ranking Worsened Between 2011 and 2012	↓

Indicator	Tippecanoe	Clinton	White	Carroll	Benton	Fountain	Montgomery	Jasper	Average Ranking for Service Area
<b>Overall Health Outcomes</b>	20 ↓	44	37 ↓	40 ↓	29 ↓	49 ↓	52	41	39
<i>Mortality</i>	15 ↓	42	50 ↓	47 ↓	36 ↓	53 ↓	55	60 ↓	45
<i>Morbidity</i>	27 ↓	51 ↓	22 ↓	32 ↓	28 ↓	41 ↓	48 ↓	12	33
<b>Overall Health Factors</b>	10	32	45	23	35 ↓	66	37	41 ↓	36 ↓
<i>Health behaviors</i>	5	9 ↓	41	47	60 ↓	61	68	39	41 ↓
<i>Tobacco use</i>	12	16	18 ↓	74 ↓	44 ↓	77	69	44 ↓	44 ↓
<i>Diet and exercise</i>	4	10	75	55	77 ↓	20	56 ↓	68 ↓	46 ↓
<i>Alcohol use</i>	38	8	66 ↓	12	52	72 ↓	63	27	42
<i>Sexual activity</i>	40 ↓	78	45	19 ↓	27	65	77	24	47 ↓
<i>Clinical care</i>	17	48	72 ↓	24 ↓	70	82	25	29	46 ↓
<i>Access to care</i>	27	73	72	45	82	80	28	22	54 ↓
<i>Quality of care</i>	16 ↓	26	61 ↓	17 ↓	45 ↓	83	37	47	42 ↓
<i>Social and economic factors</i>	23 ↓	56	44	17	16	57	39 ↓	58 ↓	39 ↓
<i>Education</i>	18 ↓	69	61	35	29	37 ↓	20	34 ↓	38
<i>Employment</i>	19	38	50	27	38 ↓	74	31	38 ↓	39 ↓
<i>Income</i>	44 ↓	52	30	22 ↓	26	40	62 ↓	10	36 ↓
<i>Family and social support</i>	27	33	55 ↓	22 ↓	1	28	46	57 ↓	34 ↓
<i>Community safety</i>	78 ↓	48	1	35	28 ↓	85	70 ↓	92 ↓	55 ↓
<i>Physical environment</i>	27 ↓	69	31	50 ↓	81 ↓	47	25	46 ↓	47 ↓
<i>Environmental quality</i>	1	39	39	65	15	15	15	15	26
<i>Built environment</i>	66 ↓	80 ↓	31	35 ↓	87	62	40	59 ↓	58 ↓

Source: County Health Rankings, 2012.

Tippecanoe County fell within the 75th percentile for overall health outcomes (length and quality of life) ranking 20th in the state, which is the highest ranking for health outcomes among the eight counties in the IU Health Arnett service area. Comparatively, the overall service area average and the counties of Clinton, White, Carroll, Benton, and Jasper ranked in the top 50th percentile.

In preventable health factors, Tippecanoe County ranked 10th in terms of overall health-related factors (determinants of health); individual scores are displayed in *Table 7* above. The majority of Tippecanoe County's rankings fell within the top 50% of Indiana counties; however, community safety was ranked in the bottom 25% at 78th in the state, and several indicator rankings decreased from 2011 to 2012.

For Tippecanoe County, the specific indicators ranked in the top 25% of Indiana counties were environmental quality (1st), diet and exercise (4th), tobacco use (12th), quality of care (16th),

education (18th), and employment (19th). In addition to the above, other indicators ranked in the top half of Indiana counties, including access to care (27th), family and social support (27th), alcohol use (38th), sexual activity (40th), and income (44th).

Specific indicator rankings that fell between 2011 and 2012 include sexual activity, quality of care, education, income, community safety, and built environment. Tippecanoe County ranked higher than the overall service area for many indicators, but especially for those of diet and exercise (difference of 42), tobacco use (difference of 32), access to care (difference of 27), quality of care (difference of 26), environmental quality (difference of 25), education (difference of 20), and employment (difference of 20).

Among the other counties in the overall service area, Tippecanoe County ranked the highest on several factors related to overall health outcomes. However, many of Tippecanoe County's individual health factor rankings were worse than the average across all seven counties in the IU Health Arnett service area. Specifically, community safety, income, and built environment were all ranked worse for Tippecanoe County than the overall service area average ranking.

Across all IU Health Arnett service area counties, diet and exercise, sexual activity, access to care, community safety, and built environment indicators are ranked most consistently in the bottom quarter or bottom half of Indiana counties.

#### **5.4.2 Community Health Status Indicators**

The Community Health Status Indicators (CHSI) Project of the US Department of Health and Human Services compares many health status and access indicators to both the median rates in the US and to rates in "peer counties" across the US. Counties are considered "peers" if they share common characteristics such as population size, poverty rate, average age, and population density.

Tippecanoe County has 43 designated "peer" counties in 25 states, including LaPorte County in Indiana, McLean and Sangamon counties in Illinois, and Greene, Lake, Licking, Portage, Warren, and Wood counties in Ohio. **Table 8** below highlights the analysis of CHSI health status indicators with highlighting in cells that compare favorably or unfavorably both to the US as a whole and to peer counties. Indicators are found to be unfavorable for a county when its rates are higher than those of the entire nation and designated peer counties, and are considered favorable when the rates for the county are lower than those of the US or peer counties.

Several indicators related to birth and infant care were unfavorable for Tippecanoe County, including no care in the first trimester, infant mortality, white non-Hispanic infant mortality, Hispanic infant mortality, and neonatal infant mortality. Indicators related to suicide were also considered unfavorable for Tippecanoe County. Tippecanoe County compared unfavorably to US and peer county benchmarks for two chronic health conditions: lung cancer and stroke; however, indicators for breast cancer (female) and colon cancer were favorable (where rates and percentages for the indicators in Tippecanoe County are lower than those for the entire nation or for peer counties). Other favorable indicators for Tippecanoe County include low birth weight, premature births, and births to women age 40-54.

**Table 8**  
Favorable and Unfavorable Health Status Indicators for Tippecanoe and Surrounding Counties

Key	
Favorable health status indicator	
Neither favorable nor unfavorable indicator	
Unfavorable health status indicator	

Indicator	Tippecanoe	Clinton	White	Carroll	Benton	Fountain	Montgomery	Jasper
Low Birth Weight								
Very Low Birth Weight								
Premature Births								
Births to Women Under 18								
Births to Women Age 40-54								
Births to Unmarried Women								
No Care in First Trimester								
Infant Mortality								
White Non-Hispanic Infant Mortality								
Black Non-Hispanic Infant Mortality								
Hispanic Infant Mortality								
Neonatal Infant Mortality								
Post-Neonatal Infant Mortality								
Breast Cancer (Female)								
Colon Cancer								
Lung Cancer								
Coronary Heart Disease								
Stroke								
Homicide								
Suicide								
Motor Vehicle Injuries								
Unintentional Injury								

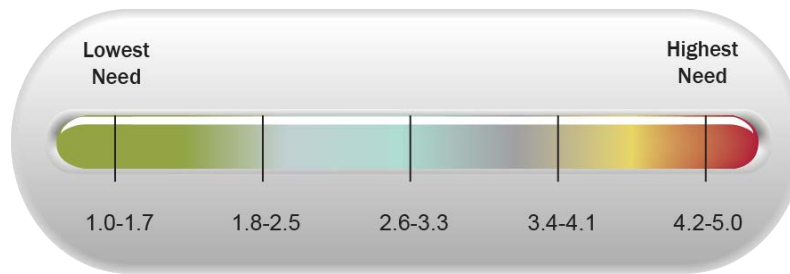
Source: Community Health Status Indicators Project, Department of Health and Human Services, 2009.

The indicators comparing unfavorably to US and peer counties across six or more of the counties within the IU Health Arnett service area include no care in the first trimester, colon cancer, lung cancer, stroke, and suicide.

## 5.5 ZIP Code-Level Health Access Indicators

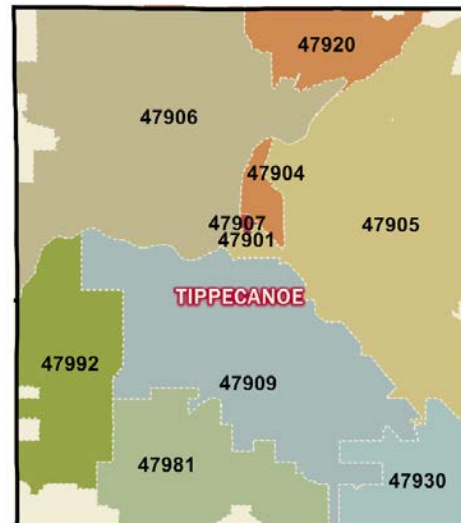
The Community Need Index (CNI) was created in 2005 by Dignity Health (formerly Catholic Healthcare West) in collaboration with Thomson Reuters. CNI identifies the severity of health disparities related to housing, English as a second language (ESL), and education level for ZIP codes in the United States. In addition to health indicators, CNI includes economic and structural indicators in its assessment of the overall health of a community. Scores are assigned on a scale of one to five, with one indicating the least amount of community need and five indicating the most (see *Figure 4*). The CNI assessments illustrate correlations between high need/high scores and high hospital utilization in specific ZIP codes. *Table 9* summarizes the CNI for ZIP codes in Tippecanoe County.

**Figure 4**  
Community Need Index Rating Scale



**Table 9**  
CNI Scores for Tippecanoe County

County	City	ZIP Code	Rank
Tippecanoe	Lafayette	47901	4.6
		47904	4.0
		47909	3.0
	Dayton	47905	3.6
	West Lafayette	47906	3.4
		47907	3.4
	Clarks Hill	47930	2.8
	Battle Ground	47920	2.4
	Romney	47981	1.8
	Westpoint	47992	1.4



Source: Community Need Index, 2011.

Within Tippecanoe County, CNI scores indicate needs are relatively high in ZIP codes 47901 and 47904 (both in Lafayette), and community needs are lowest in ZIP codes 47981 (Romney) and 47992 (Westpoint).

## 5.6 Regional Chronic Conditions and Preventive Behaviors

The National Research Corporation, one of the largest online healthcare surveys in the United States, measures health needs throughout the country. Its Ticker program provides a wide array of data that measure needs in communities, most notably its Chronic Conditions and Preventive Health Behaviors surveys. These surveys provide estimates of chronic conditions and related behaviors within a population of interest.

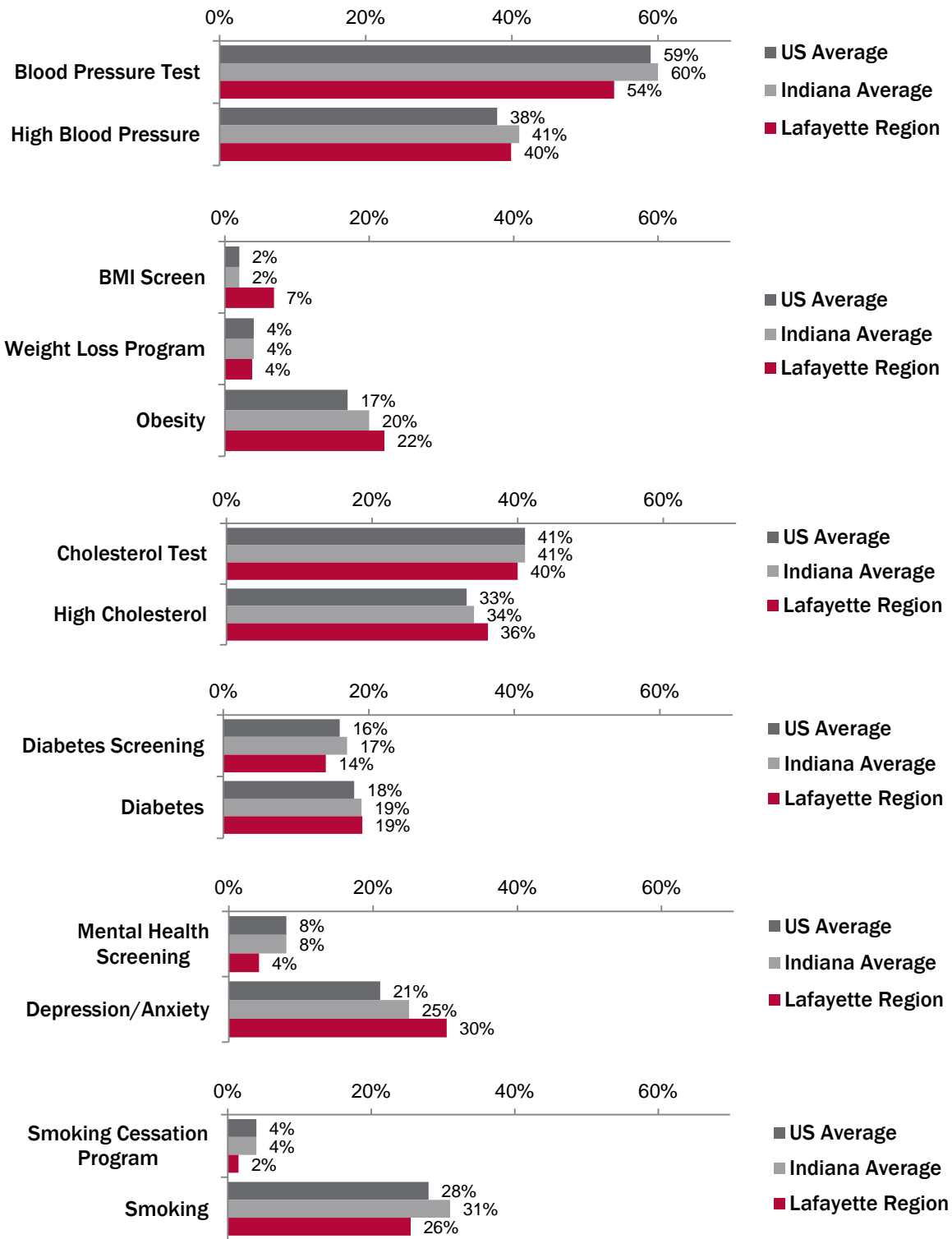
These estimates are based on a monthly Internet survey of over 270,000 individuals across the country. For this CHNA, Ticker data utilized represent the “Lafayette Regional Market.” These Ticker data identified the following top 10 chronic conditions:

- High blood pressure
- High cholesterol
- Depression/anxiety disorder
- Smoking
- Arthritis
- Allergies—other
- Obesity/weight problems
- Allergies/hay fever
- Diabetes
- Sinus problems

Most chronic conditions and corresponding preventive behaviors of interest have been compared to the Indiana and US averages. These comparisons indicate that the Lafayette Region experiences relatively higher percentages of obesity, high cholesterol, depression, and anxiety and relatively lower percentages of smoking, as well as cancer (other than skin). Diabetes and high blood pressure are consistent with state and national trends. The charts in *Figure 5* below illustrate the chronic conditions and preventive behaviors for the Indiana University Health “Lafayette Regional Market,” Indiana, and the entire nation.

**Figure 5**

**Chronic Conditions and Preventive Behaviors in the Indiana University Health “Lafayette Regional Market”**



Source: Ticker, National Research Corporation, 2012.



## 5.7 Medically Underserved Areas and Populations

The Health Resources and Service Administration (HRSA) has calculated an Index of Medical Underservice (IMU) score for communities across the US. The IMU score calculation includes the ratio of primary medical care physicians per 1000 persons, the infant mortality rate, the percentage of the population with incomes below the poverty level, and the percentage of the population older than 64. IMU scores range from zero to 100, where 100 represents the least underserved and zero represents the most underserved.

Any area or population receiving an IMU score of 62.0 or below qualifies for Medically Underserved Area (MUA) or Medically Underserved Population (MUP) designation. Federally Qualified Health Centers (FQHCs) may be established to serve MUAs and MUPs. Populations receiving an MUP designation include groups within a geographic area with economic barriers or cultural and/or linguistic access barriers to receiving primary care. When a population group does not qualify for MUP status based on the IMU score, Public Law 99-280 allows MUP designation if “unusual local conditions which are a barrier to access to or the availability of personal health services exist and are documented, and if such a designation is recommended by the chief executive officer and local officials of the State where the requested population resides.”<sup>2</sup> **Table 10** below illustrates the areas that have been designated as MUAs or MUPs in the IU Health Arnett community.

**Table 10**  
MUAs and MUPs in the IU Health Arnett Hospital Community

Key					
—		County does not contain an MUP or MUA designation			
Service Area	County	Medically Underserved Areas		Medically Underserved Populations	
		IMU Score	Detail	IMU Score	Detail
<b>Primary</b>	Tippecanoe	47	Tippecanoe Service Area	—	
	Clinton	61.9	Ross Service Area (Ross Township)	—	
		59.4	Warren Service Area (Warren township)	—	
<b>Secondary</b>	White	N/A	Honey Creek Service Area (Honey Creek township)	—	
		49.3	Liberty/Lincoln Service Area (Liberty and Lincoln townships)	—	
	Carroll	—		66.8	Entire county*
	Benton	—		—	
Fountain	60.6	Entire county		—	
Montgomery	—		58.8	Low-income population, Crawfordsville Service Area - 3 Census Tracts (CTs)	
Jasper	—		—		

\*Indicates a Government MUP, which is a designation made at the request of a State Governor based to documented based on unusual, local conditions and barriers to accessing personal health services.

Source: Health Resources and Services Administration, US Department of Health and Human Services, 2012.

2. Guidelines for Medically Underserved Area and Population Designation. US Department of Health and Human Services, Health Resources and Services Administration. <http://bhpr.hrsa.gov/shortage/>.

Tippecanoe, Clinton, While and Fountain counties in the community all had service areas, if not the entire county, designated as an MUA. Fountain County was the only county designated as a low-income MUP. Counties in the IU Health Arnett service area community containing designated MUPs included Carroll and Montgomery.

### 5.8 Health Professional Shortage Areas

An area can receive a federal Health Professional Shortage Area (HPSA) designation if a shortage of primary care, dental care, or mental healthcare professionals is found to be present. 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.” **Table 11** below lists the HPSAs in the IU Health Arnett community.

**Table 11**  
HPSAs in the IU Health Arnett Hospital Community

Key	
—	County does not contain HPSA designation for category

Service Area	County	Primary Care HPSA	Dental Care HPSA	Mental Health HPSA
Primary	Tippecanoe	2 health centers: Tippecanoe Community Health Center and Purdue University-Monon Community Health	Low-income population, entire county	Region 30 Mental Health, entire county
			2 health centers: Tippecanoe Community Health Center and Purdue University-Monon Community Health	3 health centers: Tippecanoe Community Health Center, Purdue University-Monon Community Health, Region 30 Mental Health
Secondary	Clinton	—	—	—
	White	Low-income population, Jasper/White/Pulaski Service Area (Honey Creek, Monon, Princeton, and West Point townships)	—	Region 30 Mental Health, entire county
		1 rural health clinic: Monticello Medical Center LLC		
	Carroll	—	—	Region 30 Mental Health, entire county
	Benton	Low-income population, entire county	—	Region 30 Mental Health, entire county
	Fountain	1 rural health clinic: St. Vincent South Clinic	—	Region 30 Mental Health, entire county
	Montgomery	Low-income population, Crawfordsville Service Area - 3 Census Tracts (CTs)	—	Region 30 Mental Health, entire county
Jasper	Low-income population, Jasper/White/Pulaski Service Area (Gillam, Hanging Grove, Marion, and Milroy townships)	—	Region 30 Mental Health, entire county	

Source: Health Resources and Services Administration, US Department of Health and Human Services, 2011.

## 5.9 Description of Other Facilities and Resources Within the Community

The IU Health Arnett community contains a variety of resources that are available to meet the health needs identified through this CHNA. These resources include facilities designated as HPSAs, hospitals, FQHCs, public health departments, and other organizations. **Table 12** below lists the other facilities and resources in the IU Health Arnett community.

**Table 12**  
Resources in Tippecanoe and Surrounding Counties

Service Area	County	Public Health Department
<b>Primary</b>	Tippecanoe	Tippecanoe County Health Department (Lafayette, Indiana)
<b>Secondary</b>	Clinton	Clinton County Dept. of Health (Frankfort, Indiana)
	White	White County Health Department (Monticello, Indiana)
	Carroll	Carroll County Health Department (Delphi, Indiana)
	Benton	Benton County Health Dept. (Fowler, Indiana)
	Fountain	Fountain & Warren County Health Dept. (Attica, Indiana)
	Montgomery	Montgomery County Health Dept. (Crawfordsville, Indiana)
	Jasper	Jasper County Board of Health (Rensselaer, Indiana)

Service Area	County	FQHC
<b>Primary</b>	Tippecanoe	Riggs Community Health Center (Lafayette, Indiana)
<b>Secondary</b>	Clinton	Clinton County WIC Program (Frankfort, Indiana)
	White	Monon Health Center (Monon, Indiana)
	Carroll	Carroll County Health Center (Delphi, Indiana)
	Benton	N/A
	Fountain	N/A
	Montgomery	N/A
	Jasper	N/A

**Table 12 (cont.)**  
Resources in Tippecanoe and Surrounding Counties

Service Area	County	Hospital	
<b>Primary</b>	Tippecanoe	Franciscan St. Elizabeth Health East Hospital	St. Elizabeth Health Central
		Franciscan St. Elizabeth Health Central Hospital	St. Elizabeth Health East
<b>Secondary</b>	Clinton	St. Vincent Frankfort Hospital	
	White	IU Health White Memorial Hospital	
	Carroll	N/A	
	Benton	N/A	
	Fountain	N/A	
	Montgomery	St. Clare Medical Center	
	Jasper	Jasper County Hospital	

Sources: Health Resources and Services Administration, US Department of Health and Human Services, 2011; Indiana State Department of Health, Health Care Regulatory Services, 2011.

## 5.10 Review of Other Assessments of Health Needs

### *5.10.1 Tippecanoe County Health Needs Assessment (Prepared by Tippecanoe County Health Department)*

This community health assessment is the first of its kind in Tippecanoe County. While it may reference secondary data from public sources, the primary data collection was performed by Pauline Shen, of the Tippecanoe County Health Department with local Health Coalition (HAT) members. This effort was sponsored by: Franciscan Alliance, St. Elizabeth Hospital, Tippecanoe County Health Department, Riggs Community Health Center, and Unity Healthcare. The local health coalition is a group within the Chamber of Commerce. The Chamber was instrumental in the media campaign which launched the assessment. This report was prepared in December 2011.

Key conclusions were:

- The two largest problems identified in the community are: drug abuse and unemployment
- The community services listed as “very important” are: affordable healthcare, accessible healthcare, childcare, and job training and employee services
- The largest health problems include: obesity, physical inactivity, substance abuse (alcohol and drug), chronic disease, and tobacco use
- Health services listed as very important are: affordable medication, affordable healthcare, affordable dental care, school nutrition and education, affordable eye care, access to mental healthcare, indoor/outdoor smoke-free policies, and weight-control education
- The most common chronic disease indicators of the adult population are: high cholesterol, hypertension, depression, anxiety, smoking, heart problems, and diabetes
- There are many different methods used for effective communication of community and health news to the public; the top methods are: television, Internet, newspaper, and health professionals
  - Communication vehicles are greatly influenced by demographic variables of race/ethnic, income, and age

### *5.10.2 2009-2010 Tippecanoe County K-12 Body Mass Index Assessment*

Annually since 2004-2005, a community-wide body mass index (BMI) report has been written and distributed to participating schools, along with their respective administrations. This report is a compilation of all the schools that were sampled in 2009-2010. In the interest of brevity, the 2009-2010 BMI Annual Report contains charts without lengthy background information, which is available from previous years’ reports.

In 2009-2010, 3115 students were weighed in Tippecanoe community. The grades covered represent K-8. Missing from the sample are high school students, who are difficult to collect data from due to the nature of their academic schedules.

Key conclusions were:

- The community is close to the national prevalence of overweight and obese children, with 18% of children being overweight and 17% obese
  - A designation of “overweight” is a BMI between the 85th-94th percentiles, and “obese” is a BMI  $\geq$  the 95th percentile
  - 62% of the students were normal weight and 2% were underweight

- All schools, regardless of corporation, had approximately the same overweight percentage of 17%
- The biggest difference in scores between the school corporations is within the obesity category; these ranged from a low of 10% to a high of 22%
- An obesity prevalence of 16% and 22% is higher than the state and national prevalence; unfortunately, with school cuts during the economic downturn, scheduled physical activity in schools can be as little as 30 minutes per week, per student
  - This is less than the national recommendation of 30 minutes per day and often this activity includes their recess
- An increase in overweight children has been seen since the 2004-2005 school year
- The underweight prevalence has increased from 1% to 3%, which is troubling; as there may be more students at risk for bulimia or similar disorders

### ***5.10.3 Clinton County Community Needs Assessment 2011***

This county health assessment has been done on behalf of St. Vincent Frankfort Hospital in Frankfort, Indiana. It is a summary of other surveys and secondary data available about the population of Clinton County. No new data were specifically collected for this report.

The focus of this community health assessment was on adults. The main source of data was from the Assessment of Chronic Health Indicators in North Central Indiana. This assessment data were collected via a phone survey conducted by Purdue University in 2007; the sample size was 201.

Key conclusions were:

- Clinton County is considered a rural county among the 92 counties in Indiana
- The 2009 census estimate shows a population of 34,347 residents, which ranks Clinton County 45th in terms of population in Indiana
- 36% of survey respondents were age 50-64, 34% were age 65 or older, 24% were age 35-49, and 6% were age 25-34
- Clinton County ranks 28th among Indiana counties in health-related indicators, but ranks much lower in overall health outcomes at 51st in the state
  - This disparity is unusual and warrants a deeper investigation into the findings
- The prevalence of diabetes in the population was much higher than both the state and national numbers
- The smoking prevalence for Clinton County was lower than the state, but close to that of the entire US
- The percentage of adults who are overweight in the county is similar to the state and national rates, but the percentage of adults who are obese is much higher than both
- Cancer screening for both men and women were good compared to state rates
- There is a large disparity between the Hispanic population and the rest of Clinton County residents in using healthcare resources, in particular when it comes to healthcare insurance and annual physician and dental visits
- The Hispanic population has a much lower smoking prevalence than the community at large, as well as the prevalence for the entire state of Indiana
- The surveyed Hispanic population responded with a much lower “satisfaction with life” variable than the community at large

## 6 PRIMARY DATA ASSESSMENT

IU Health Arnett’s approach to gathering qualitative data for its CHNA consisted of a multicomponent approach to identify and verify community health needs for the IU Health Arnett service area. This included the following components:

1. Hosting multiple one and a half to two hour community conversation focus groups with public health officials and community leaders in attendance to discuss the healthcare needs of the service area and what role IU Health Arnett could play in addressing the identified needs.
2. Surveying the community at large through the hospital’s Web site, with special emphasis to garner input from low income, uninsured, or minority groups.

### 6.1 Focus Group Findings

#### 6.1.1 Identification of Persons Providing Input

Local leaders with a stake in the community’s health were invited to attend a focus group session held at IU Health Arnett Hospital. Attendees who participated in the focus group are listed in **Table 13** below.

**Table 13**  
Focus Group Participants

Name	Title, Affiliation	Expertise
Kathy Murray	<i>Health and Human Sciences Educator, Purdue Extension of Tippecanoe County</i>	Ms. Murray is a representative of education. As an educator for Purdue Extension, she is focused on improving educational opportunities for young adults.
Laura Carson	<i>Finance &amp; Community Impact Director, United Way of Greater Lafayette</i>	Ms. Carson is a representative of healthy living. As a director for United Way, she works for an organization that believes in helping people learn more, earn more, and lead safe and healthy lives, and creates programs to assist in those goals, especially for the underserved populations.
Michael D. Bohlin	<i>Local Health Officer, Tippecanoe County Health Department</i>	Dr. Bohlin is a public health expert. As a local health officer, he is knowledgeable in public health needs in the community, including in low income and underserved populations.
Ron Cripe	<i>Local Health Administrator, Tippecanoe County Health Department</i>	Mr. Cripe is a public health expert. As a local health administrator, he is knowledgeable in public health needs in the community, including in low income and underserved populations.
James Taylor	<i>Executive Director, United Way of Greater Lafayette</i>	Mr. Taylor is a representative of healthy living. As Executive Director United Way, he works for an organization that believes in helping people learn more, earn more, and lead safe and healthy lives, and creates programs to assist in those goals, especially for the underserved populations.
David Byers	<i>Tippecanoe County Commissioner</i>	Mr. Byers is a representative of healthy living. As county commissioner, he is knowledgeable in the community's needs and resources available to address those needs.
Tom Murtaugh	<i>Tippecanoe County Commissioner</i>	Mr. Murtaugh is a representative of healthy living. As county commissioner, he is knowledgeable in the community's needs and resources available to address those needs.

Rabbi Audrey Pollack	<i>Rabbi of Temple Israel, West Lafayette</i>	Rabbi Pollack is a representative of community needs. As a rabbi in the community, she is well-informed of the community's various needs and issues.
Jennifer Flora	<i>CEO, Mental Health America of Tippecanoe County</i>	Ms. Flora is a representative of mental health issues and community awareness. As CEO, she is well-versed in the areas surrounding mental health and how it is affecting the community.
Aadron Rausch	<i>Director of Strategic Engagement, IU Health Arnett</i>	Mr. Rausch is a representative of healthy living and community awareness and needs. As Director of Strategic Engagement, he is knowledgeable in the community market and the needs within the community.
Sue Bergstrom	<i>Nurse, Lafayette School Corporation</i>	Ms. Bergstrom is a representative of children's health. As a school nurse in the community, she is familiar with school-age children's health issues and needs.
Veronica Jalomo	<i>Board Member, Hanna Community Center</i>	Ms. Jalomo is a representative of children's health. As a child care provider in the community, Ms. Jalomo is familiar with children's health issues and needs.
Carol Lancaster Deno	<i>Nurse, West Lafayette Community School Corporation</i>	Ms. Lancaster Deno is a representative of children's health. As a school nurse in the community, she is familiar with children's health issues and needs.

### **6.1.2 Prioritization Process and Criteria**

To obtain a more complete picture of the factors that play into the Tippecanoe County community's health, input from local health leaders was gathered through two separate focus group sessions. The first live group session lasted two hours and was held at IU Health Arnett Hospital and the second session was held via conference call. IU Health Arnett facilitators mailed letters and made follow-up telephone calls inviting public health officials and community leaders to attend the focus group discussion, paying special attention to including organizations that represent the interest of low-income, minority, and uninsured individuals. The goal of soliciting these leaders' feedback was to gather insights into the quantitative data that may not be easily identified from the secondary statistical data alone.

Upon arrival to the focus group, participants were asked to list their believed five prioritized health needs for the IU Health Arnett community. These responses were collected and aggregated into a comprehensive list of identified needs to be further discussed later in the session and ranked for severity of need within the community. IU Health Arnett facilitators then provided participants with a presentation featuring the mission of IU Health, current outreach priorities, and local health data, including demographics, insurance information, poverty rates, county health rankings, causes of death, physical activity, chronic conditions, preventive behaviors, and community needs index.

Upon completion of the data presentation, IU Health facilitated a discussion on the comprehensive list of identified needs from earlier in the session. The objective of this method was intended to inspire candid discussions prior to a second identification of five prioritized health needs by each participant. The votes on the five prioritized health needs were tallied and final input from the group was encouraged during this process in order to validate the previously identified needs. Following additional discussion, participants were also asked to address what they thought the role of IU Health Arnett could be in meeting the local health needs.

### **6.1.3 Description of Prioritized Needs**

The focus group identified the following five needs as priorities for IU Health Arnett:



1. Access to healthcare.
2. Mental health.
3. Obesity and lack of physical activity.
4. Substance abuse.
5. Senior health.

These prioritized needs are discussed in more detail below.



**1. Access to healthcare** was a prominent concern shared by leaders during both sessions. A large amount of time was spent talking about the successes of the Riggs Community Health Center as one of the main points of access for most of the underserved community. Many community leaders shared how vital the Riggs Center is to the Tippecanoe community, as it offers the most resources for the underinsured or uninsured. However, leaders shared that Riggs cannot keep up with the demand, resulting in long wait times or turning down patients all together. Attendees at both sessions agreed that many additional resources are needed to support the Riggs Community Health Center. School-based clinics were brought up as a potential way to shore up the gap in access to healthcare, especially for children, while lessening the burden on the Riggs Center, which would also help parents with limited incomes, time, and resources. Murdock Elementary was shared as a successful school-based clinic model. Access to healthcare is especially limited in the Northwest region of the county, as it tends to be completely isolated from healthcare.



**2. Mental health** was identified as a leading need because there are few mental healthcare providers (ie, psychiatrists) in the community and there are no inpatient facilities. The lack of inpatient facilities is especially burdensome because residents, including children, needing inpatient mental healthcare are forced towards Northern Indiana or Southern Indiana, making guest visits, costs, and continuous support difficult. The group shared the need for a facility that would treat both mental health and physical health conditions in the community concurrently. Exacerbating the problem is that primary care physicians are not usually comfortable addressing even mild to moderate cases of mental health concerns. Community leaders shared the need to launch an awareness and education campaign to stop the stigma around mental healthcare.



**3. Obesity and lack of physical activity** were strong concerns for the Tippecanoe County officials. The prevalent concern around obesity and physical inactivity is that the school systems do not enforce daily physical activity. While Lafayette middle schools received a 5 million dollar PEP grant, it left out both the early education schools and high schools. In addition, there are no physical activity programs aimed to aid the developmentally disabled in schools. The group agreed that general education around obesity and physical education is needed not only for the children, but also for the schools and parents (ie, parents need to be reminded that in allowing their children eat at McDonalds, obesity and overweight is often facilitated by parents). Many individuals recognized that even though more resources are needed, the county is improving in promoting physical activity, especially in promoting the community's trails and other newly launched recreational initiatives. For example, the parks have been implementing walking trails, bike trails, and park trails, while Purdue Extension is working on youth development and nutrition programs. The Food Finders Food Bank is also beginning a mobile food produce program.



**4. Substance abuse** is closely linked with mental health, so community leaders shared the same lack of resources to treat substance abuse as they do mental health in their community. This is especially the case for resources to treat substance abuse and its co-occurrence with mental health. Currently no facilities offer treatment for both substance abuse and mental health in the Lafayette area, leaving a large gap in patient care. Leaders did share that in the near future, the Sycamore Springs facility will be opening and will provide both mental health and substance abuse

services; however, focus group participants were skeptical that this facility will be sufficient.



**5. Senior health** was identified as a leading need in the community, but more discussion was needed around treating chronic conditions in the elderly. Lack of senior daycare facilities where elder individuals can receive basic care and follow-up care was the biggest concern. Community leaders shared that while the Jenks Rest Senior Center and Extended Care Facilities (ECFs) exist, the services need to be expanded. An example of a relatively simple community need related to elder care is that no services currently exist to address when elderly individuals should not be driving themselves anymore.

## **6.2 Community Survey Findings**

IU Health also solicited responses from the general public regarding the health of the IU Health Arnett community through an online survey. The survey consisted of approximately 15 multiple choice and open-ended questions that assessed the community members' feedback regarding healthcare issues and barriers to access.

A link was made available on the hospital's Web site via an electronic survey tool from April 2012 through June 2012. A paper version was distributed to local community centers, health clinics, community health fairs and events, as well as within some hospital patient waiting areas. Additionally, an estimated 25,000 surveys were e-mailed, direct-mailed, or sent via newsletter. In addition to disseminating directly to the general public of the community, the survey was also sent via e-mail to participants in the needs assessment focus groups to provide an opportunity for these community leaders to pass on to their local community members.

### ***Respondent Demographics***

9 respondents participated in the survey. All of the participants were from the PSA (Tippecanoe County). All but one participant (89%) was Caucasian (white), and the majority of respondents were 18-40 (77%) years of age, with only two respondents above the age of 60.

The educational attainment of the sample was relatively high for the nine individuals who reported it, with more than 66% of respondents indicating they had completed either a college undergraduate (44%) or graduate degree (22%). One respondent indicated completing vocational or technical schooling, and another one respondent each reported completing some high school or a high school degree/GED only.

A majority of survey participants reported a household income of over \$44,701 (78%), with the majority of participants indicating an income of \$44,701-\$67,050 (56%). Only two respondents (22%) reported a household income lower than \$44,701.

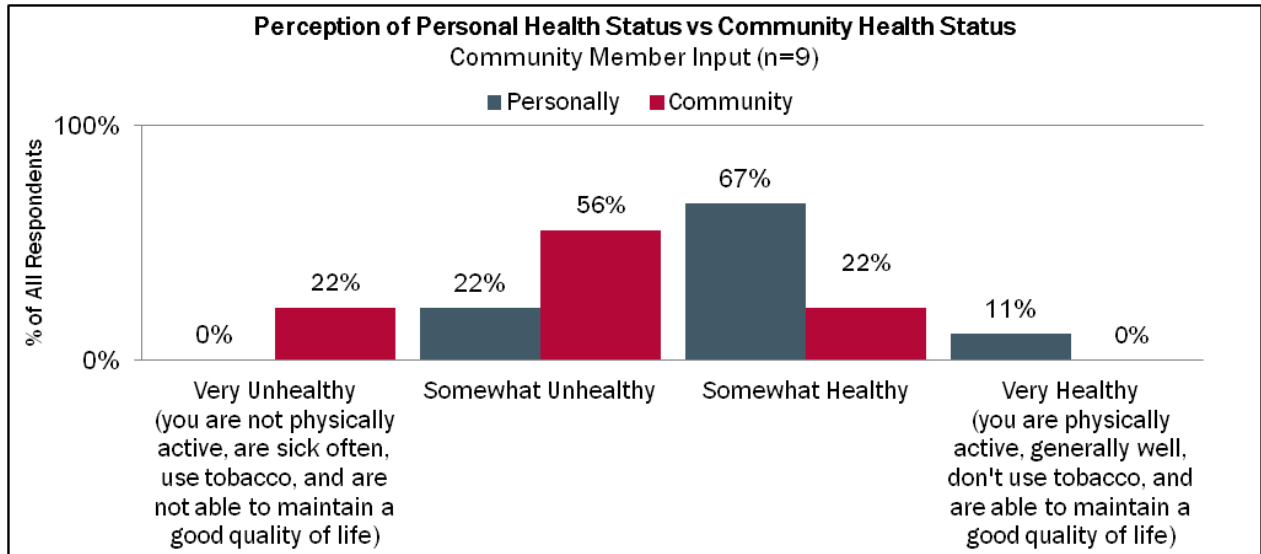
Survey respondents were also asked to report their insurance status. Of the nine respondents who reported their insurance status, the majority had commercial/private insurance (67%). Two individuals also reported either being uninsured or self-pay (22%), and one respondent was covered by Medicaid.

### ***Perceptions of Personal and Community Health***

Survey respondents were asked to assess both how healthy they thought they were personally, as well as how healthy they thought their overall community was. Four response options were presented, ranging from "Very Healthy (you/community members are physically active, generally

well, don't use tobacco, and are able to maintain a good quality of life)" to "Very Unhealthy (you/community members are not physically active, are sick often, use tobacco, and are not able to maintain a good quality of life)." Participant results are summarized in **Figure 6** below.

**Figure 6**  
Web-Based Survey Responses



Source: IU Health Arnett Community Survey, 2012.

The majority of respondents rated themselves as either "Somewhat Healthy" (67%) or "Very Healthy" (11%). Conversely, when asked to rate their overall community on the same scale, most participants rated their community's health as "Somewhat Unhealthy" (56%) or "Very Unhealthy" (22%), as opposed to only 22% rating themselves as "Somewhat Unhealthy." Only 22% of respondents rated their community as "Somewhat Healthy," and no respondents rated it as "Very Healthy."

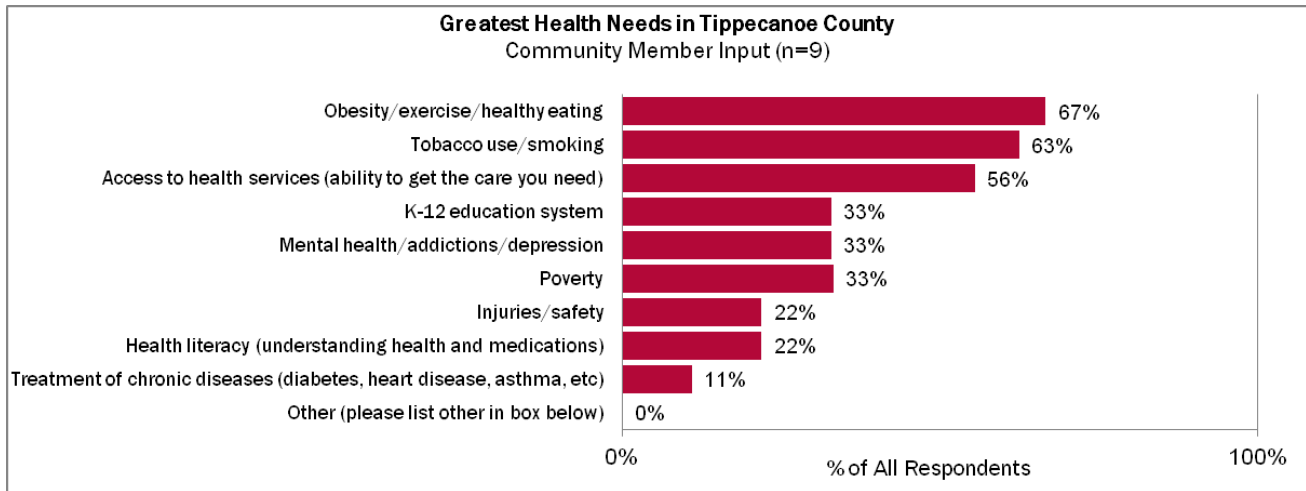
### **Health Issues**

When asked to rate the top health issues in their community on a scale of one to five, the five issues rated most often by respondents as the top need in their community included:

1. Obesity/exercise/healthy eating.
2. Tobacco use/smoking.
3. Access to health services.
4. K-12 education system.
5. Mental health/addiction/depression.

**Figure 7** below illustrates the health issues identified most frequently by respondents as the number one health need in the community.

**Figure 7**  
Web-Based Survey Responses

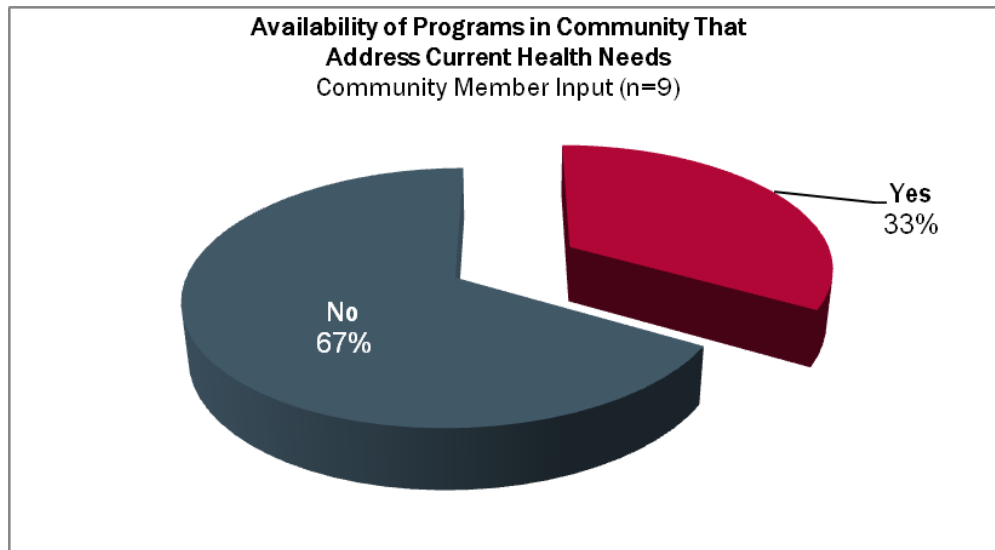


Source: IU Health Arnett Community Survey, 2012.

### ***Community Health Needs***

A majority of respondents indicated that their community did not maintain enough programs to help with the identified key community health issues. **Figure 8** below illustrates a detailed view of this feedback with regard to the question “*With the five needs you picked above, do you think there are enough programs in your community to help with these needs?*”

**Figure 8**  
Web-Based Survey Responses



Source: IU Health Arnett Community Survey, 2012.

Of those who reported they did not feel like their community had adequate programs available to address current health needs, they listed the following needs as those they feel the IU Health Arnett community should consider focusing on the most:

- Services that are truly accessible by all community members; provide more information on how to improve one's overall health through better preventative measures
- Improved access to healthcare services, especially with reference to providing affordable options for low-income populations, as well as addressing the lack of physicians in the community area
- Programs to address addiction problems in Indiana