



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

2015



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IU Health Community Health Needs Assessment Team Members

Stephanie Berry, MS

Manager System, Coordination
Community Outreach and Engagement
Indiana University Health
sberry@iuhealth.org

Anyah Land, MPH,

Community Benefit Project Manager
Community Outreach and Engagement
Indiana University Health Methodist
Hospital
Office: 317.962.9880
aland@iuhealth.org

Amber Blackmon

Masters of Public Health Intern
Community Outreach and Engagement
Indiana University Health Methodist
Hospital
Office: 317.962.6010

Michael Reece, Ph.D. MPH

Associate Dean for Research & Graduate
Studies
School of Public Health
Indiana University-Bloomington

Rachel Lott

IU Health Bedford
Marketing Manager

Gina Forrest

IU Bloomington
School of Public Health
Center for Global and Community
Outreach

Nancy Parker, Monroe County YMCA

**Paula McDevitt, City of Bloomington
Parks and Recreation**
**Alison Miller, City of Bloomington Parks
and Recreation**
ACHIEVE of Monroe County

Penny Caudill

Administrator
Monroe County Health Department

Kathy Hewitt

Lead Health Educator
Monroe County Health Department

Grace Adams

Health Educator
Medical Reserve Corps (MRC) Coordinator
Monroe County Health Department

Carol Weiss Kennedy, MS

IU Health Bloomington
Community Health Director

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) Bedford Hospital (IU Health Bedford) in order to identify the leading health needs in Lawrence County, the area defined as the community served by the hospital, in order to address such needs, and 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.

1.2 Objectives

The 2015 IU Health Bedford CHNA has three main objectives:

- 1. Identify the priority health needs within Lawrence County, Indiana.**
- 2. Serve as a foundation for developing implementation strategies that can be utilized by healthcare providers, communities, and policy makers in order to improve the health status of the Lawrence County community.**
- 3. 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 Bedford Community

- Service Area Counties: Lawrence, Orange, Jackson, Martin, Greene, Monroe, and Washington
- Service area population in 2015: 323,181
- 89.5% of the IU Health Bedford's inpatient discharge population resides in Lawrence County
- Of the seven service area counties, only three are expected to decrease in population by 2020: Lawrence, Martin and Greene
- The 65+ population is projected to increase substantially by 2020 for all counties, and the Monroe County is the only county in which the population will increase in all age groups, except 45-64
- 20% of community discharges were for patients with Medicaid, 47% were for patients with Medicare, and 4% were for Uninsured/Self-pay patients

IU Health Bedford's entire community service area extends into seven counties: Lawrence, Orange, Jackson, Martin, Greene, Monroe, and Washington. Poor social and economic factors such as low educational attainment, high unemployment, and a rising poverty rate 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 Lawrence County.



2.2 Primary Service Area

Lawrence County comprises the majority of the IU Health Bedford community. It accounts for all of the PSA total population, and 89.5% of the inpatient discharge population of the total community service area.



Lawrence County has higher rates of unemployment than the averages for both the state of Indiana and the entire nation. The median household income of Lawrence County is also below the Indiana state and national averages. The county is adversely affected by a combination of chronic health conditions, low educational attainment, and the low availability of higher paying jobs.

3 STUDY METHODS

3.1 Analytic Methods

In order to identify the community's leading health needs, both quantitative and qualitative data it was utilized. For this CHNA, quantitative analyses assessed the health needs of the population through data abstraction and analysis, and qualitative analyses were conducted by gathering input from community members through a survey and through a structured interview with community leaders in Lawrence County.

3.2 Data Sources

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

- Demographics, e.g., population, age, sex, race
- Economic indicators, e.g., poverty and unemployment rates
- Health status indicators, e.g., injury deaths, physical activity, chronic conditions, and preventive behaviors
- Health access indicators, e.g., insurance coverage, ambulatory care sensitive condition (ACSC) discharges
- Availability of healthcare facilities and resources

Data sets for quantitative analyses included:

- Community Health Status Indicators Project
- Dignity Health Community Need Index
- Indiana Department of Workforce Development
- Indiana Hospital Association Database
- Robert Wood Johnson Foundation—County Health Rankings
- STATS Indiana data—Indiana Business Research Center, IU Kelley School of Business
- US Bureau of Labor Statistics
- US Census Bureau
- 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 Bedford’s ability to reach reasonable conclusions regarding community health needs. While IU Health Bedford has worked to capture quantitative information on a wide variety of health conditions from a wide array of sources, IU Health Bedford 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 Bedford conducted a focus group with public health experts and community health leaders and community input surveys to gather input from general and underserved community members. 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 (such as seniors or injury prevention groups), then that need could potentially be underrepresented in the focus group.

3.4 Collaborating Organizations

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

Bedford Parks Department	IU Health Bedford Hospital
Boys & Girls Club of Lawrence County	IU Health Bloomington Hospital
Bedford Area Chamber of Commerce	Lawrence County Community Foundation
City of Bedford	Lawrence County Economic Growth Council
Hoosier Uplands	Mitchell Community Schools
Indiana University Center for Survey Research	RADIUS Indiana
Indiana University School of Public Health	United Way of South Central Indiana

4 DEFINITION OF COMMUNITY ASSESSED

This section identifies the community assessed by IU Health Bedford. The community was defined as Lawrence County, the county where IU Health Bedford is located.

Table 1
IU Health Bedford Inpatient Discharges by County and Service Area, 2014

Discharge Area	County	Discharges	Percent of Total
Primary Service Area	Lawrence	913	89.5%
	<i>Subtotal</i>	<i>913</i>	<i>89.5%</i>
Secondary Service Area	Orange	29	2.8%
	Jackson	32	3.1%
	Martin	15	1.5%
	Greene	24	2.4%
	Monroe	4	0.4%
	Washington	3	0.3%
	<i>Subtotal</i>	<i>107</i>	<i>10.5%</i>
All Other Areas	<i>Subtotal</i>	<i>0</i>	<i>0%</i>
Total Discharge Population		1020	100.0%

Source: IHA Database, 2014.

In 2014, the IU Health Bedford PSA included 913 discharges and its SSA included 107 discharges. The community was defined based on the geographic origins of IU Health Bedford inpatients. Of the hospital's inpatient discharges, approximately 90% originated from the PSA and 10% from the SSA (**Table 1**).

Figure 1
Counties in the IU Health Bedford Service Area Community, 2014



5 SECONDARY DATA ASSESSMENT

5.1 Demographics

IU Health Bedford Hospital is located in Lawrence County, a county located in south central Indiana. Lawrence County includes ZIP codes within the towns of Bedford, Heltonville, Mitchell, Oolitic, Springville, and Williams. Based on the most recent Census Bureau (2014) statistics, Lawrence County's estimated population is 45,704 persons with approximately 50.5% being female and 49.5% male. The county's population estimates by race are 97.1% White, 1.3% Hispanic or Latino, 0.5% Asian, 0.5% Black, 0.1% American Indian or Alaska Native, and 1.3% persons reporting two or more races.

Lawrence County has relatively low levels of educational attainment. A high school degree is the level of education most has achieved (41.5%). An additional 19.7% had some college, but no degree, while 18.1% of the population had an associate's or bachelor's degree. A total of 4.7% hold a graduate or professional degree.

Within the entire service area, the total population for the PSA is 45,704 and the total population for surrounding counties is 277,477, as illustrated in **Table 2** below.

Table 2
Service Area Population, 2014

Serve Area	County	Population	Percent of Total
Primary Service Area	Lawrence	45,704	14.1%
	<i>Subtotal</i>	<i>45,704</i>	<i>14.1%</i>
Secondary Service Area	Orange	19,626	6.1%
	Jackson	43,705	13.5%
	Martin	10,203	3.2%
	Greene	32,726	10.1%
	Monroe	143,339	44.4%
	Washington	27,878	8.6%
	<i>Subtotal</i>	<i>277,477</i>	<i>85.9%</i>
Total Service Area		323,181	100.0%

Source: US Census Bureau, 2015.

Population growth can help to explain changes in community characteristics related to health status, and thus play a major role in determining the specific services that a community needs. The Lawrence County population has decreased by 0.9% since 2010, when the population was estimated to be 46,134 persons. Indiana's total 2014 population estimate of 6,596,855 was up by 1.7% from the last census in 2010, and population growth was up by 3.3% for the entire nation.

Between 2015 and 2020, Lawrence County's population is projected to decrease slightly (-0.57%). Its population is expected to decline for all age groups except those aged 20-24 (+1.31%) and 65+ (+12.02%).

At 12.02%, the 65+ population is expected to grow the fastest among all Lawrence County age cohorts between 2015 and 2020. 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 Lawrence County for persons 65+ is expected to increase at a slower rate than the combined IU Health Bedford service area (+14.99%) and the state of Indiana (+16.07%) as illustrated in **Table 3** below.

Table 3
Projected 2015-2020 Service Area Population Change

Service Area	County	Overall		Projected 2015-2020 Change By Age Cohort					
		2014 Total Population	Projected 2015-2020 Change	0-4	5-19	20-24	25-44	45-64	65+
Primary	Lawrence	45,704	-0.57%	-0.68%	-4.58%	1.31%	-3.23%	-4.30%	12.02%
	Subtotal	45,704	-0.57%	-0.68%	-4.58%	1.31%	-3.23%	-4.30%	12.02%
Secondary	Orange	19,626	-0.53%	-1.53%	-1.98%	-0.73%	-3.46%	-3.93%	10.84%
	Jackson	43,705	1.14%	-0.78%	-1.17%	-2.82%	-1.58%	-0.63%	13.16%
	Martin	10,203	-0.25%	-1.33%	1.04%	-3.64%	-5.65%	-4.62%	13.58%
	Greene	32,726	4.55%	6.26%	1.68%	2.88%	5.97%	-2.32%	19.82%
	Monroe	143,339	0.69%	-0.16%	-2.68%	3.90%	-1.16%	-2.52%	11.47%
	Washington	27,878	1.23%	1.67%	-2.05%	4.72%	-3.16%	-0.33%	13.94%
	Subtotal	277,477	2.63%	2.52%	0.06%	2.35%	1.93%	-2.13%	15.64%
Total Service Area		323,181	2.18%	2.04%	-0.58%	2.28%	1.25%	-2.49%	14.99%
Indiana		6,596,855	2.61%	2.17%	0.96%	-0.71%	1.42%	-1.43%	16.07%

Source: STATS Indiana, Indiana Business Research Center, IU Kelley School of Business, 2015.

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, and (iii) Insurance Coverage.

5.2.1 Employment

In 2010, the share of jobs in Lawrence County was highest within the areas of healthcare and social assistance, manufacturing, retail trade, administrative and support/waste management and remediation services, and accommodation and food services. Lawrence County has a diverse group of major employers reported by the Indiana Department of Workforce Development, including: GM Powertrain, IU Health Bedford, Dana Corporation, Wal-Mart Supercenter, Times-Mail, Garden Villa, Stone Belt, Bedford-North Lawrence High, and Indiana Limestone Company.

Lawrence County reported a higher unemployment rate than the rates of most surrounding counties, the state of Indiana, and the national average rates. **Table 4** summarizes unemployment rates at July 2014 and July 2015.

Table 4
Unemployment Rates, July 2014 and July 2015

Area	July 2014	July 2015	% Change from 2014-2015
Lawrence County	8.00%	6.40%	-1.60%
Indiana	5.80%	4.50%	-1.30%
USA	6.20%	5.30%	-0.90%

Source: US Bureau of Labor Statistics, 2015.

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 2013, the national poverty rate was at 15.8%, decreasing slightly from 15.9% in 2011. In Indiana, 15.8% of the state population lived in poverty, which was the same as the 2011 poverty rate.

For Lawrence County, a poverty rate of 12.9% was reported in 2013, decreasing from 15.4% in 2011 (-2.5%). Comparatively for Indiana, Hamilton County has the lowest poverty rate at 5.5% and Monroe County has the highest poverty rate at 24.0%. **Table 5** below illustrates the poverty rates by year between 2011 and 2013.

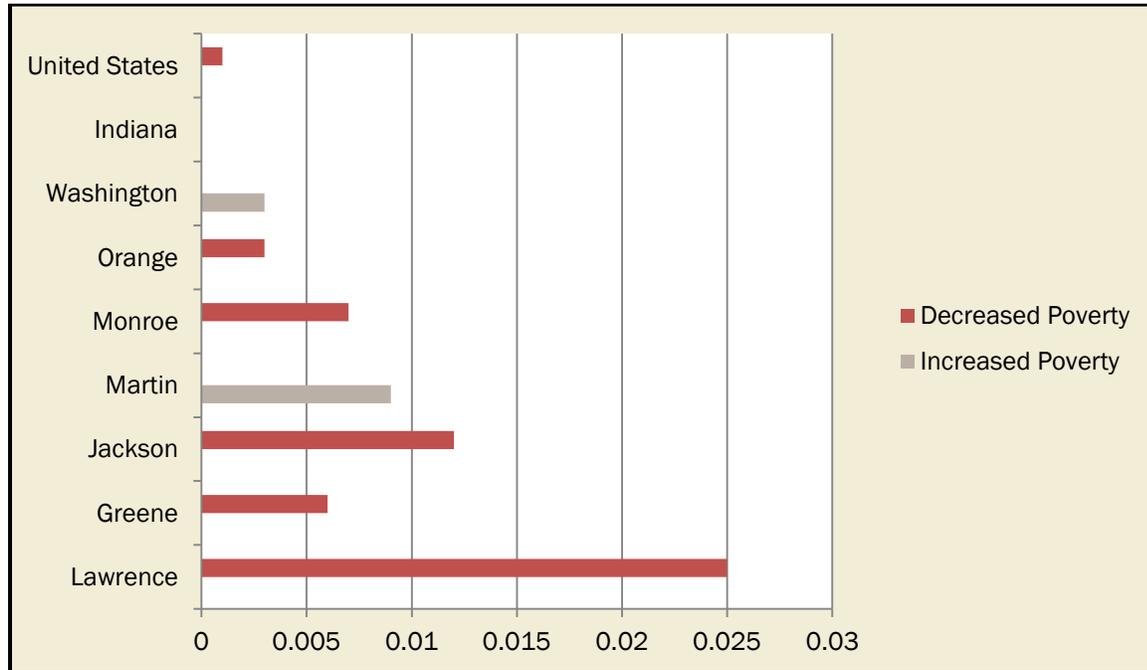
Table 5
Percentage of People in Poverty, 2011-2013

Service Area	County	2011	2012	2013	% Change from 2011-2013
Primary	Lawrence	15.40%	17.00%	12.90%	-2.50%
Secondary	Greene	14.30%	15.90%	13.70%	-0.60%
	Jackson	14.10%	12.70%	12.90%	-1.20%
	Martin	14.00%	12.80%	14.90%	0.90%
	Monroe	24.70%	24.30%	24.00%	-0.70%
	Orange	17.10%	17.40%	16.80%	-0.30%
	Washington	15.20%	16.80%	15.50%	0.30%
Indiana		15.80%	15.50%	15.80%	0.00%
United States		15.90%	15.90%	15.80%	-0.10%

Source: US Census Bureau, 2015.

Lawrence County had the highest poverty rate decrease (-2.5%) in the IU Health Bedford service area between 2011 and 2013. 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** below.

Figure 2
Percentage Change in Poverty Rates between 2011 and 2013



Source: US Census Bureau, 2015.

Income level is an additional economic factor that has been associated with the health status of a population. Based on US Census Bureau (2013) data, Lawrence County's per capita personal income was estimated to be \$22,169, with a median household income around \$42,627, which is both below the state and US national rates. The rates are lower than the Indiana state average of per capita income of \$24,635, with a median household income around \$48,248, and the US national average per capita income of \$28,155, with a median household income of \$53,046.

5.2.3 Insurance Coverage

National statistics on health insurance as of 2013 indicated that 13% of the United States population was uninsured. Of the US population that was insured, 48% were insured through an employer, 6% through other private providers, 16% through Medicaid, 15% through Medicare, and 2% through other public providers.

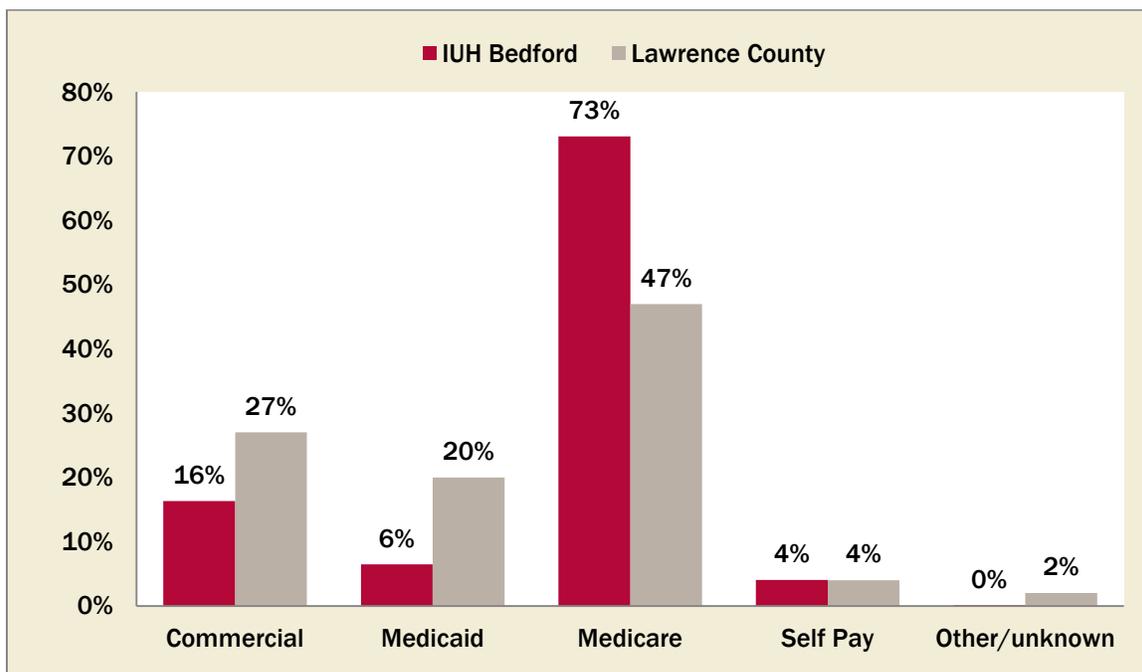
In Indiana, it was estimated that 12% of the population were uninsured, 17.3% of which were children. Of the Indiana residents who were insured, 14% were insured through Medicaid, 14% through Medicare, 52% through their employer, 6% through other private providers, and 1% through other public providers.¹

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

Based on inpatient discharge data from the Indiana Hospital Association (IHA), 27% of Lawrence County residents have commercial insurance, 20% are insured through Medicaid, 47% are insured through Medicare, 4% pay out-of-pocket (uninsured), and 2% have other government insurance or are unknown.

At IU Health Bedford Hospital, it is estimated that 16.3% of discharged patients have commercial insurance, 6.5% are insured through Medicaid, 73.1% are insured through Medicare, 4.1% pay out-of-pocket (uninsured), and 0.1% have other government insurance or are unknown (see **Figure 3**).

Figure 3
Insurance Coverage
2014 Lawrence County and IU Health Bedford Hospital Inpatient Discharges



Source: IHA Discharge Database, 2015.

5.3 County Level Health Status and Access Indicators

5.3.1 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 represent the lowest. **Table 7** summarizes County Health Ranking assessments for Lawrence and surrounding counties in Indiana for 2015; rankings for counties were converted into quartiles to indicate how each county ranks versus others in the state. In addition, some non-ranked health factors are shown, categorized to reflect the ranked areas.

Table 7
Relative Health Status Indicators for Lawrence County and Surrounding Counties

Key	
>74th percentile	
50th to 74th percentile	
25th to 49th percentile	
<25th percentile	

Indicator	Lawrence	Greene	Jackson	Martin	Monroe	Orange	Washington	Avg Rank for Service Area
Overall Health Outcomes	80	64	65	44	14	82	89	63
Length of Life	72	82	78	42	8	62	89	62
Quality of Life	80	41	46	42	29	92	67	57
Overall Health Factors	67	69	41	32	7	73	82	53
Health Behaviors	45	54	72	12	3	79	84	50
Clinical Care	43	85	45	34	11	64	56	48
Social & economic factors	75	60	19	45	23	68	78	53
Physical environment	73	83	45	91	71	65	64	70

Non-ranked Health Factors		Lawrence	Greene	Jackson	Martin	Monroe	Orange	Washington
Health Behaviors	Adult Smoking	20%	24%	23%	18%	18%	28%	37%
	Adult Obesity	34%	34%	38%	31%	23%	32%	29%
	Excessive Drinking	11%	12%	15%	14%	17%	15%	14%
	Teen Births (per 1000)	50	46	56	41	13	39	41
Clinical Care	Uninsured	17%	17%	18%	16%	17%	17%	18%
	Preventable Hospital Stays (per 1000 Medicare pop.)	71	96	69	62	43	79	65
Social & Economic Factors	High School Graduation	86%	89%	92%	75%	90%	91%	87%
	Children in single-parent households	30%	27%	31%	31%	29%	29%	33%
	Violent Crime (reported offenses per 100,000)	183	42	263	90	272	*	*
Physical Environment	Drinking water violation exposure	0%	6%	0%	17%	0%	0%	0%
	Severe housing problems	12%	11%	12%	11%	24%	13%	13%

Source: County Health Rankings, 2015.

*Data was not reported.

Lawrence County fell within the 25th percentile of Indiana counties, ranking 80th in the state for overall health outcomes (length and quality of life), which is the third lowest ranking for health outcomes among the seven counties in the IU Health Bedford service area. Comparatively, the counties of Orange and Washington also ranked in the bottom quartile for health outcomes.

In preventable health factors, Lawrence County ranked 67th in terms of overall health-related factors (determinants of health); individual scores are displayed in **Table 7**. Of Lawrence County's rankings, 75% fell within the bottom 50% of Indiana counties. For Lawrence County, the specific indicators ranked in the bottom 25% of Indiana counties included overall health outcomes (80th), quality of life (80th), and social and economic factors (75th).

A few indicators ranked in the top 50% of Indiana counties for Lawrence County; these included health behaviors (45th) and clinical care (43rd). These are also the only two areas in which Lawrence County ranked higher than the overall service area.

Other health factors show Lawrence County to have lower rates of smoking (20%), excessive drinking (11%), and drinking water violation exposure (0%) than more than half of all counties in the service area. Lawrence County was shown to have higher rates of obesity (34%), teen births (50 per 1000), preventable hospital stays (71 per 1000 Medicare population), and children in single-parent households (30%) than more than half of all counties in the service area.

5.3.1. Community Health Status Indicators

The Community Health Status Indicators (CHSI) is a service provided by the U.S. Department of Health and Human Services to provide a summary of how a given county compares to its “peer” counties relating to their health. Peer counties are determined by population demographics, poverty levels and household income. Counties that mirror each other in these indicators are considered peer counties.

Lawrence County has a total of 64 peer counties across the United States, five of which are in Indiana. **Table 8** (see below) displays the favorable and unfavorable indicators across 7 Indiana counties. These counties were chosen because they are within the service area range of IU Health Bedford Hospital. Lawrence, Orange, Jackson, Martin, Greene, Monroe and Washington County indicators are represented in the table below.

Lawrence County's most unfavorable indicators were diabetes, stroke and cost barrier to care. Jackson County displays the most unfavorable health status indicators, while Washington and Greene County displayed the least. These indicators are ranked based on where they compare to their peer counties, as well as the overall U.S. health status indicators.

Table 8
Favorable and Unfavorable Health Status Indicators, Lawrence and Surrounding Counties

Key	
Favorable Health Status Indicators	
Neither Favorable nor Unfavorable Indicators	
Unfavorable Health Indicators	

Indicator	Lawrence	Orange	Jackson	Martin	Greene	Monroe	Washington
Low Birth Weight							
Preterm Births							
Births to Women 15-19							
Single-Parent Families							
Adult Diabetes							
High Housing Costs							
Male Life Expectancy							
Female Life Expectancy							
Adult Obesity							
Breast Cancer (Female)							
Colon Cancer							
Lung Cancer							
Coronary Heart Disease Deaths							
Stroke Deaths							
Unintentional Injury Including Motor Vehicle (Death Rate)							
Unintentional Injury (Death Rate)							
Cost Barrier to Care							

Source: Community Health Status Indicators Project, Department of Health and Human Services, 2011

The indicators comparing unfavorably to US and peer counties across three or more of the counties within the IU Health Bedford service area include lung cancer, stroke deaths, and cost barrier to care, which was unfavorable in all but one county.

5.4 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 Lawrence County.

Figure 4
Community Need Index Rating Scale

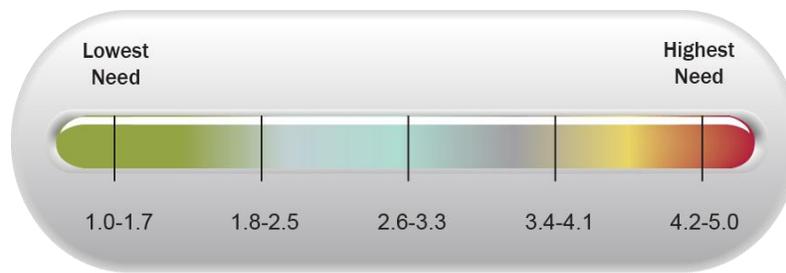
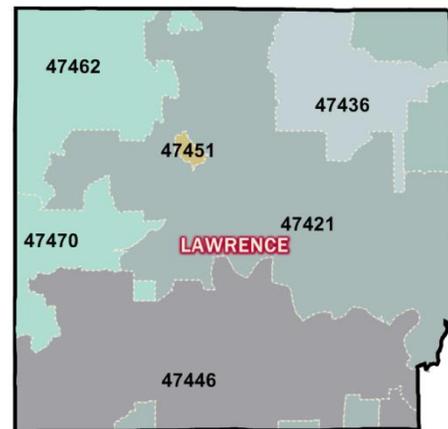


Table 9
CNI Scores for Lawrence County

County	City	ZIP Code	Rank
Lawrence	Bedford	47421	3.4
	Mitchell	47446	3.4
	Heltonville	47436	2
	Oolitic	47451	3
	Williams	47470	2.8
	Springville	47462	2.2



*Note that ZIP code 47470 (Williams) is primarily within a county outside of Lawrence County, but is included since a large portion of this ZIP code area extends into Lawrence County.

Source: Community Need Index, 2015.

Within Lawrence County, CNI scores indicate needs are moderately high in ZIP codes 47451 (Oolitic) and 47446 (Mitchell), and community needs are relatively low in ZIP code 47436 (Heltonville).

5.5 Medically Underserved Areas and Populations

The Health Resources and Service Administration (HRSA) have 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.”² **Table 10** below illustrates the areas that have been designated as MUAs or MUPs in the IU Health Bedford community.

Table 10
MUAs and MUPs in the IU Health Bedford Hospital Community

Key					
		-			
		Currently does not contain an MUP or MUA Designation			
Service Area	County	Medically Underserved Areas		Medically Underserved Populations	
		IMU Score	Detail	IMU Score	Detail
Primary	Lawrence*	-		66.4	Governor's Exception
Secondary	Orange	-		59.80	Low Income population
	Jackson*	0.0	Governor's Exception	-	
	Martin	57.0	Martin Service Area (Halbert, Lost River, and Micheltree townships)	-	
		60.8	Washington Service Area (Washington township)	-	
	Greene	58.8	Wright Service Area (Wright township)	-	
		64.6	Governor's Exception	-	
	Washington	61.1	Posey Service Area (Posey township)	61.5	Low income-Salem (Brown, Jefferson, Madison, Monroe, Vernon, Washington townships)
	58.33	Franklin/Gibson/Pierce Service Area (Franklin, Gibson, Pierce township)			

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

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

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/>.

Jackson, Martin, Greene and Washington County had service areas designated MUAs. Lawrence, Orange and Washington County had designated MUPs.

5.6 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 Bedford community.

Table 11
HPSAs in the IU Health Bedford Hospital Community

Key	
-	Currently does not contain HPSA designation for category

Service Area	County	Primary Care HPSA	Dental Care HPSA	Mental Health HPSA
Primary	Lawrence	Low income	-	-
	Orange	Low income	-	Southern Indiana Catchment Area
Secondary	Jackson	-	-	-
	Martin	Entire county	-	-
	Greene	Ridge Medical Center; Low income in entire county	Ridge Medical Center	Ridge Medical Center; Green County
	Monroe	-	-	-
	Washington	Entire county	-	-

Source: Health Resources and Services Administration, US Department of Health and Human Services, 2015.

5.7 Description of Other Facilities and Resources within the Community

The IU Health Bedford community contains a variety of resources that are available to meet the health needs identified through this CHNA. These resources include facilities designated as FQHCs, public health departments, and other organizations.

Table 12 below lists the other facilities and resources in the IU Health Bedford community.

Table 12
Resources in Lawrence and Surrounding Counties

Service Area	County	Public Health Department
Primary	Lawrence	Lawrence County Health Dept. (Bedford, Indiana)
Secondary	Orange	Orange County Health Department (Paoli, Indiana)
	Jackson	Jackson County Health Department (Seymour, Indiana)
	Martin	Martin County Health Department (Shoals, Indiana)
	Greene	Greene County Health Department (Bloomfield, Indiana)
	Monroe	Monroe County Health Department (Bloomington, Indiana)
	Washington	Washington County Health Department (Salem, Indiana)

Service Area	County	FQHC
Primary	Lawrence	N/A
Secondary	Orange	N/A
	Jackson	Community Health Center of Jackson County (Seymour, Indiana)
	Martin	N/A
	Greene	N/A
	Monroe	N/A
	Washington	N/A

Service Area	County	Hospital
Primary	Lawrence	IU Health Bedford Hospital & St. Vincent Dunn Memorial Hospital
Secondary	Orange	IU Health Paoli Hospital
	Jackson	Schneck Medical Center
	Martin	N/A
	Greene	Greene County General Hospital
	Monroe	Bloomington Meadows Hospital, Monroe Hospital & IU Health Bloomington Hospital
	Washington	St. Vincent Salem Hospital

Sources: Health Resources and Services Administration, US Department of Health and Human Services, 2015; Indiana State Department of Health, Health Care Regulatory Services, 2015.

6 PRIMARY DATA ASSESSMENT

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

1. Hosting a one and a half hour community conversation focus group luncheon with community leaders in attendance to discuss the healthcare needs of the service area and what role IU Health Bedford could play in addressing the identified needs.
2. Surveying the community at large through a mailed and web survey, in partnership with the IU Center for Survey Research, IU Health Bloomington Hospital and a number of area county health departments.

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 Bedford Hospital. Attendees who participated in the focus group are listed in **Table 13** below.

Table 13
Focus Group Participants

Title, Affiliation	Expertise
<i>Executive Director, United Way of South Central Indiana</i>	United Way works to improve health, income and education. The executive director facilitates programs and raises money for agencies working with underserved populations in these areas.
<i>Director, Bedford Parks Department</i>	The Parks Department provides essential services, facilities and programs necessary for the positive development and well-being of the community through the provision of parks, greenways, trails and recreational facilities.
<i>Director of Business & Community Development, City of Bedford</i>	The Director of Business & Community Development is charged with facilitating the Stellar Communities grant the City of Bedford received. This includes multiple development projects totaling more than \$19 million.
<i>Interim Chief Professional Officer, Boys & Girls Club of Lawrence County</i>	The Boys & Girls Club of Lawrence County serves youth in the community, focusing programming around the areas of athletics, character and leadership, education and career, health and life skills, and the arts.
<i>Interim President, Bedford Area Chamber of Commerce</i>	The Bedford Area Chamber of Commerce works to provide members a competitive advantage by promoting business, industry, tourism and quality of life, advancing the commercial and civic interests of the community.
<i>Superintendent, Mitchell Community Schools</i>	The superintendent of Mitchell Community Schools serves a rural community, overseeing the education of Hatfield & Burrell Elementary Schools, Mitchell Junior High, and Mitchell High School.
<i>Chief Strategy Officer, Hoosier Uplands</i>	Hoosier Uplands is a non-profit agency that works in aging, community action, licensed home health care and hospice, and community housing development.
<i>Manager, RADIUS Indiana</i>	Radius Indiana leads regional collaboration by leveraging the diverse assets of Southern Indiana to drive attraction, retention and expansion of business.
<i>Board Member, Lawrence County Community Foundation</i>	The Lawrence County Community Foundation works to be proactive in creating and growing an enduring source of charitable assets to identify and respond to the emerging and changing needs of the community.
<i>Interim Director, Lawrence County Economic Growth Council</i>	The Growth Council plans for and guides the economic development of the county, facilitates the expansion and retention of existing business, aggressively recruits new business, and supports the development of a superior quality of life.

6.1.2 Prioritization Process and Criteria

To obtain a more complete picture of the factors that play into the Lawrence County community's health, input from local health and community leaders was gathered through a one and a half hour focus group luncheon. The luncheon was held at IU Health Bedford Hospital. IU Health Bedford facilitators mailed letters and sent follow-up emails 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, data from the community survey was shared with participants including the believed five prioritized health needs for the IU Health Bedford community according to survey respondents. These responses were analyzed and discussed later in the session and were identified to be on target with what these local leaders also saw as the top five needs within the community. IU Health Bedford facilitators then provided participants with an opportunity to discuss why these areas are so important, what might be done in these areas and what community organizations or entities might have the primary responsibility for impacting those needs.

This discussion on the comprehensive list of identified needs from earlier in the session inspired candid discussions and allowed us to understand more of the meaning behind the identified needs and how they are showing up in the community more specifically. Final input from the group was encouraged during this process in order to fully validate the previously identified needs. Following additional discussion, participants were also asked to address what they thought the role of IU Health Bedford 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 Bedford:

1. Obesity/Lack of Exercise
2. Substance Use
3. Chronic Disease Management
4. Basic Needs (food, shelter, transportation, violence-free home)
5. Mental/Behavioral Health

These prioritized needs are discussed in more detail below.



1. Obesity/Lack of Exercise was the first identified need, and consisted of the following discussion points: education on obesity and lack of exercise should be more health-focused and less weight-focused, so that people fully understand why obesity is a problem. Because of economic issues, healthy eating is not easily modeled by parents in Lawrence County. Many are working too many jobs to cook for their families, or buy affordable healthy meals. In addition, there's a perception that the McDonald's in town may be over-utilized, especially for sugar-sweetened beverages in addition to unhealthy food. The community leaders, when asked who is primarily responsible for this issue, concluded that while it's a family and individual responsibility to choose a healthy lifestyle, the healthcare organizations in town, including IU Health Bedford Hospital, should lead in this area, providing information and education, access to assistance, and understanding of how to utilize primary care rather than walk-in clinics or the emergency room for managing health issues, particularly obesity. In addition, the leaders felt that workplace wellness and support, as well as

insurance providers or employee health plans offering discounts for employees who improve their health have been a useful and successful tool in some community organizations already.



2. Substance Use was the second concern that rose to the top. Interestingly, community leaders mentioned that one of the things they appreciate about this community is a low crime rate, unless you consider the drug-related offenses. This includes all forms of drug abuse, while alcohol abuse was not as much of a concern. The group agreed that the criminal justice and law enforcement agencies in the community are primarily responsible for this issue, but also believe that there needs to be a more unified community effort. For example, schools and other youth providers like the Boys & Girls Club should continue providing and improve the available resources for youth in the community. When it came to healthcare's role, the leaders felt that IU Health can own the process of helping people navigate substance abuse issues, like finding help, what options are available in town, etc. Right now the resources are too fragmented, and the leaders felt that someone needs to own the process, and that health care should do that.



3. Chronic disease management was the third concern expressed within the focus groups. Leaders addressed the fact that there's not enough education regarding chronic diseases like diabetes, pulmonary disease, heart disease, etc. In addition to more publicized resources for managing these diseases, the community leaders wanted to see more education regarding these diseases—not just what causes them, but why they are so detrimental and challenging to a person's health and well-being. In addition to general education, the focus group participants would like to see more youth education because prevention is so important. The group also shared that because healthcare is the expert in something like this, healthcare should be primarily responsible for working on this issue in the community.



4. Basic Needs (food, shelter, transportation, violence-free home) is the fourth issue determined to be one of the top five needs in Lawrence County. Specifically, the group discussed shelter when lamenting the lack of affordable/low-income housing in the community. Transportation was a concern because those who don't have reliable transportation struggle to hold a job, manage their healthcare, etc. The most discussed element of this need was related to physical safety in the home, particularly with concern for domestic violence and child abuse. Because this need is a more broadly defined category than others, the leaders saw a number of community organizations as having primary responsibility, including: youth programs (Boys & Girls Club), the public library, the local United Way, and schools. In addition, the leaders began to discuss the need for more community-wide partnerships to solve these issues, so that where two separate organizations may not have the resources to do something individually, they could work together and make a bigger difference. They saw the role of healthcare with this issue to be more related to partnerships, formation of a coalition of resources, and being the collaborator.



5. Mental & Behavioral Health rose to the top as well, as the fifth need for Lawrence County. When discussing this issue, the group defined it as stress, depression, sometimes connected to substance use, and mental or behavioral disorders. The biggest concern related to this was not just prevalence, but a lack of predictable and available resources to manage mental and behavioral health in the community. This is another area where the group wanted to see more community partnerships, not only among local groups, but with regional and state agencies as well. They saw IU Health Bedford's role as digging into the opportunities in mental health and finding out what additional support is available or could be provided.

6.2 Community Survey Findings

IU Health also solicited responses from the general public regarding the health of the IU Health Bedford community through a paper and web-based survey. The survey was developed by a group of health departments in southern Indiana, along with IU Health Bedford Hospital, IU Health Bloomington Hospital and the Bloomington Parks Department. The survey was then adjusted and validated by the IU Center for Survey Research. The survey assessed the community's healthcare issues, health behaviors and barriers to access.

A total of 1,000 surveys were mailed to a random sample of Lawrence County residents. Half included a link to an online survey, while the other half included a paper survey to be filled out and returned via a pre-paid envelope. In addition, half of the surveys included a single dollar bill in the envelope to encourage participation in the survey.

Respondent Demographics

557 respondents participated in the survey. All of the participants were from the PSA (Lawrence County). The survey sample was 96% Caucasian (White), and was skewed toward a middle-aged population, with 51% of respondents being born between 1950 and 1979.

The educational attainment of the sample was fairly evenly distributed, with the highest percentage completing a high school diploma or GED (37%). Completing some form of college education, (54%) either had some college (21%), an associate's degree (10%), a bachelor's degree (11%) or graduate, professional degree or beyond (12%). Only (8%) completed some high school, while (1%) selected "Other."

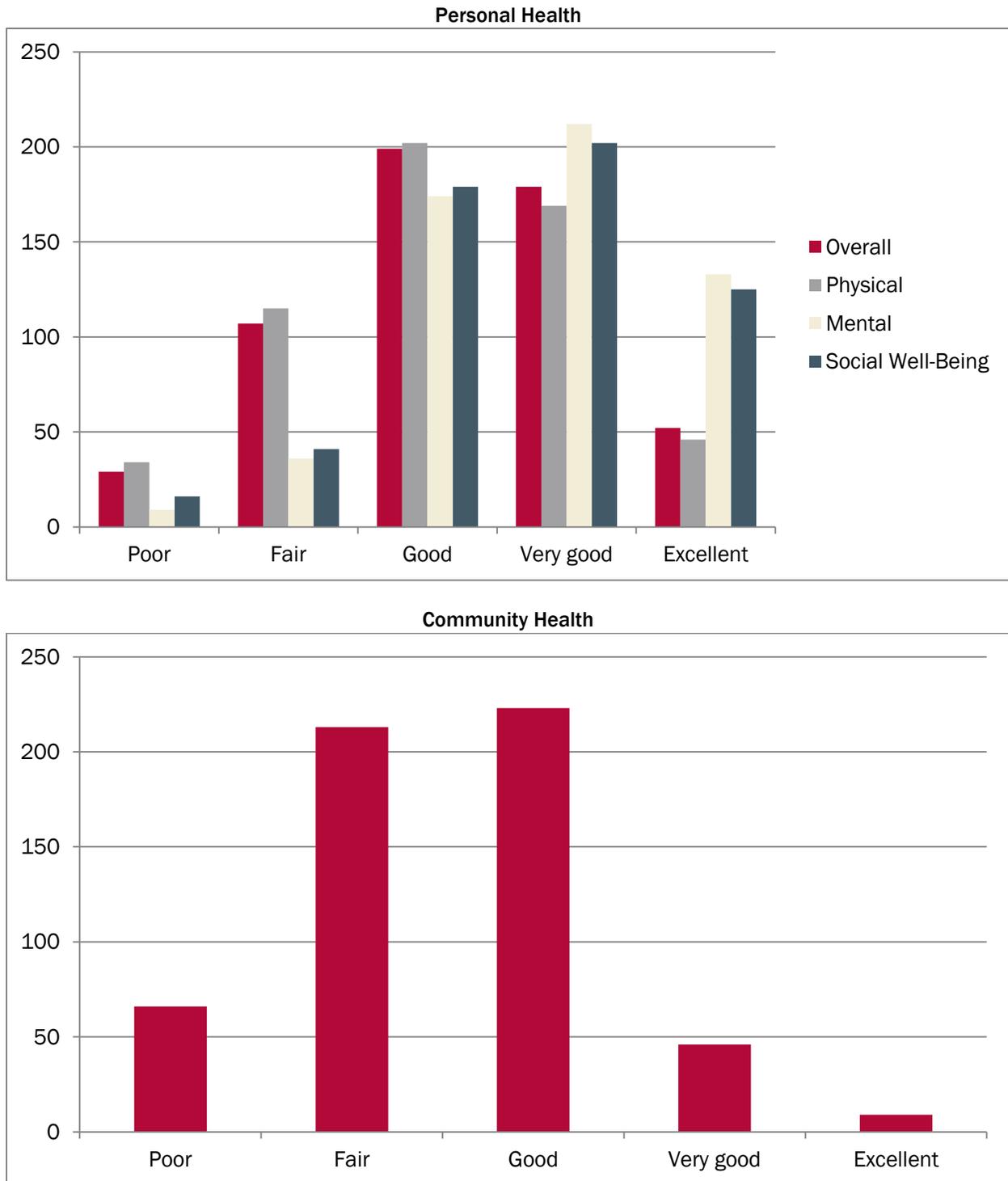
Reported household income of the sample was distributed fairly even across income ranges below \$74,999, as defined in the survey. 22% of all respondents reported a household income of \$75,000+; another 17% reported \$50,000-\$74,999, 15% reported a household income of \$35,000-\$49,999, 13% reported \$25,000-\$34,999, and the remaining respondents (33%) indicated a household income less than \$25,000. Of that bottom 33%, a total of 17% reported a household income less than \$15,000.

Survey respondents were also asked to report the type of healthcare coverage they have, if any. A majority of respondents had commercial/private insurance (46%), followed by a large percentage that reported having Medicare coverage (36%); (10%) are insured through a public source and (8%) are 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. For personal health, participants were asked about overall health, physical health, mental health and social well-being. For community health, participants were only asked to rate the overall health. Participant results are summarized in **Figure 6** below.

Figure 6
Perception of Personal Health and Community Health



Source: IU Health Bedford Community Survey, 2015.

The majority of participants rated their health in all areas as either good or very good. In addition, respondents were more likely to rate their mental health and social well-being as excellent as they

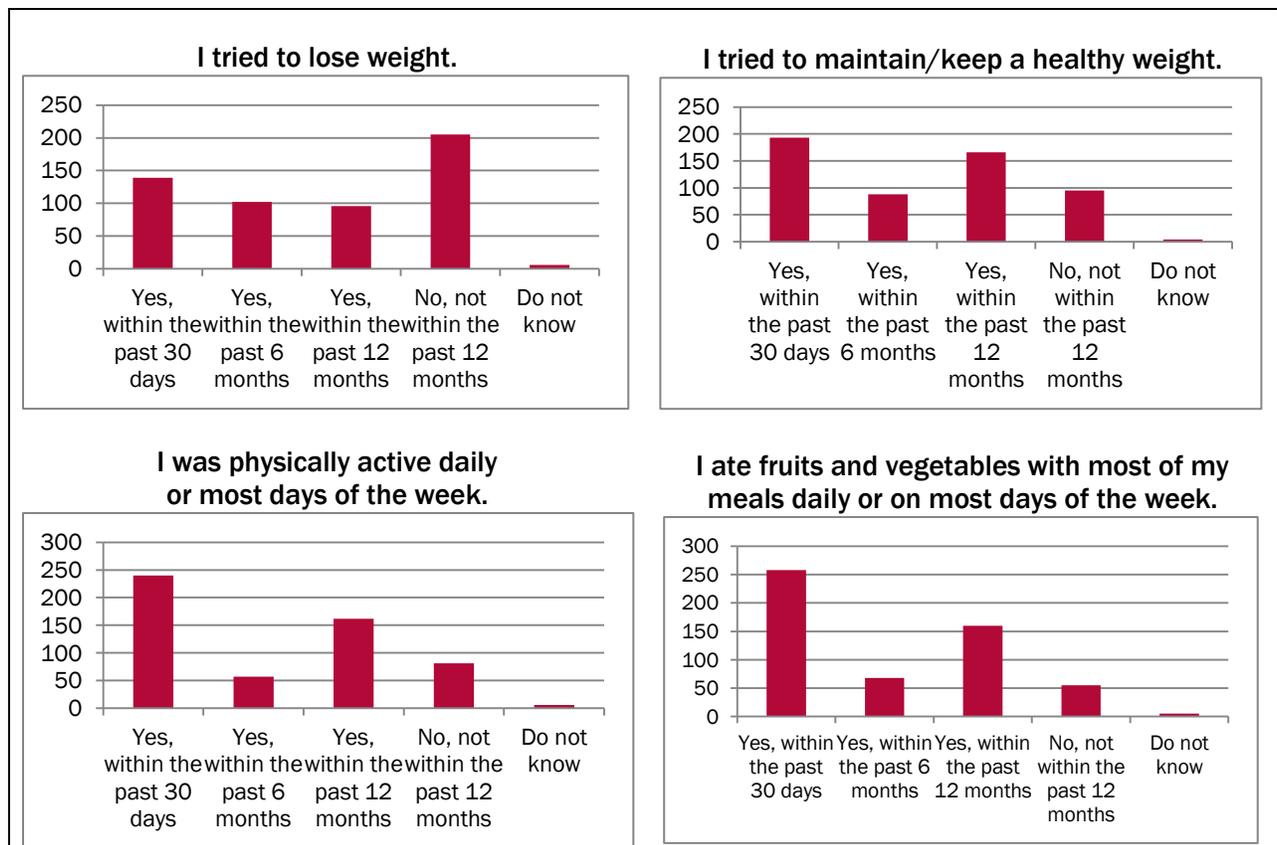
were to rate their overall or physical health as excellent. Reflecting this same issue, participants were more likely to rate their overall or physical health as fair as they were to rate their mental and social well-being as fair.

When rating the community’s overall health, the results were distributed on the lower end of the spectrum, with the majority of participants choosing fair or good. Less than half of all respondents chose poor, very good or excellent.

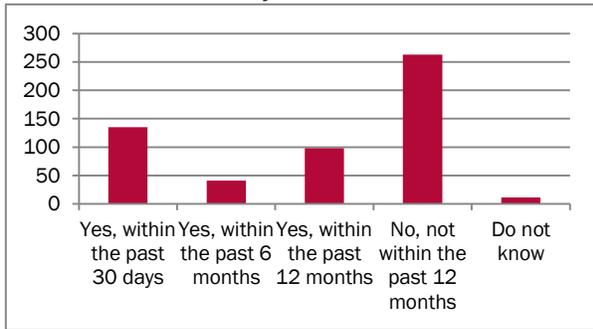
Health Behaviors

Participants were also asked about their own health behaviors in the areas of weight loss or maintenance, physical activity, eating fruits and vegetables daily, consumption of sugar-sweetened drinks, tobacco use, alcohol use, prescription medication abuse, needle-sharing, sexual activity, and social activity. Participants were asked how often they participated in these behaviors, with the options “Yes, within the past 30 days,” “Yes, within the past six months,” “Yes, within the past 12 months,” “No, not within the past 12 months,” or “Do not know.” Results are shown in **Figure 7** below.

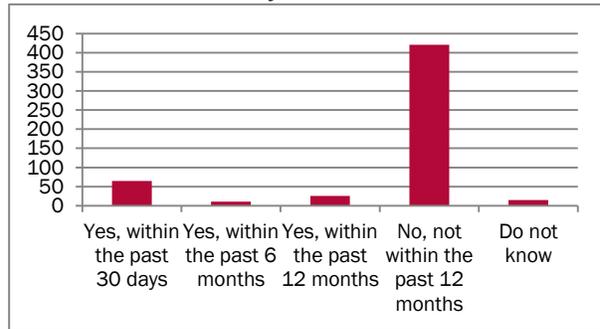
Figure 7
Health Behaviors



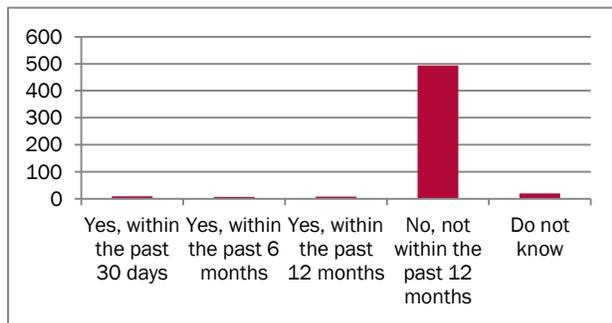
I consumed sugar-sweetened drinks daily or on most days of the week.



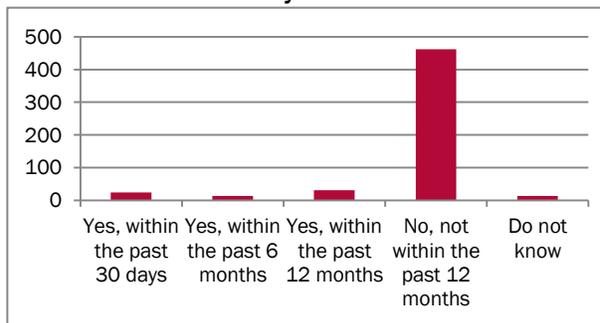
I smoked or used tobacco products daily or most days of the week.



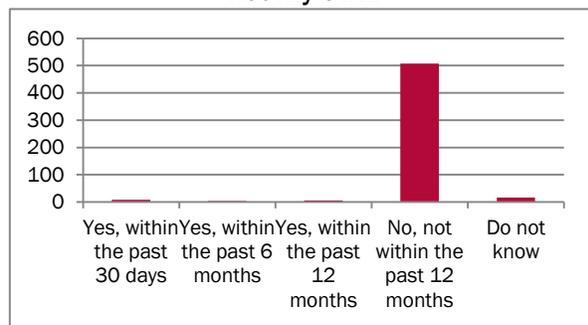
I smoke vapor/e-cigarettes daily or most days of the week.



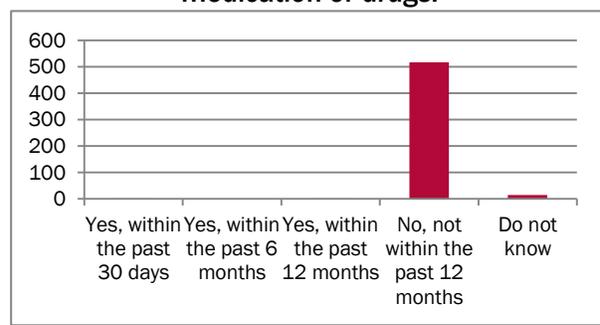
I drank at least 2 or more alcoholic drinks daily or most days of the week.



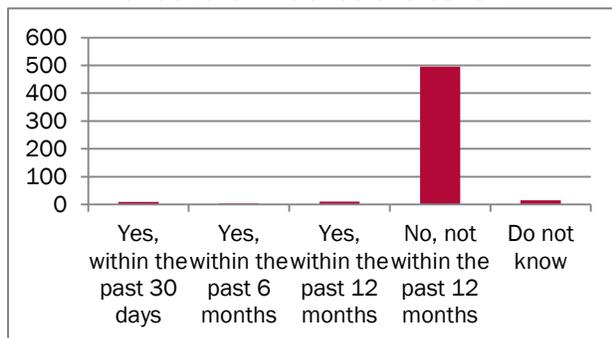
I used medication from a prescription that was not my own.



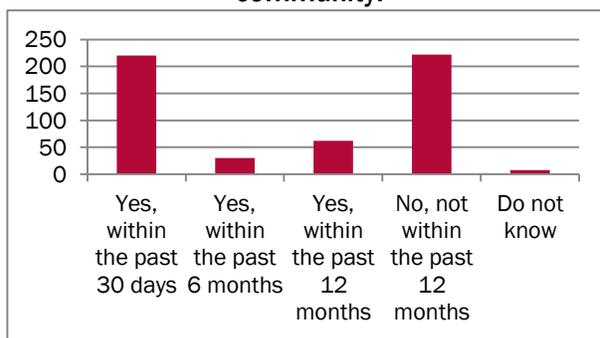
I shared needles with another person for medication or drugs.



I had sexual activity with another person while under the influence of alcohol.



I met with social groups or friends in the community.



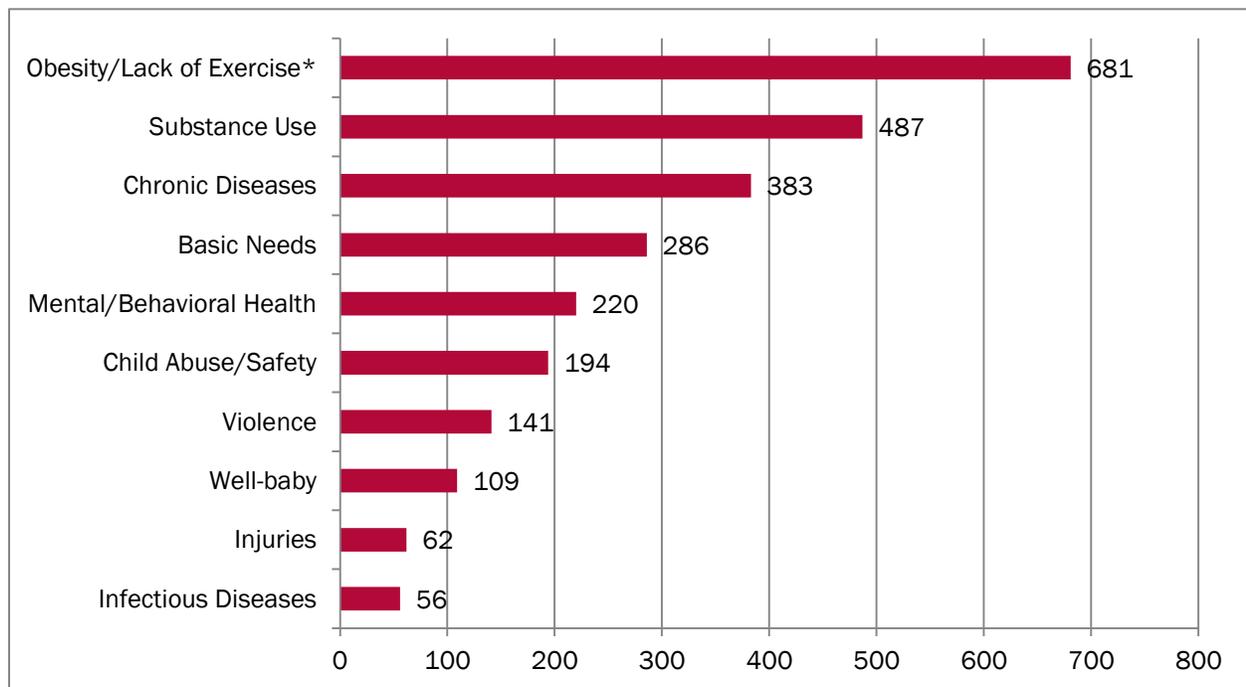
Health Issues

When asked to choose the top five most important health issues facing their community, the five issues selected most often by respondents as important needs in their community included:

1. Obesity/lack of exercise.
2. Substance use.
3. Chronic diseases.
4. Basic needs.
5. Mental/behavioral health.

Figure 8 below illustrates the health issues identified most frequently by respondents as one of the five most important health issues affecting their community.

Figure 8
Five Most Important Health Issues Facing Your Community

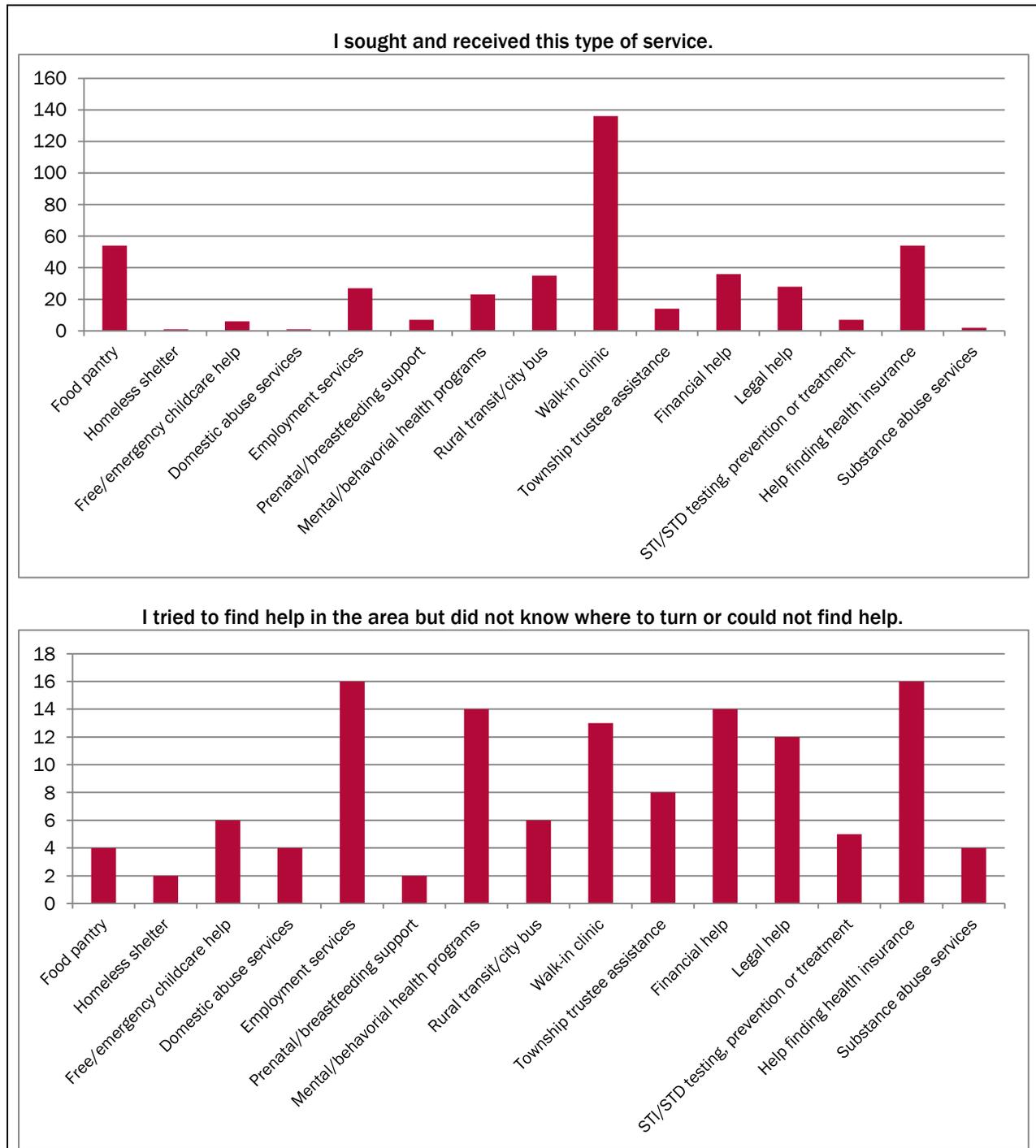


Source: IU Health Bedford Community Survey, 2015.

Community Health Resource Use

Respondents were also asked what resources or services, if any, they sought in the community, and whether they received the service. **Figure 9** below illustrates a detailed view of this feedback.

Figure 9
Use of Services & Resources within the Community



Source: IU Health Bedford Community Survey, 2015.

6.3 Summary

Upon completion of the community health needs assessments, Indiana University Health Bedford Hospital reviewed the information gathered from the community leader focus groups, and community input survey and statistical data. The needs identified through these processes were analyzed by utilizing the Hanlon Method to determine the prevalence and severity of the need as well as the effectiveness of an intervention for each particular need. Through this method, all of the health needs were given a ranking. Indiana University Health Bedford Hospital utilized the rankings to determine which community health needs were most critical and the hospital's ability to impact change when selecting the 2015 community needs to address. These needs were presented to the hospital board for approval and will shape the community outreach priorities through 2018.