Good Samaritan Hospital Community-Based Needs Assessment: Summary Report

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EXECUTIVE SUMMARY

Good Samaritan Hospital is a not-for-profit healthcare system that is committed to providing quality services and programs to improve the health of the communities they serve. To better understand the health status and needs of the area residents, Good Samaritan Hospital contracted with the Indiana University School of Medicine, Department of Family Medicine's Bowen Research Center to conduct a community-based health assessment survey that included a survey to members of the community and a separate survey of the areas healthcare providers. In addition, existing health indicator data for the counties served by Good Samaritan Hospital were compared to similar values for the State and U.S. The aim of the project was to identify the health status, lifestyle risk factors, health needs, and perceived barriers to health care of area residents. Good Samaritan Hospital professional staff also wanted to assess residents' knowledge about and experience with using Good Samaritan Hospital's free health screening programs and low cost primary care services. A cross-sectional mail survey was conducted of all households in the six county area served by Good Samaritan Hospital: Knox County, Daviess County, and Pike County in Indiana and Lawrence County, Crawford County, and Richland County in Illinois. A second survey of health care professionals in the same area was conducted to assess the perception of their patients' needs. Technical assistance for the survey was provided by the Indiana University School of Medicine, Department of Family Medicine's Bowen Research Center staff. The two separate questionnaires were developed using items from the standardized Behavioral Risk Factor Surveillance System (BRFSS) survey instrument as well as items created specifically for these surveys.

Approximately 43,000 households from the six counties were mailed materials for participation in the community survey by Ewing Printing. Ewing Printing mailed each letter explaining the purpose of the community survey, a questionnaire, and postage paid return envelope addressed to the Bowen Research Center. The overall response rate for the community survey was 8.1% (3,502/42,943). Equal

proportions of the respondents were male (50%) and female (50%). Most of the respondents were over 55 years of age (72%) and White (98%). Most (86%) survey respondents perceived themselves as having at least good health status with the majority indicating "good," "very good," or "excellent." Only 14% perceived they had "fair" or "poor" health status. More respondents indicated that their health status was excellent in 2013 than in 2010. Most (84%) of the survey respondents were meeting the American Cancer Society's cancer screening guidelines for colorectal cancer and 72% of women were meeting the screening guidelines for breast cancer. Also, only about one-third (34%) of survey respondents appeared to be meeting the Centers for Disease Control and Prevention recommended physical activity level; however, more of the respondents in 2013 reported having jobs requiring mostly heavy labor or physically demanding work. In addition, in 2013, more reported having no physical activity than in 2010. One-quarter (29%) of the respondents were either underweight or normal weight, while nearly three-quarters (71%) were either overweight or obese. Most of the respondents either never smoked (61%) or had quit smoking (24%) and only 15% of the respondents indicated that they were currently smoking. However, more were using smokeless tobacco in 2013 than in 2010. Almost all (88%) had some form of health care insurance coverage. Only about one-half (46%) of the survey respondents were aware of the Good Samaritan Hospital's free health screening program and four in ten (40%) were familiar with the Good Samaritan Hospital Primary Care Clinic. More respondents reported receiving care at the Primary Care Clinic in 2013 than in 2010.

A total of 187 healthcare providers (physicians and social workers) from the same counties were also mailed a survey by Ewing printing to determine their perceptions of the health needs of the patients they served. Healthcare providers were also given the option of completing the survey online. The overall response rate for the provider survey was 15.5% (29/187). Most often the providers who responded were female (55%), over 45 years of age (76%), and White (89%). Most of the providers were either physicians (48%) or Registered Nurses (21%). About one-half (57%) of the provider

respondents reported that less than half of their patients were physical active. Half of the providers (50 %) had greater than 25% of their patients used some form of tobacco product. The vast majority of providers (88%) indicated that at least 25% of their patients were obese. Many of the provider respondents believed that their patients were up-to-date with colon (39%), prostate (41%), cervical (42%), or breast (56%) cancer screenings; however, many did not know.

This community health needs assessment found that many of the residents of the area served by Good Samaritan Hospital reported having unhealthy lifestyle behaviors that put them at risk for serious chronic diseases such as cardiovascular disease, cancer and diabetes. In addition, a significant proportion of the residents reported symptoms of depression and anxiety that keep them from having optimum health. The health care providers in the area recognize these same conditions in their patients. It was noted that the residents perceived health status improved over the past three years as did the proportion who received seasonal flu vaccine. However, the health measures and quality of life of the residents would benefit from a greater focus on other aspects of preventive and primary health care.

BACKGROUND AND HISTORY OF THE GOOD SAMARITAN HOSPITAL

History

Good Samaritan Hospital opened in 1908. The 25-bed facility was Indiana's first county hospital. Edith Willis was the hospital's first superintendent. Her staff included an assistant superintendent, a student nurse, janitor and cook. Today, Good Samaritan Hospital is a 232-bed community health care and regional referral facility serving the residents of southwestern Indiana and southeastern Illinois by providing a full range of health care services, employing 1,900 employees, and delivering high quality patient care (Good Samaritan Hospital). Over the past 105 years, Good Samaritan Hospital has grown to include an Radiology Center, Sleep Disorders Center, the Dayson Heart Center, a Same Day Surgery Center, the Cancer Pavilion, a modern emergency room, cancer diagnostic and treatment center, and a health pavilion that houses a women's and infant's health center and outpatient technology center.

Mission

The mission of the Good Samaritan Hospital is to provide excellent health care and promote healing through trusting relationships (Good Samaritan Hospital).

Vision

To be recognized as the regional center of excellence for health care (Good Samaritan Hospital).

Community Health Services

Good Samaritan Hospital is a not-for-profit healthcare system that is committed to providing quality services and programs to improve the health of the communities they serve. The Free Community Health Screening program is a signature Good Samaritan Hospital outreach program. The program's focus areas include stroke, cancer, obesity and diabetes prevention screenings and education events, heart and kidney health services and education, and programs that focus on improving and managing dyslipidemia. Good Samaritan Hospital also provides free and low cost health care through the hospital's Primary Care Clinic and staffs community health nurses who provide school health programs

and community flu, Hepatitis A and B, and pneumococcal immunization clinics (Good Samaritan Hospital).

Purpose of the Report

The purpose of this report is to provide the findings of a community health status survey conducted by the Good Samaritan Hospital Marketing Department. The report will highlight the rationale, project goals as well as present the findings of the survey of Knox, Daviess, and Pike County Indiana and Lawrence, Crawford, and Richland County Illinois, residents as well as the impressions of the healthcare providers who provide service to these counties.

Description of the Counties Served by GSH

Knox County, Indiana

From 2007-2011, Knox County had an average of 38,446 residents. Most of the residents (73.5%, n=28,258) were twenty years of age and older. Nearly ninety-five percent (94.8%) of the population was white (alone), nearly three percent (2.7%) were black (alone), and approximately one and a half percent (1.6%) was Hispanic. About eighty-five percent (85.1%) of Knox County residents 25 years of age and older had a high school diploma, compared to 86.6% for the state of Indiana and 85.4% for the U.S. The median household income on average from 2007-2011 was $40,391, compared with $41,784 for Indiana as a whole and $48,393 for the U.S. The poverty rate was 14.2% in Knox County compared with 12.9% in Indiana and 12.2% in the U.S. (United States Census Bureau, 2011).

Daviess County, Indiana

From 2007-2011, Daviess County had an average of 31,347 residents. Most of the residents (68.7%, n=21,535) were twenty years of age and older. Over ninety-six percent (96.1%) of the population was white (alone), less than one percent (0.4%) was black (alone), and approximately four percent (4.1%) was Hispanic. About seventy-five percent (75.4%) of Daviess County residents 25 years of age and older had a high school diploma, compared to 86.6% for the state of Indiana and 85.4% for the U.S. The median household income on average from 2007-2011 was $45,231, compared with $41,784 for Indiana as a whole and $48,393 for the U.S. The poverty rate was 11.1% in Daviess County compared with 12.9% in Indiana and 12.2% in the U.S. (United States Census Bureau, 2011).

Pike County, Indiana

From 2007-2011, Pike County had an average of 12,901 residents. Most of the residents (75.3%, n=9,714) were twenty years of age and older. Over ninety-eight percent (98.1%) of the population was white (alone), less than one percent (0.1%) was black (alone), and slightly over one percent (1.1%) was Hispanic. Eighty-four percent (84.0%) of Pike County residents 25 years of age and older had a high school diploma, compared to 86.6% for the state of Indiana and 85.4% for the U.S. The median household income on average from 2007-2011 was $40,525, compared with $41,784 for Indiana as a whole and $48,393 for the U.S. The poverty rate was 11.8% in Pike County compared with 12.9% in Indiana and 12.2% in the U.S. (United States Census Bureau, 2011).

Lawrence County, Illinois

From 2007-2011, Lawrence County had an average of 16,853 residents. Most of the residents (77.9%, n=13,128) were twenty years of age and older. Nearly eighty-three percent (82.7%) of the population was white (alone), nearly fourteen percent (13.7%) were black (alone), and approximately four percent (3.7%) was Hispanic. About seventy-nine percent (79.3%) of Lawrence County residents 25 years of age and older had a high school diploma, compared to 86.6% for the state of Indiana and 85.4% for the U.S. The median household income on average from 2007-2011 was $38,326, compared with $41,784 for Indiana as a whole and $48,393 for the U.S. The poverty rate was 14.1% in Lawrence County compared with 12.9% in Indiana and 12.2% in the U.S. (United States Census Bureau, 2011).

Crawford County, Illinois

From 2007-2011, Crawford County had an average of 19,850 residents. Most of the residents (76.1%, n=15,106) were twenty years of age and older. Approximately ninety-three percent (93.1%) of the population was white (alone), nearly four percent (3.6%) were black (alone), and approximately two percent (1.8%) was Hispanic. About eighty-six percent (86.3%) of Crawford County residents 25 years of age and older had a high school diploma, compared to 86.6% for the state of Indiana and 85.4% for the U.S. The median household income on average from 2007-2011 was $43,923, compared with $41,784 for Indiana as a whole and $48,393 for the U.S. The poverty rate was 14.0% in Crawford County compared with 12.9% in Indiana and 12.2% in the U.S. (United States Census Bureau, 2011).

Richland County, Illinois

From 2007-2011, Richland County had an average of 16,180 residents. Most of the residents (75.2%, n=12,167) were twenty years of age and older. Approximately ninety-seven percent (97.1%) of the population was white (alone), less than one percent (0.4%) was black (alone), and less than one percent (0.6%) was Hispanic. About eighty-nine percent (89.3%) of Richland County residents 25 years of age and older had a high school diploma, compared to 86.6% for the state of Indiana and 85.4% for the U.S. The median household income on average from 2007-2011 was $42,305, compared with $41,784 for Indiana as a whole and $48,393 for the U.S. The poverty rate was 12.3% in Richland County compared with 12.9% in Indiana and 12.2% in the U.S. (United States Census Bureau, 2011).

Table 1: County Description

Secondary Data

	Knox County	Daviess County	Pike County	Lawrence County	Crawford County	Richland County	Indiana	U.S.
Total Population	38,446	31,347	12,901	16,853	19,850	16,180	6,454,254	306,603,772
Sex								
Male	50.5%	49.6%	50.4%	55.5%	50.7%	49.2%	49.2%	49.2%
Female	49.5%	50.4%	49.6%	44.5%	49.3%	50.8%	50.8%	50.8%
Age								
< 5 years	6.0%	8.3%	5.8%	5.3%	5.1%	5.9%	6.7%	6.6%
5-19 years	20.5%	23.1%	19%	15.6%	18.9%	18.8%	21.3%	20.5%
20-64 years	57.80%	54.60%	58.70%	61.70%	58.70%	55.9%	59.2%	60.0%
65+	15.7%	14.1%	16.6%	16.2%	17.4%	19.3%	12.8%	12.9%
Race								
White	94.8%	96.1%	98.1%	82.7%	93.1%	97.1%	85.0%	74.1%
Black/African American	2.7%	0.4%	0.1%	13.7%	3.6%	0.4%	8.9%	12.5%
American Indian/Alaska Native	0.1%	0.2%	0.0%	0.1%	0.3%	1.3%	0.2%	0.8%
Asian	0.5%	0.5%	0.7%	0.1%	0.4%	0.0%	1.5%	4.7%
Native Hawaiian/Other Pacific Islander	0.0%	0.3%	0.0%	0.2%	0.0%	0.1%	0.0%	0.2%
Other	1.9%	2.5%	1.1%	3.2%	2.6%	0.1%	4.3%	7.7%
Ethnicity								
Hispanic or Latino	1.6%	4.1%	1.1%	3.7%	1.8%	0.6%	5.8%	16.1%
Education								
High school graduate or higher	85.1%	75.4%	84.0%	79.3%	86.3%	89.3%	86.6%	85.4%
Socioeconomic Indicators								
Median household income	$40,391	$45,231	$40,525	$38,326	$43,923	$42,305	$48,393	$52,762
Poverty rate	14.2%	11.1%	11.8%	14.1%	14.0%	12.3%	12.2%	12.5%

(United States Census Bureau, 2011)

Table 2: Leading Causes of Deaths

Secondary Data (Number of Deaths / Crude Death Rate)

	Knox County (2008-2010)	Daviess County (2008-2010)	Pike County (2008-2010)	Lawrence County (2008-2010)	Crawford County (2008-2010)	Richland County (2008-2010)	Indiana (2010)	U.S. (2010)
Cancer	256/221.8	202/214.9	95/245.3	112/221.5	166/79.0	132/272	13,164 / 203.0	574,743 / 186.2
Diabetes	47/40.7	47/50.0	20/51.6	17/ data unreliable	15/ data unreliable	Data not-available	1,587 / 24.5	69,071 / 22.4
Alzheimer's disease	24/20.8	48/51.1	19/data unreliable	49/96.9	21/35.3	Data not available	1,940 / 29.9	83,494 / 27.0
Heart Disease	330/285.9	210/223.4	118/304.7	134/265.0	188/316.0	151/311.2	13,388 / 206.5	597,689 / 193.6
Stroke (cerebrovascular diseases)	172/149.0	77/81.9	35/90.4	30/59.3	55/92.4	37/76.3	3,082 / 47.5	129,476 / 41.9
Influenza and Pneumonia	25/21.7	25/26.6	Data not-available	14/ data unreliable	21/35.3	17/data unreliable	1,175 / 18.1	50,097 / 16.2
Chronic lower respiratory diseases	97/84.0	45/47.9	25/64.6	47/92.9	45/75.6	33/68	3,794 / 58.5	138,080 / 44.7
Nephritis, nephrotic syndrome, and nephrosis	38/32.9	35/37.2	Data not-available	20/39.5	26/43.7	20/42.2	1,516 / 23.4	50,476 / 16.3
Accidents (unintentional injuries)	69/59.8	46/48.9	11/ data unreliable	32/63.3	26/43.7	30/61.8	2,534 / 39.1	120,859 / 39.1
Intentional self-harm (suicide)	16/data unreliable	Data not-available	Data not-available	Data not-available	Data not-available	Data not-available	864 / 13.3	38,364 / 12.4

(Centers for Disease Control and Prevention, 2010)

Table 3: Physical Environment

Secondary Data (2007)

	Knox County	Daviess County	Pike County	Lawrence County	Crawford County	Richland County	Indiana
Air pollution – Particulate Matter Days (Annual number of unhealthy air quality days due to fine particulate matter)	5	4	2	4	1	1	2
Air Pollution - Ozone days (Annual number of unhealthy air quality days due to ozone	0	0	0	0	0	0	3
Access to recreational facilities (Rate of recreational facilities per 100,000)	11	7	0	0	10	19	10
Access to healthy foods (Percent of population who are low-income and do not live close to a grocery store)	0%	0%	2%	1%	1%	1%	7%
Violent crime rate per 100,000 population	88	114	Unreliable	270	248	211	367

(Robert Wood Johnson Foundation, 2013)

Table 4: Natality and Sexual Health Indicators

Secondary Data

	Knox County	Daviess County	Pike County	Lawrence County	Crawford County	Richland County	Indiana
Natality Indicators*							
Low Birth Weight (2010)	Not Significantly Different than Indiana	Not Significantly Different than Indiana	Not Significantly Different than Indiana	Not Significantly Different than Indiana	Not Significantly Different than Indiana	Not Significantly Different than Indiana	8%
Sexual Health**							
Chlamydia Rate per 100,000 (2009)	294	146	143	90	133	71	341
Teen birth Rate per 1,000 female population, ages 15-19 (2002-2008)	41	49	43	38	42	39	44

* (Indiana State Department of Health, 2010)

** (Robert Wood Johnson Foundation, 2013)

METHODS

Partnerships

Good Samaritan Hospital contracted with the Indiana University School of Medicine, Department of Family Medicine's Bowen Research Center to conduct two surveys and examine existing data to better understand the health needs and health status of area residents. The aim of the project was to identify the lifestyle risk factors, cancer screening behaviors, perceived barriers to health care, and other health concerns of area residents. Professional staff of the Good Samaritan Hospital also wanted to assess resident's awareness and experience using Good Samaritan Hospital's free health screening programs and low cost primary care services. Ewing Printing, a printing and mailing company used by the Good Samaritan Hospital Marketing Department, completed the printing and mailing components of the survey process (http://www.ewingprinting.com/).

Study Design

The 2013 Good Samaritan Hospital Community Needs Assessment consisted of two cross-sectional mail surveys conducted with technical assistance provided by the Bowen Research Center staff. The two questionnaires were developed using items from the standardized Behavioral Risk Factor Surveillance System (BRFSS) instrument to understand the perceived health status of adults in six county area served by Good Samaritan Hospital, as well as other questions to determine the impressions of the population from the perspective of the residents and healthcare providers in the area. Where possible, the health indicators for residents in the counties served by Good Samaritan Hospital were compared to similar statistics for the State of Indiana and the U.S.

Instrument Development

The survey instruments were developed by the Bowen Research Center project team and professional staff at Good Samaritan Hospital. Health status, health behaviors, emotional support, life satisfaction, and demographic items were selected from publically available questionnaires used to collect this health information from the Centers for Disease Control and Prevention's Behavioral Risk Factor Surveillance System (BRFSS). The items on the BRFSS instrument were tested for validity and reliability to insure that the data collected with the instrument are the best available (Centers for Disease Control and Prevention (CDC)). This state and national database provides communities conducting assessments with the opportunity to track health measures locally and compare local findings to state and national level values. Since BRFSS is conducted by telephone interview, some survey items were modified, specifically the layout and organization of the response categories, for self-report and printing purposes. The Director of Marketing and Bowen Research Center professional staff developed additional survey items to gather specific information about the knowledge and use of the free health screenings and low cost primary health care offered in the community by Good Samaritan Hospital. Items on the professional survey instrument were developed specifically for this community-based needs assessment to obtain their perceptions of the health needs of their patients and the community they serve. The final survey instruments were converted to a scannable form for data entry using Cardiff Teleform® (Appendices A and C).

Printing and Mailing Logistics

Survey Mailing and Printing

Ewing Printing Company, Inc. printed and mailed all of the survey instruments and other documents. Materials for both surveys were printed on Good Samaritan Hospital letterhead, over the signature of the Good Samaritan Hospital's Chief Executive Officer, and mailed in Good Samaritan Hospital envelopes. Postage paid return envelopes were pre-addressed to the Bowen Research Center. Faculty and professional staff of Good Samaritan Hospital and Bowen Research Center provided Ewing Printing Company with the text for the cover letters (Appendix B and D). Professional staff at Bowen Research Center posted a portable document format (pdf) file containing 42,943 copies of the Community survey instrument and 187 copies of the Healthcare Provider survey instrument on the Ewing Printing website (http://www.ewingprinting.com/). Staff at Ewing Printing Company used the pdf files to print individual survey instruments.

Mailing List

The mailing list for the community survey covered all of the residential addresses and residential P.O. Boxes of the six counties included in the needs assessment. The provider survey mailing list was provided by the Marketing Department from Good Samaritan Hospital.

Survey Administration

Target Population

The target population for the Good Samaritan Hospital community survey was adults eighteen years of age and older who were residents of Knox, Davies, or Pike County, Indiana, and Lawrence, Crawford, or Richland County, Illinois. The provider survey targeted all health care providers (physicians and social workers) in the area.

Mailing Protocol and Response Rates

Community Survey: A survey instrument, cover letter and postage paid envelope were mailed to the 42,943 households in Knox, Daviess, and Pike Counties in Indiana, as well as Lawrence, Crawford and Richland Counties in Illinois, over a period of approximately two weeks in early March, 2013. A total of 3,502 individuals returned questionnaires. Sixteen survey instruments were excluded from the analysis: six due to the subjects marking out or cutting off the survey's barcode and ten due to the surveys being returned blank. Thus, 3,486 completed instruments were available for analysis, giving an overall response rate of 3,486/42,943 (8.1%). Individual response rates for each county were as follows: Knox County, Indiana: 1,569/16,016 (9.8%); Daviess County, Indiana: 362/7,299 (5.0%); Pike County, Indiana: 194/2,506 (7.7%); Richland County, Illinois: 350/5,438 (6.4%); Lawrence County, Illinois: 615/6,348 (9.6%); and Crawford County, Illinois: 396/5,290 (7.5%).

Provider Survey: A survey instrument, cover letter, and postage paid envelope were mailed to 187 healthcare providers in early March, 2013. Due to a poor response rate, the provider survey was re-sent with a new cover letter and postage paid envelope in early April, 2013. Of the 187 that were initially mailed, eleven individuals responded by returning the survey and one individual responded to the online survey. After the survey was mailed a second time, twenty additional surveys were returned. Three survey instruments were returned blank with the providers indicating that they had already sent in their responses. Thus, 29 completed instruments were available for analysis, giving an overall response rate of 29/187 (15.5%).

Data Collection and Entry

Professional staff at the Bowen Research Center entered data electronically using Cardiff Teleform®. All survey data were electronically scanned and verified.

Data Definitions

Definitions of computed variables are available in Appendix E.

Data Sources

The Indiana and United States prevalence data included in this report were obtained from the Centers for Disease Control and Prevention's Behavioral Risk Factor Surveillance System (BRFSS). The BRFSS is a state-based health telephone survey that collects information on health risk behaviors, preventive health practices, and health care access related to chronic disease and injury. States use the BRFSS data to identify health problems, track health issues and evaluate public health initiatives. Data collected in all 50 states is aggregated to provide U.S. estimates on an annual basis (Centers for Disease Control and Prevention (CDC)).

Data Analysis

Data were analyzed using IBM PASW Statistical analysis software version 20. The data shown in the tables show the actual number of respondents who chose each response option, with missing responses from the surveys removed. Survey responses for the community survey were weighted so that the age distribution of the weighted responses matched the total age distribution of the six county area; thus, the responses more closely represent what would be expected from the total population The percentages shown for both 2010 and 2013 are the weighted values.

The Knox County community survey responses were compared to responses to the survey from the 6 county area, the state of Indiana and for the U.S., where possible. Benchmarks from the Healthy People 2020 Objectives for the Nation and the Centers for Disease Control and Prevention are also shown when they were available. In addition, the results from the 2013 community survey items from Knox County residents were compared to the 2010 community survey for Knox County residents. Z-tests for proportions were used to assess if the change from 2010 to 2013 was statistically significant. P-values less than .05 were considered statistically significant.

Protection of Human Subjects

Documents were submitted to the Indiana University Office of Research Administration for human subjects' approval. Staff at the Office of Research stated that the project was not considered research conducted on human subjects because no identifying characteristics were collected by the survey instrument and the overall use of the data collected was for administrative purposes.

RESULTS

Section I: Demographics (Community Survey)

Respondent Demographics: Sex, Age, Race, and Ethnicity

Exactly half of the respondents were male (50.0%) and half were female (50.0%). The majority of the respondents were over 55 years of age (74.2%) and 52.0% were 65 years of age or older. The mean age was 61.75 years. Almost all of the respondents were white (98.5%) and non-Hispanic/Latino (99.5%) (Table 5). The demographics from the survey are similar to most of the combined demographics of the total six county area served by Good Samaritan Hospital. Approximately half of the residents in the six county area were male (51%), white (94%), and non-Hispanic/Latino (98%). Only 16% of the residents of the six county area were over 65 years of age which means there is an over-representation of the 65 and older population in the survey results (United States Census Bureau, 2011).

Table 5: Sex, Age, Race, and Ethnicity

	n	%
Survey Respondents		
Sex		
Male	1714	50.0
Female	1714	50.0
Total	3428	100.0
Missing	58	
Age (mean age = 61.75)		
18-24	31	0.9
25-34	186	5.5
35-44	227	6.7
45-54	431	12.7
55-64	757	22.2
65+	1771	52.0
Total	3403	100.0
Missing	83	
Race		
White	3379	98.5
Black or African American	17	0.5
Asian	4	0.1
Native Hawaiian or Other Pacific Islander	3	0.1
American Indian or Alaskan Native	12	0.3
Other	16	0.5
Total	3431	100.0
Missing	55	
Ethnicity		
Hispanic/Latino	18	0.5
Non-Hispanic/Latino	3328	99.5
Total	3346	100.0
Missing	140	

Respondent Demographics: Marital Status, Education, and Employment

Fifty-six percent (56.1%) of the survey respondents were married. About fifteen percent (14.7%) were divorced and nineteen percent (18.8%) were widowed. Over ninety percent of the respondents were high school graduates (92.0%) and twenty-three percent (23.4%) completed four or more years of college. Forty-two percent (41.8%) of the respondents described themselves as employed or self-employed, four percent (4.4%) as homemakers, and forty-five percent (44.5%) as retired (Table 6).

Table 6: Marital Status, Education, and Employment

	n	%
Survey Respondents		
Marital Status		
Married	1918	56.1
Divorced	501	14.7
Widowed	641	18.8
Separated	24	0.7
Never Married	275	7.9
Member of an Unmarried couple	59	1.7
Total	3418	100.0
Missing	68	
Education Level		
Never attended school or only kindergarten	2	0.1
Grades 1-8	86	2.5
Grades 9-11	187	5.4
Grade 12 or GED	1252	36.3
College 1-3 years	1113	32.3
College 4 years or more	805	23.4
Total	3445	100.0
Missing	41	
Employment Status		
Employed for wages	1167	33.9
Self-employed	270	7.9
Homemaker	152	4.4
Retired	1532	44.5
Out of work for less than 1 year	32	0.9
Out of work for more than 1 year	29	0.8
Unable to work	232	6.7
Student	25	0.7
Total	3439	100.0
Missing	47	

Respondent Demographics: Household Income, Poverty Level, and Household Size

Approximately ten percent (9.9%) of the respondents were estimated to be living below poverty level.

About one-fifth (20.8%) reported living between 100-200% above poverty level. Sixty-nine percent

(69.2%) of the respondents indicated living at 200% or more above the poverty level (Table 7).

Table 7: Household Income, Poverty Level, and Household Size

	n	%
Survey Respondents		
Annual Household Income		
Less than $10,000	228	7.5
$10,000-$14,999	280	9.2
$15,000-$19,999	239	7.8
$20,000-$24,999	320	9.2
$25,000-$34,999	418	13.7
$35,000-$49,999	419	13.8
$50,000-$74,999	540	17.7
$75,000-$100,000	326	10.7
More than $100,000	277	9.1
Total	3047	100.0
Missing	439	
Poverty Level		
Below	303	9.9
100-200%	634	20.8
200-300%	640	21.0
300% and above	1470	48.2
Total	3047	100.0
Missing	439	

Section II: General Health Status and Health Behaviors (Community Survey)

Measures of health status, health behaviors, emotional support and life satisfaction, and health care access were reported graphically in charts and in tables on the following pages. Knox County data is compared to the respondent's from all of the counties surveyed as well as the most recently available BRFSS estimates for Indiana and the United States by question where available. The year of the data when obtained is included in the narrative or chart for each item. American Cancer Society recommendations (American Cancer Society, 2013) and Healthy People 2020 Objectives (United States Department of Health and Human Services, 2013) for improving the health of all Americans were also included, when available or appropriate, to help Good Samaritan Hospital health planners to identify community strengths and challenges.

General Health Status

- Fewer Knox County adults (14.8%) and total respondents (14.2%) perceived their health status to be "excellent" compared to Indiana (17%) or United States (U.S.) (21%) adults (Figure 1).
- A slightly higher proportion of Knox County adults (37.2%, 35.1%) and total respondents (35.4%, 36.2%) perceived their health status to be "very good" or "good" compared to Indiana (33%, 33%) and U.S. (33%, 30%) adults, respectively, (Figure 1).
- Slightly fewer Knox County adults (12.8%) and total respondents (14.2%), perceived their health status to be "poor" or "fair" compared to Indiana (17%) and U.S. (16%) adults (Figure 1).
- There was no single Healthy People 2020 Objective for general health status (United States Department of Health and Human Services, 2013).
- The comparison to the 2010 survey showed one significant difference and one result approaching significance among Knox County residents in General Perceived Health (Figure 2).

- Significantly more indicated they perceived that their health status was "excellent" in 2013, compared to 2010 (2013: 14.8%; 2010: 10.3%; p-value: 0.0221).
- Fewer perceived that their health status was "fair" in 2013 (2013: 10.0%; 2010: 14.1%; p-value: 0.0512).

Figure 1: Health Status

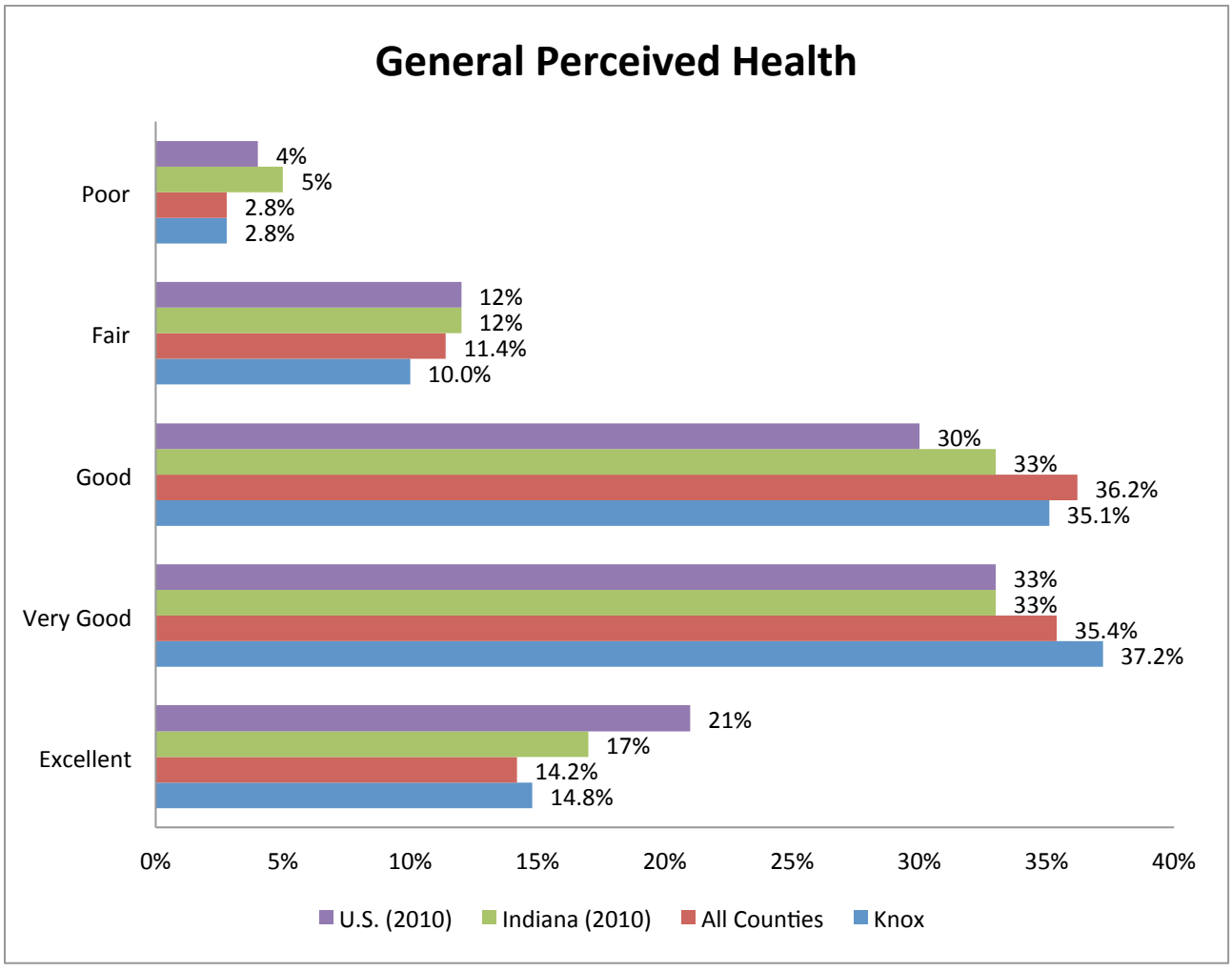
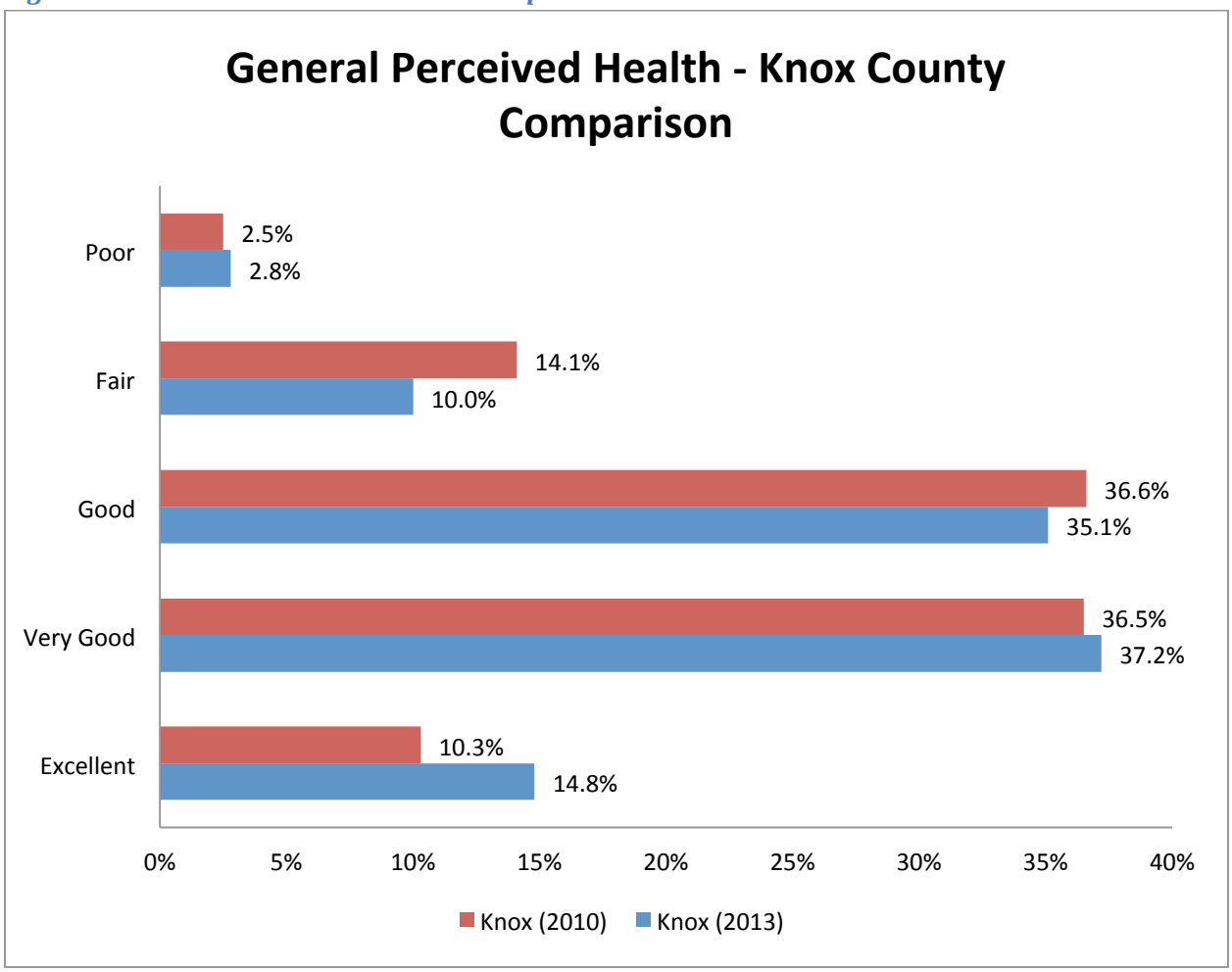


Figure 2: Health Status 2010 – 2013 Comparison



*p-values: Poor: 0.7604; Fair: 0.0512; Good: 0.616; Very Good: 0.8153; Excellent: 0.0221

Flu Vaccine

- Less than two-thirds of Knox County adults (58.7%) and total respondents (55.1%) had a seasonal flu vaccine in the past 12 months compared to 48.7% of Indiana and 39.3% of U.S. adults (Figure 3).
- Healthy People 2020: Increase the proportion of children and adults who are vaccinated against seasonal influenza to 80% for average risk adults 18-64 years, 90% for adults 65 years and older, and 80% for children 6 months to 17 years (United States Department of Health and Human Services, 2013).
- Significantly more Knox County residents reported they received the seasonal Flu Vaccine in the past 12 months (2013: 58.7%; 2010: 47.1%; p-value: 0.0002) (Figure 4).

Figure 3: Flu Vaccine

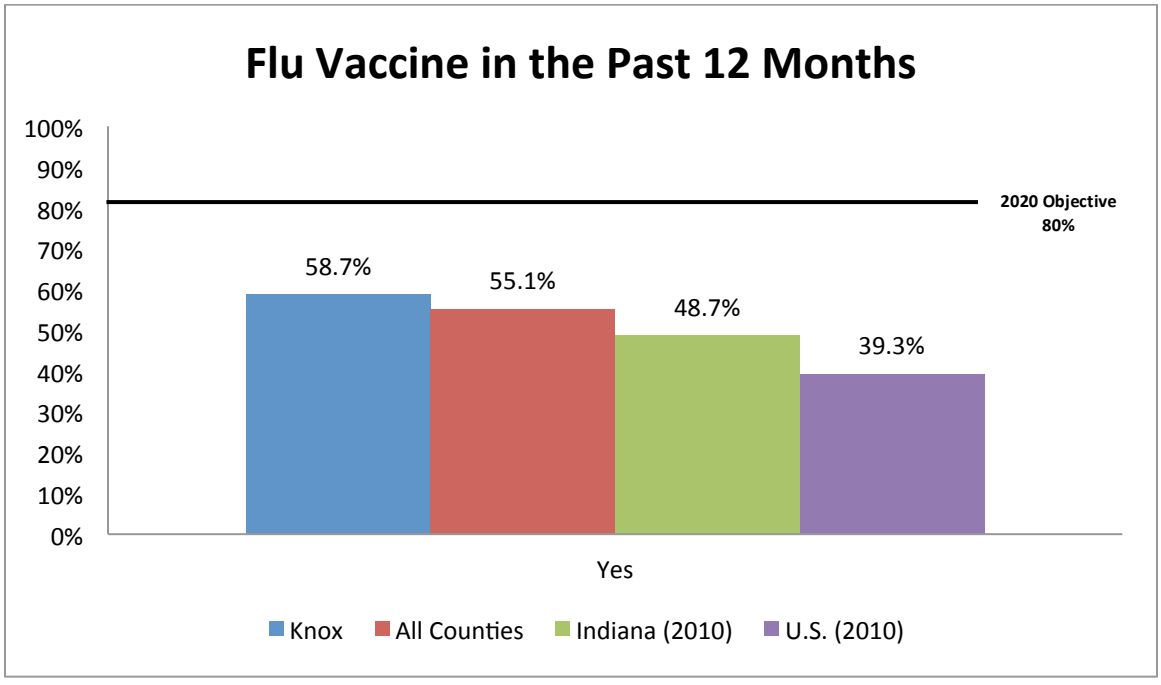
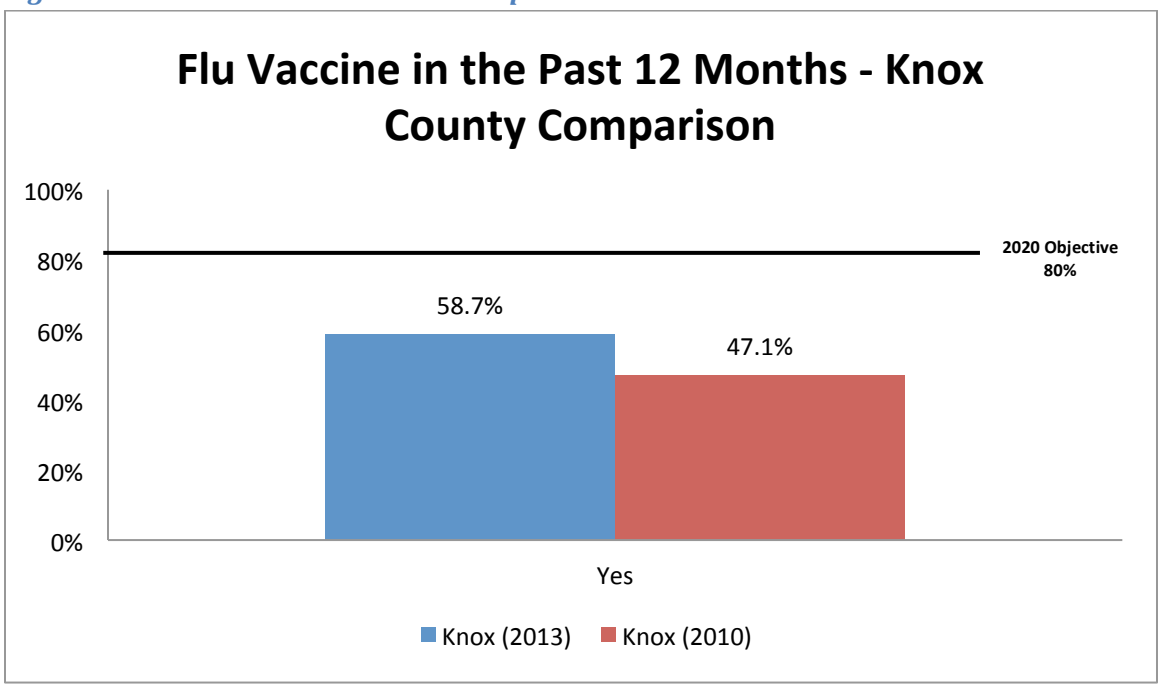


Figure 4: Flu Vaccine 2010 – 2013 Comparison



*p-value: 0.0002

Men's and Women's Health Screening

- Less than one-half of Knox County adults (43.5%) and total respondents (40.9%) age 50 or over ever had a blood stool test compared to 38.2% of Indiana and 40.7% of U.S. adults (Figure 5).
- Fewer Knox County adults (60.6%) and total respondents (60.9%) age 50 or over ever had a sigmoidoscopy or colonoscopy compared to 63.8% of Indiana and 66.5% of U.S. adults (Figure 5).
- The comparison to the 2010 survey showed no significant differences among Knox County residents over 50 years of age who have ever received a Colorectal Cancer Screening (Figure 6).

- Sixty-one percent (61.0%) of total respondents met the American Cancer Society colorectal cancer screening recommendation that both men and women should receive a colorectal cancer screening beginning at age 50 adhering to one of the following testing schedules: yearly fecal occult blood test (gFOBT), or flexible sigmoidoscopy every 5 years, or colonoscopy every 10 years (American Cancer Society, 2013) (Figure 7).
- Healthy People 2020: Increase the proportion of adults who receive a colorectal cancer screening based on the most recent guidelines to 70.5% (United States Department of Health and Human Services, 2013).
- The comparison to the 2010 survey did not show a significant difference among Knox County residents over 50 years of age who were meeting the Colorectal Cancer screening recommendations (Figure 8).

Figure 5: Colorectal Cancer Screening

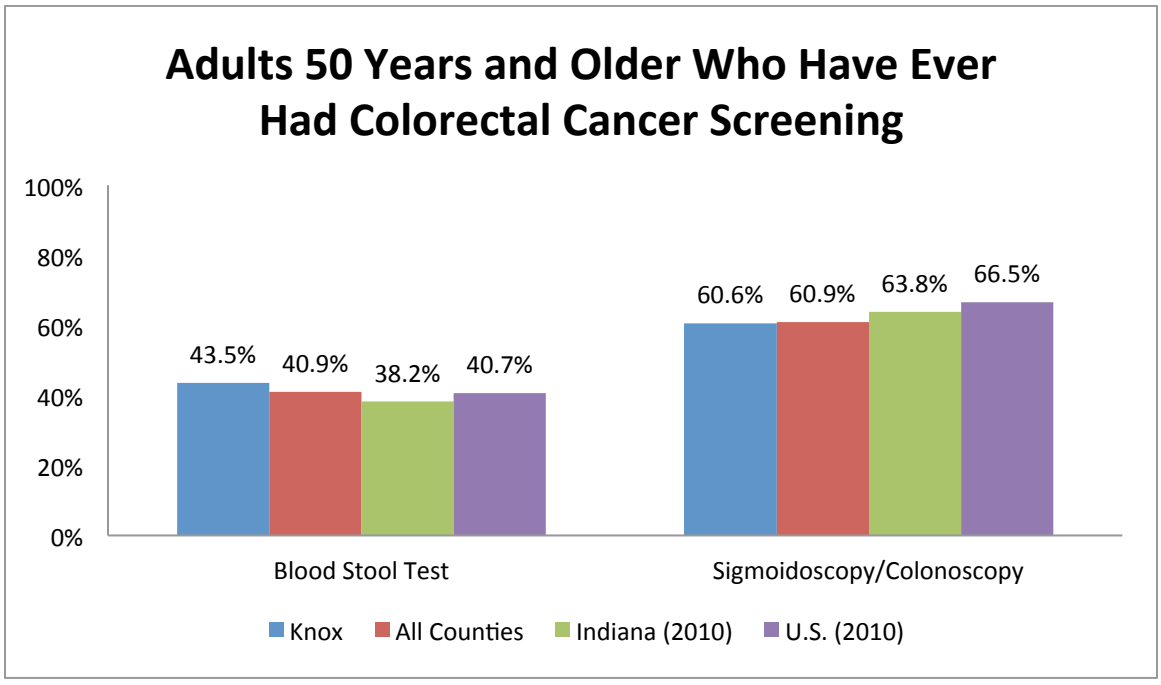
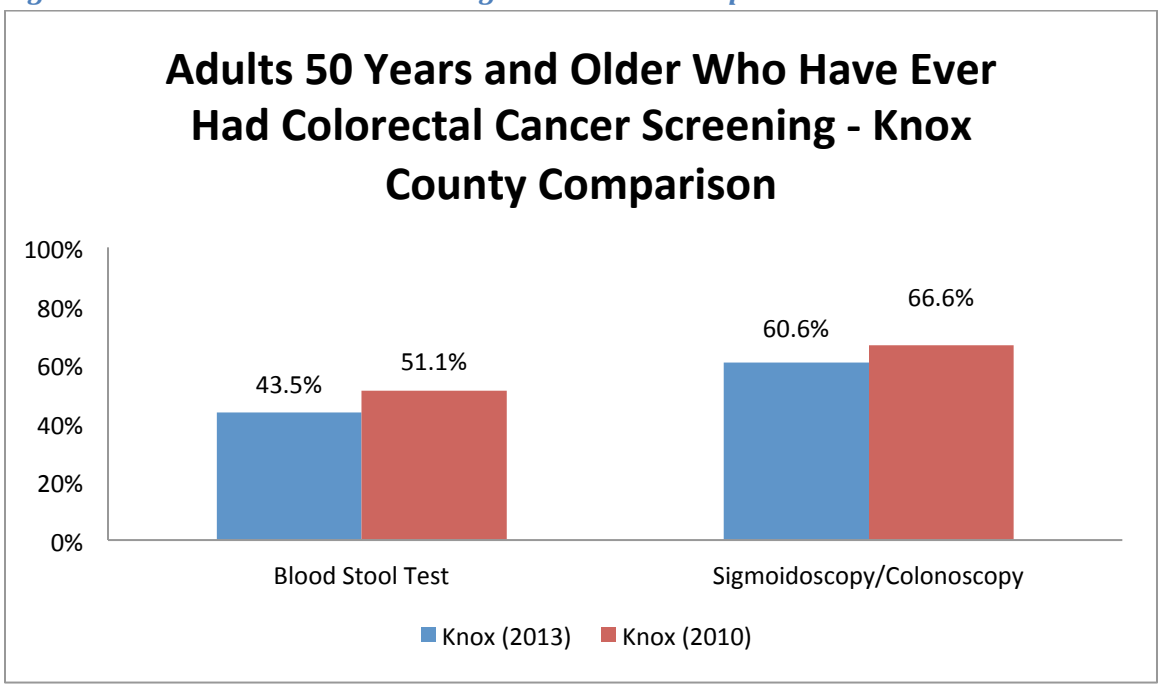


Figure 6: Colorectal Cancer Screening 2010 – 2013 Comparison



*p-value: Blood Stool Test: 0.0962; Sigmoidoscopy/Colonoscopy: 0.1677

Figure 7: Colorectal Cancer Screening Recommendations

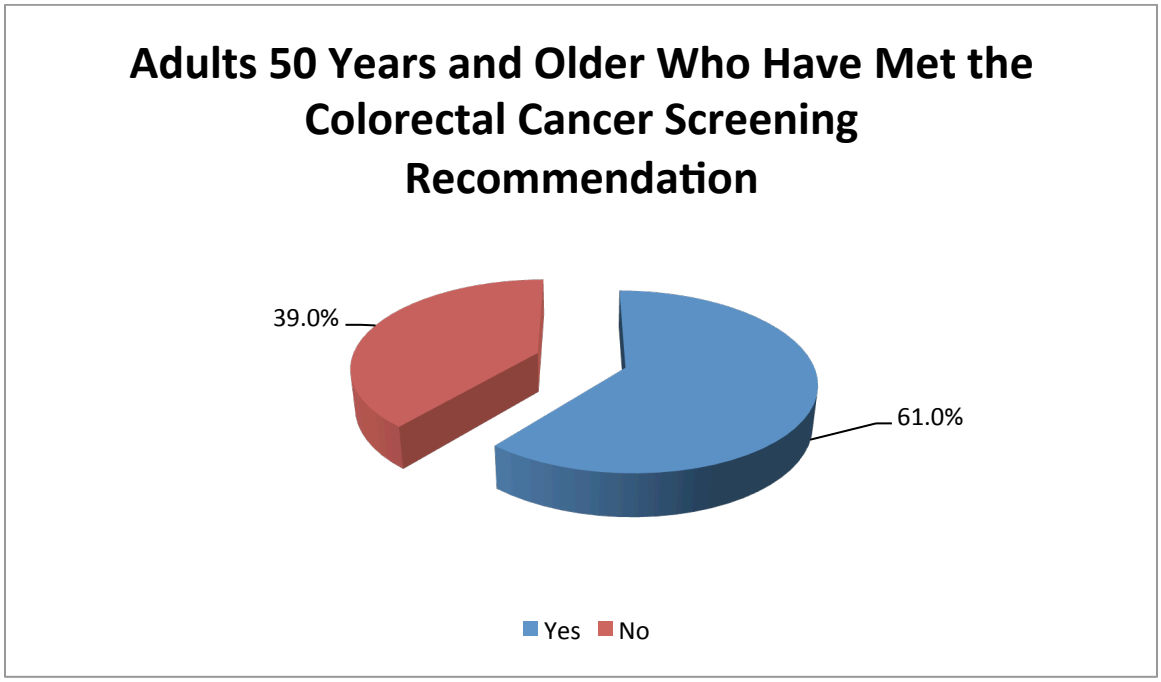
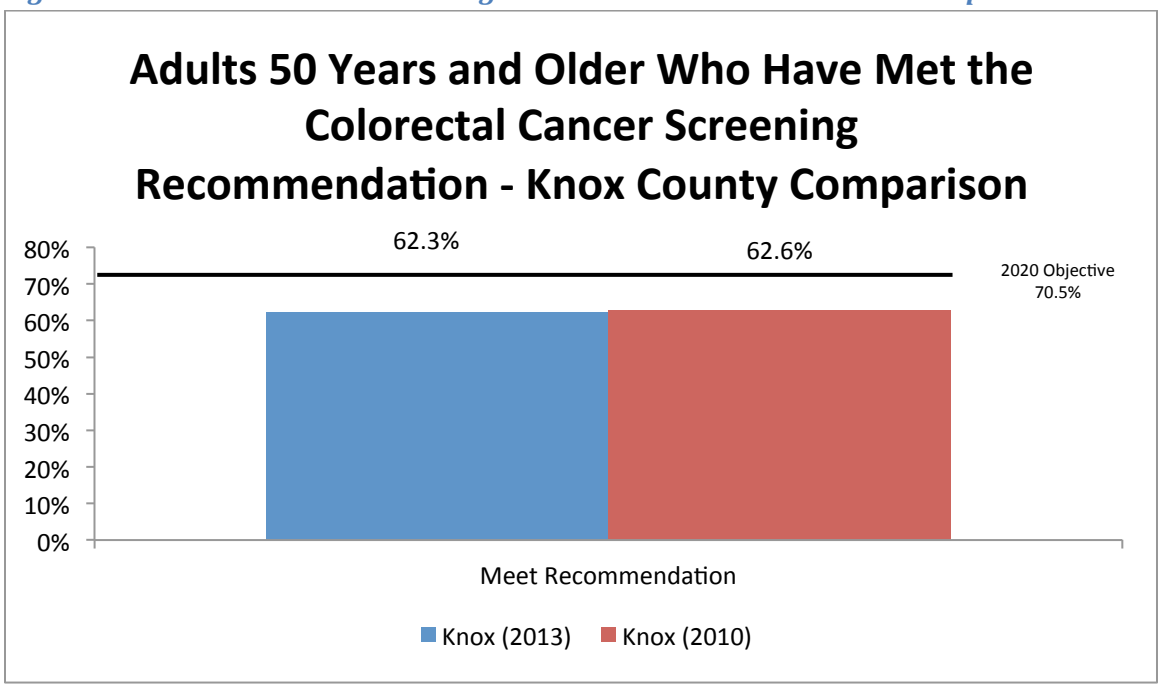


Figure 8: Colorectal Cancer Screening Recommendation 2010 – 2013 Comparison



*p-value: 0.9465

Men's Health Screening

- Approximately the same proportion of Knox County men (82.0%) and total male respondents (79.1%) age 50 years or older ever had a PSA test compared to men the same age in Indiana and the U.S. (78.2%, 77.3%) (Figure 9).
- Approximately the same percentages of Knox County men (78.4%) and total respondents (77.8%) age 50 years or older ever had a digital rectal exam compared to men the same age in Indiana (82.4%) and the U.S. (83.7%) (Figure 9).
- Healthy People 2020: Increase the proportion of men who have discussed with their health care provided whether or not to have a prostate-specific antigen (PSA) test to screen for prostate cancer (this objective is under development) (United States Department of Health and Human Services, 2013).
- There is no Healthy People 2020 Objective for digital rectal exam.

- The comparison to the 2010 survey showed no significant differences among Knox County men over 50 years of age who have ever received a Prostate Cancer Screening (Figure 10).

Figure 9: Prostate Cancer Screening

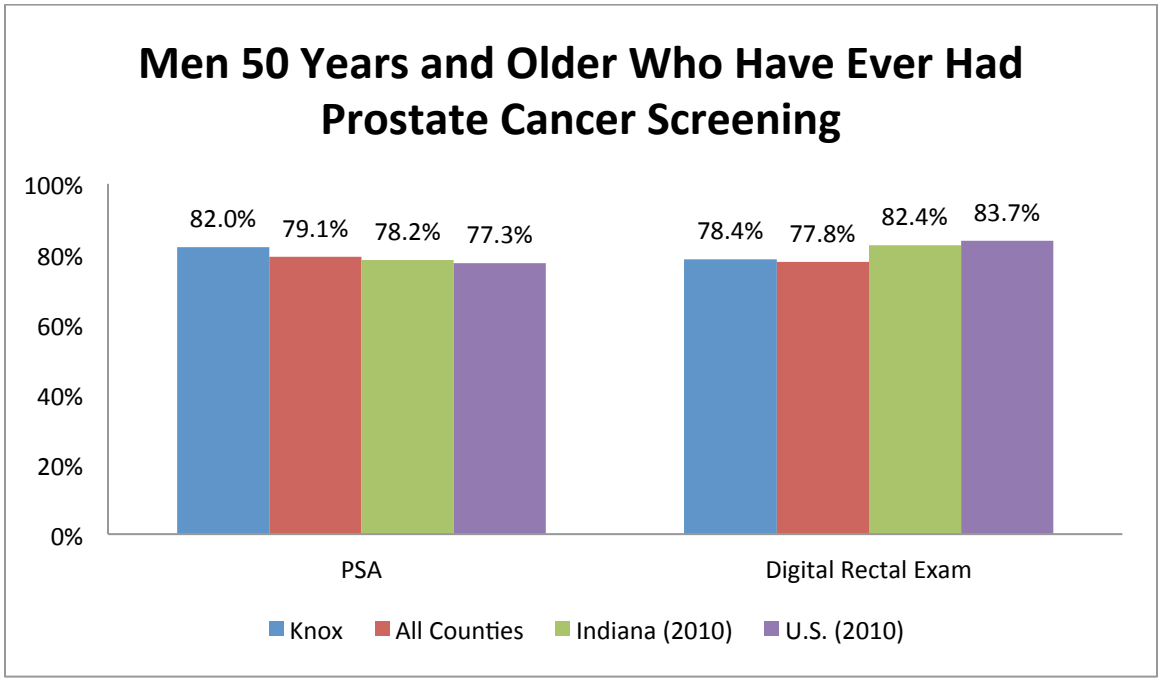
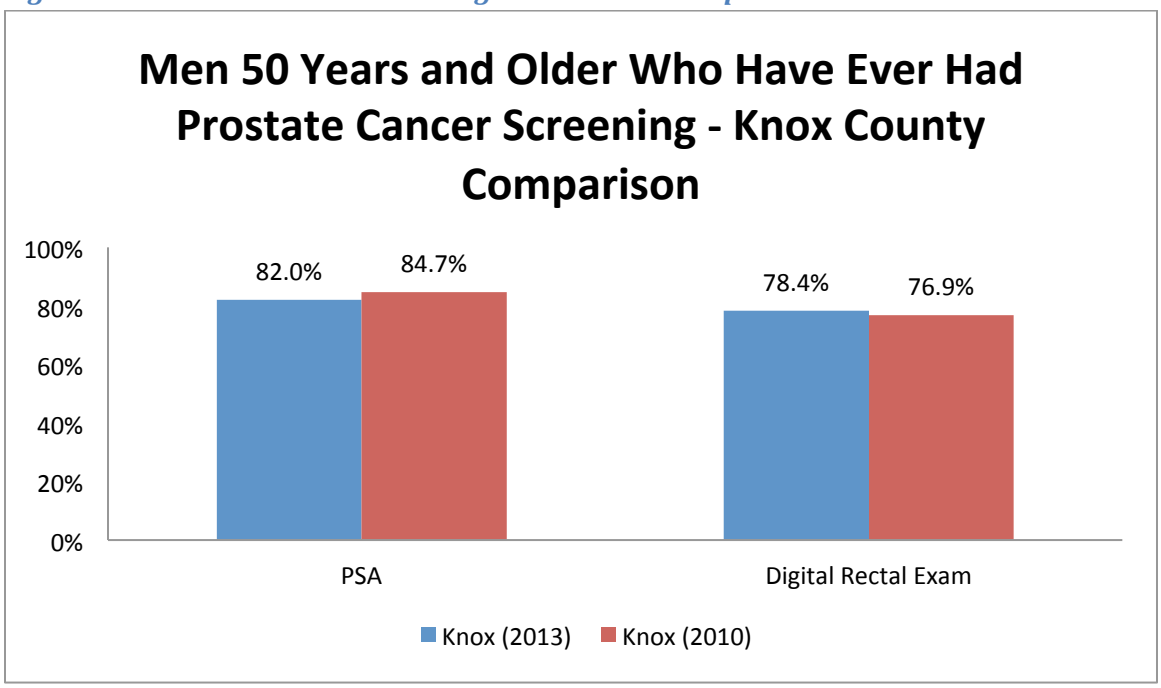


Figure 10: Prostate Cancer Screening 2010 – 2013 Comparison



*p-value: PSA: 0.5607; Digital Rectal Exam: 0.7796

Women's Health Screening – Breast Cancer

- Slightly fewer Knox County women (88.1%) and total respondents (89.2%) age 40 or older (who never had a double mastectomy) ever had a mammogram compared to 92.7% of Indiana and 92.6% of U.S. women of the same age. Among those, fewer Knox County women (71.0%) and total respondents (72.4%) had a mammogram within the past two years compared to 76.8% of Indiana and 80.3 of U.S. women (Figure 11).
- Healthy People 2020 Objective: Increase the proportion of women who receive breast cancer screening in the past 2 years, based on the most recent guidelines, to 81.1% (United States Department of Health and Human Services, 2013).
- The comparison to the 2010 survey showed no significant differences among Knox County women over 40 years of age (who had not had a double mastectomy) who have received a Breast Cancer Screening (ever or within the past 2 years) (Figure 12).

Figure 11: Breast Cancer Screening

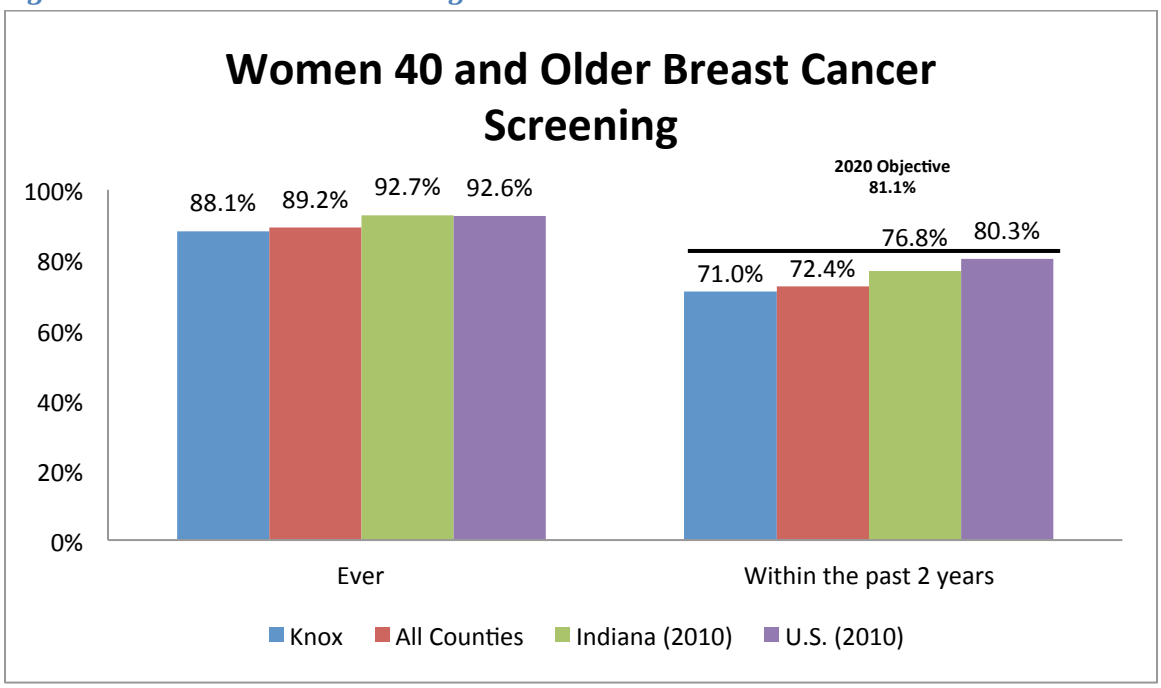
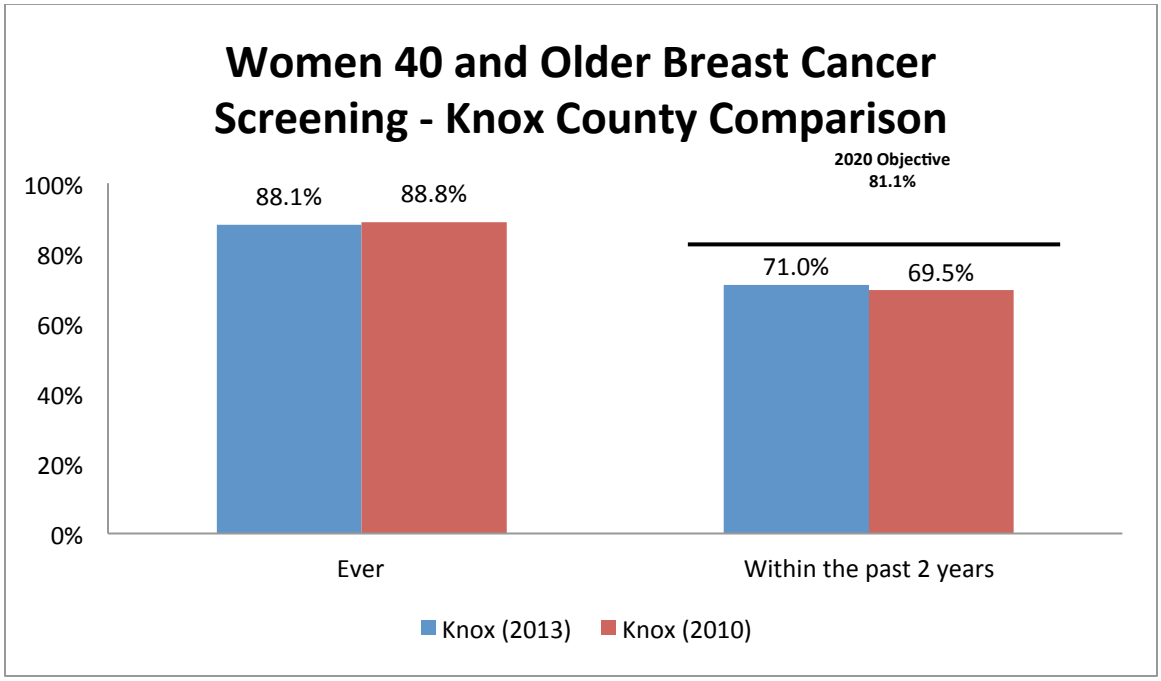


Figure 12: Breast Cancer Screening 2010 – 2013 Comparison



*p-value: Ever: 0.8205; Within the past 2 years: 0.769

Women's Health Screening – Cervical Cancer

- Most Knox County (95.8%), total respondents (95.8%), Indiana (95.4%) and U.S. women (95.3%) twenty-one (21) years of age or older (who had not had a complete hysterectomy) ever had a pap test. Among those, more Knox County females (82.8%), total respondent females (81.3%), and U.S. females (81.7%) had a pap test within the past three years compared to Indiana (78.0%) women the same age (Figure 13).
- Healthy People 2020 Objective: Increase the proportion of women who receive cervical cancer screening in the past 3 years, based on the most recent guidelines, to 93.0% (United States Department of Health and Human Services, 2013).
- The American Cancer Society recommends that women over 40 receive a yearly mammogram (American Cancer Society, 2013).
- The comparison to the 2010 survey showed no significant differences among Knox County women over 21 years of age (who had not had a complete hysterectomy) who have received a Cervical Cancer Screening (ever or within the past 3 years) (Figure 14).

Figure 13: Cervical Cancer Screening

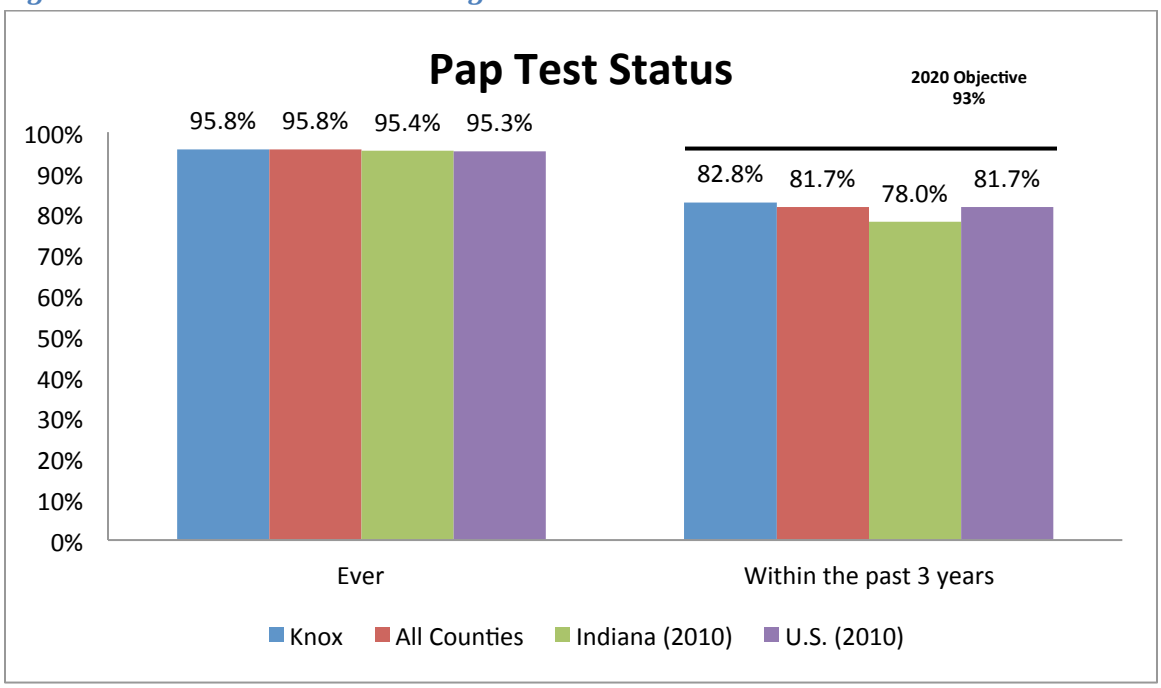
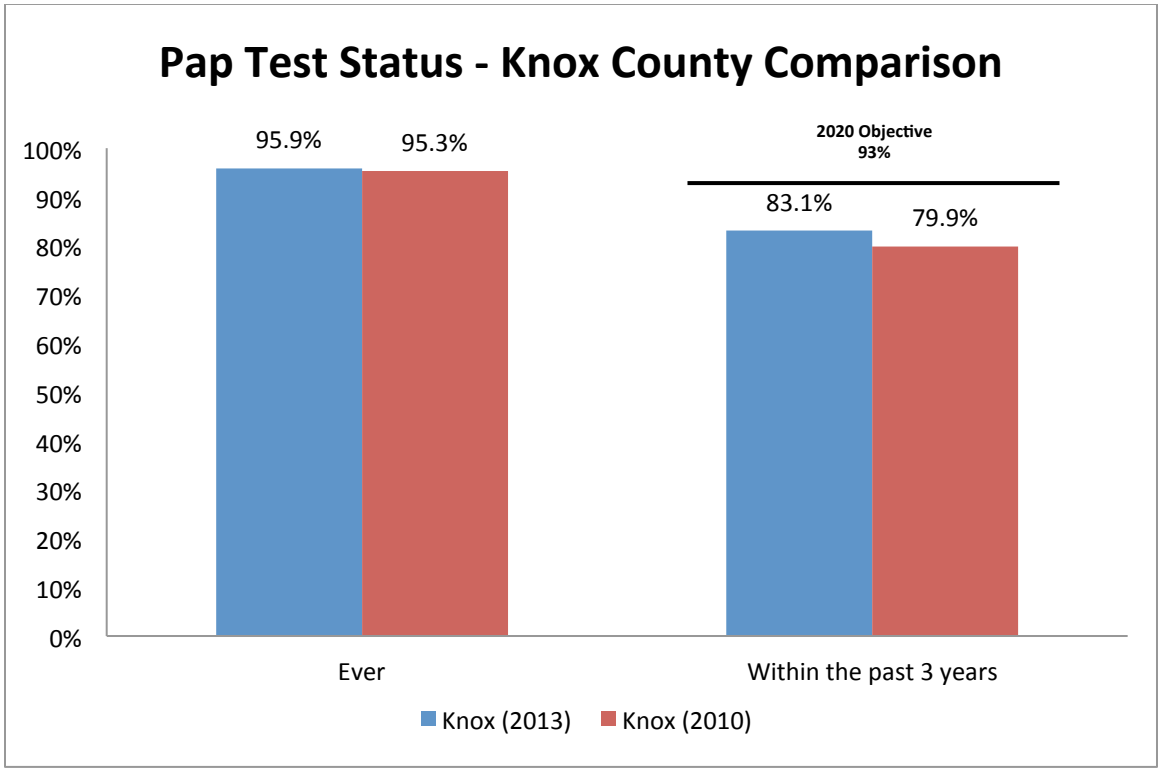


Figure 14: Cervical Cancer Screening 2010 – 2013 Comparison



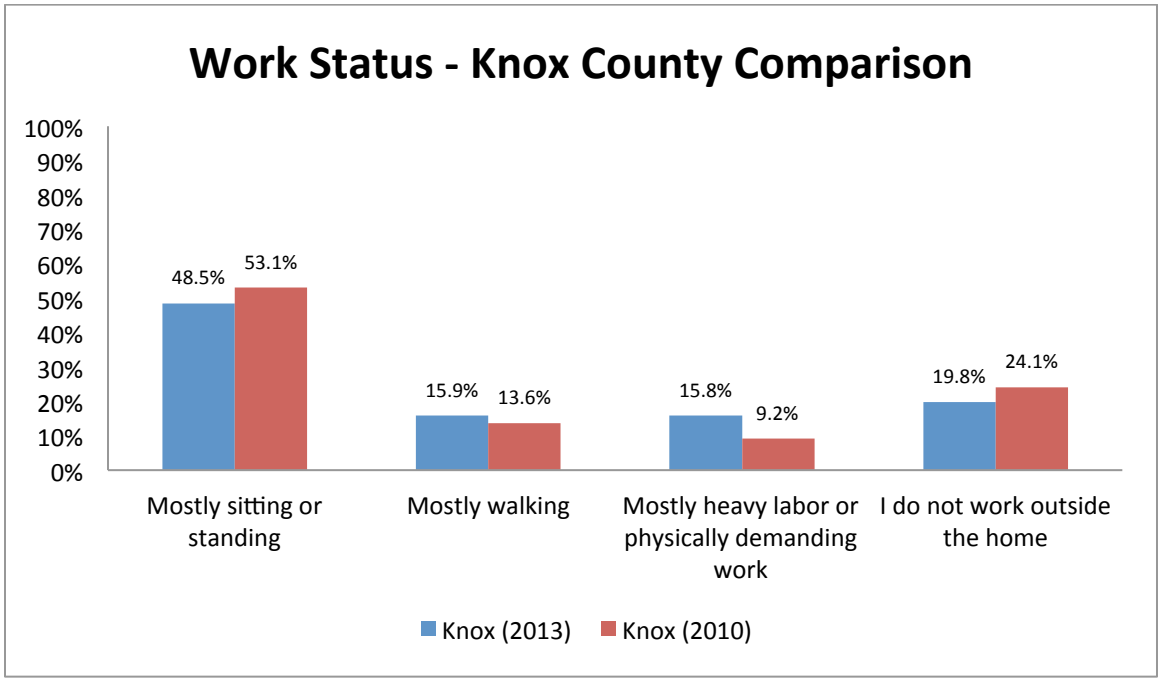
*p-value: Ever: 0.7645; Within the past 3 years: 0.3987

Physical Activity

- Half (47.6%) of the total respondents described their activity at work as "mostly sitting or standing," 14.0% as "mostly walking," and 15.5% as "mostly heavy labor or physically demanding work." Two in ten (22.9%) of the total respondents did not work outside of the home."
- Comparing the 2013 survey responses to those from the 2010 survey found that significantly more of the Knox County residents reported performing mostly heavy labor or physically demanding work in 2013 (2013: 15.8%; 2010: 9.2%; p-value: 0.0007) (Figure 15).
- Six in ten (60.9%) of the total respondents participated in physical activity or exercise during the past month other than their regular job.
- Among those, fewer Knox County adults (31.0%) and total respondents (34.3%) had a level of physical activity meeting the Centers for Disease Control and Prevention physical activity guidelines (moderate level activity adults with 30+ minutes of moderate physical activity five or more days per week, or vigorous physical activity for 20+ minutes three or more days per week) compared to 48.0% of Indiana and 49.2% of U.S. adult (Figure 16).
- Fewer Knox County adults (30.3%) and total respondents (26.6%) reported some physical activity, but at a level that was insufficient for meeting the Centers for Disease Control and Prevention physical activity guidelines compared to 39.4% of Indiana and 37.8% of U.S. adults (Figure 16).
- More Knox County adults (38.7%) and total respondents (39.1%) reported no physical activity compared to 13.0% of Indiana (12.6%) and U.S. (13.0%) adults (Figure 16).

- Healthy People 2020: Increase the proportion of adults who engage in aerobic physical activity of at least moderate intensity for at least 150/minutes/week, or 75/minutes/week of vigorous intensity, or a combination to 47.9% (United States Department of Health and Human Services, 2013).
- In 2013, significantly more Knox County residents reported no physical activity (2013: 38.7%; 2010: 31.5%; p-value: 0.0196) (Figure 17).

Figure 15: Work Status 2010 – 2013 Comparison



*p-value: Mostly sitting or standing: 0.1498; Mostly walking: 0.301; Mostly heavy labor or physically demanding work: 0.0007; I do not work outside the home: 0.1111

Figure 16: Physical Activity

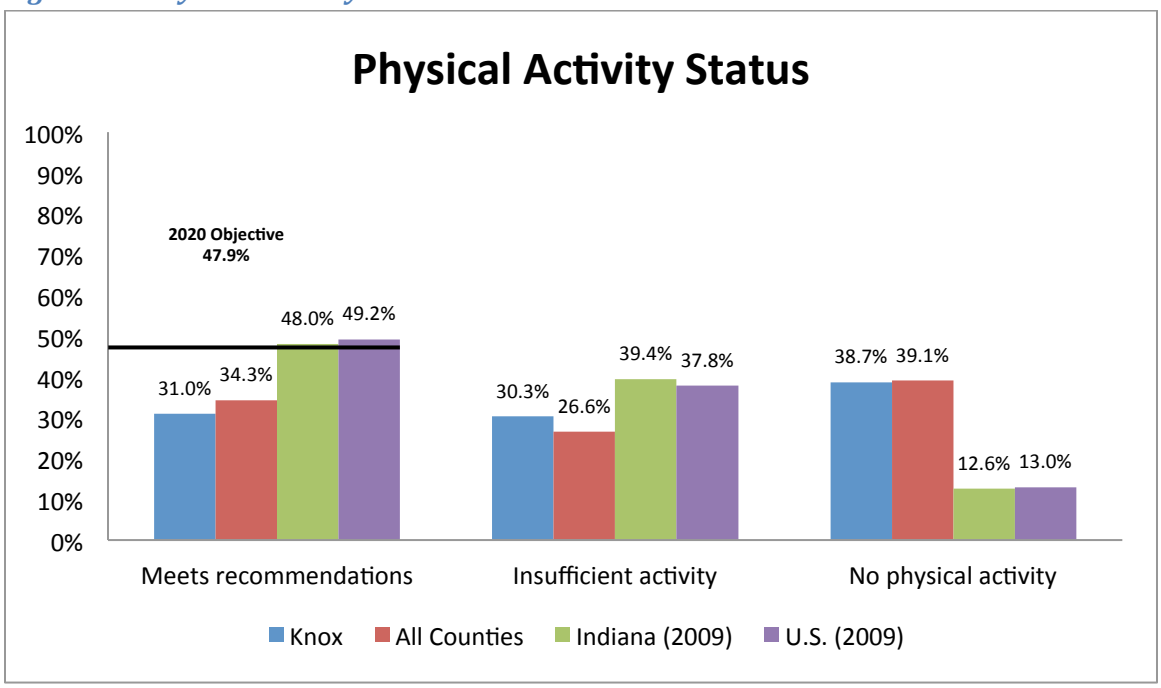
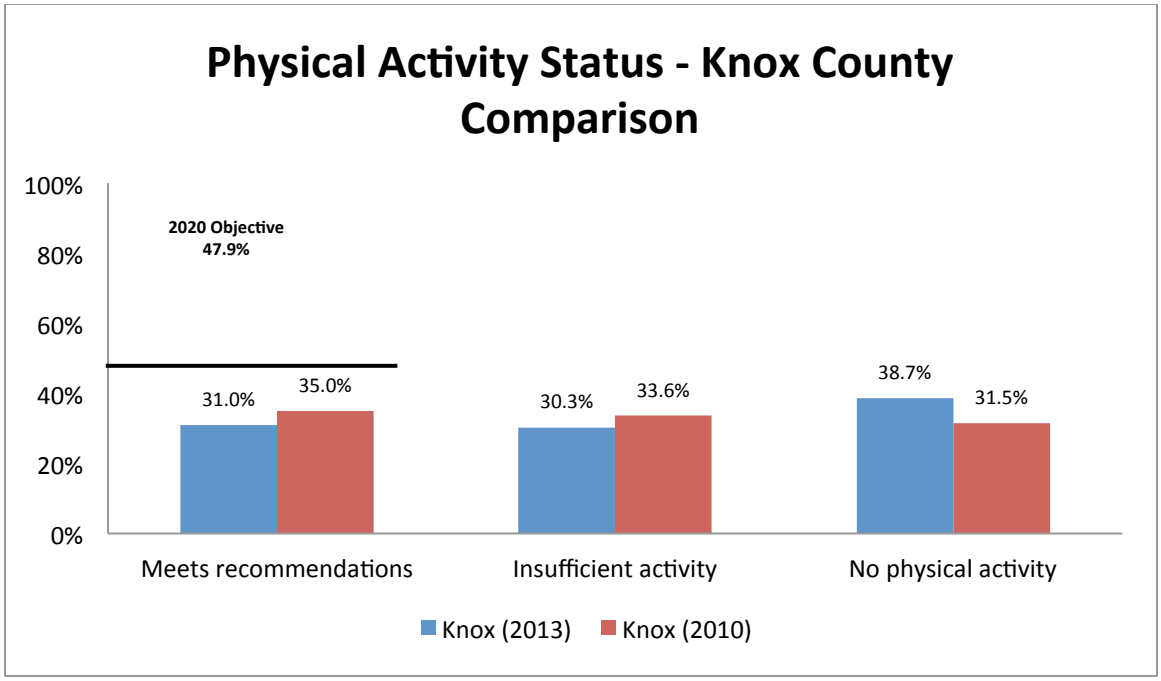


Figure 17: Physical Activity 2010 – 2013 Comparison

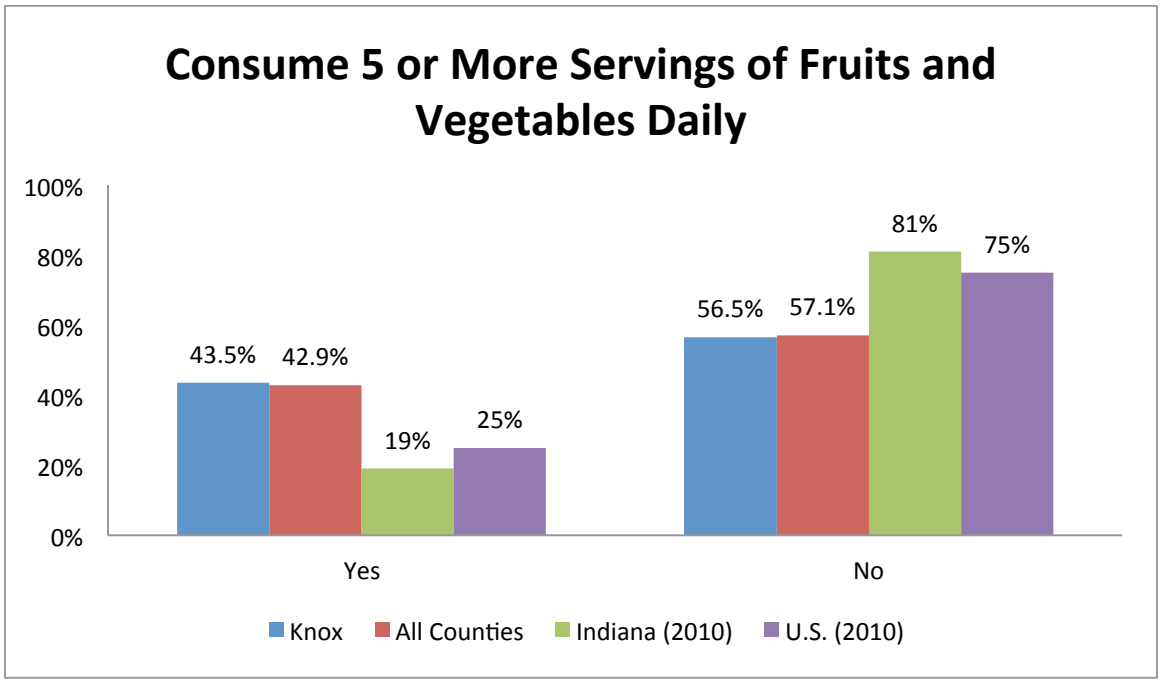


*p-value: Meets recommendations: 0.1958; Insufficient activity: 0.2816; No physical activity: 0.0196

Fruit and Vegetable Intake

- More Knox County adults (43.5%) and total respondents (42.9%) indicated that they consumed at least 5 servings of fruits and vegetables daily compared to Indiana (19%) and the U.S. (25%) (Figure 18).

Figure 18: Fruit and Vegetable Intake



Body Mass Index

- Fewer (29.4%) Knox County adults and total respondents (29.0%) were neither overweight or obese compared to Indiana (35%) and U.S. (36%) adults (Figure 19).
- More Knox County adults and total respondents were overweight (39.1%, 37.9%) and obese (31.5%, 33.0%) compared to Indiana (36%, 29%) and U.S. adults (36%, 28%) (Figure 19).
- Healthy People 2020: Increase the proportion of adults who are at a healthy weight to 33.9% (United States Department of Health and Human Services, 2013).
- Healthy People 2020: Reduce the proportion of adults who are obese to 30.6% (United States Department of Health and Human Services, 2013).
- The comparison to the 2010 survey showed no significant difference among Knox County residents in their Weight Classification by Body Mass Index (Figure 20).

Figure 19: BMI

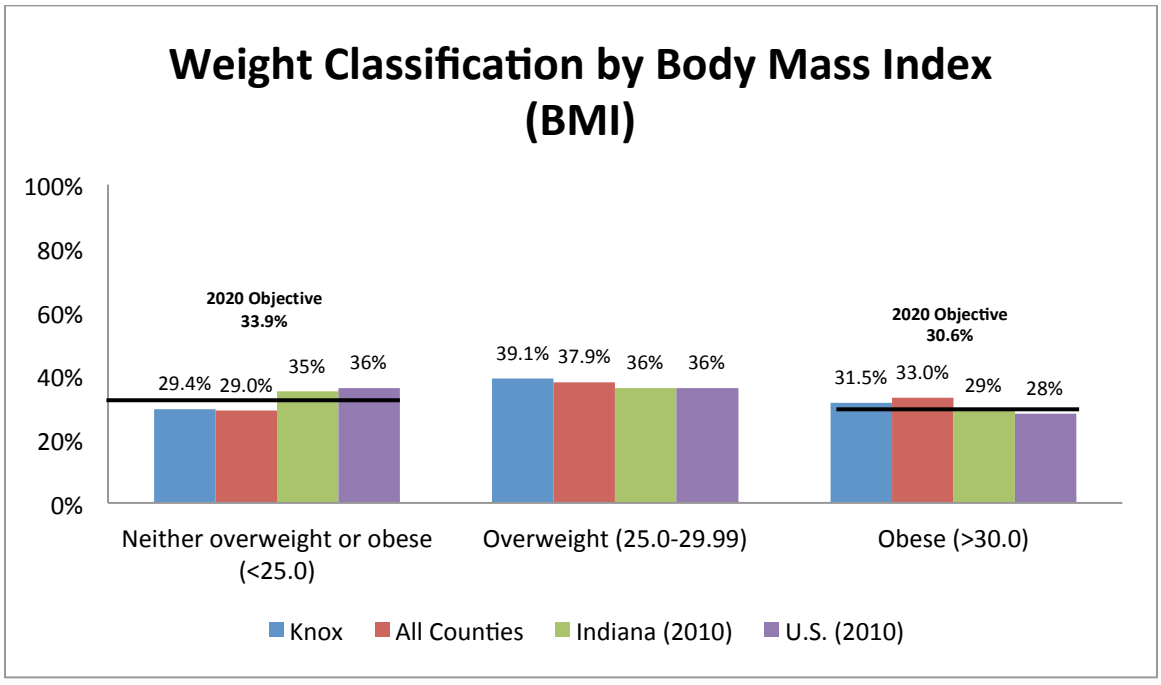
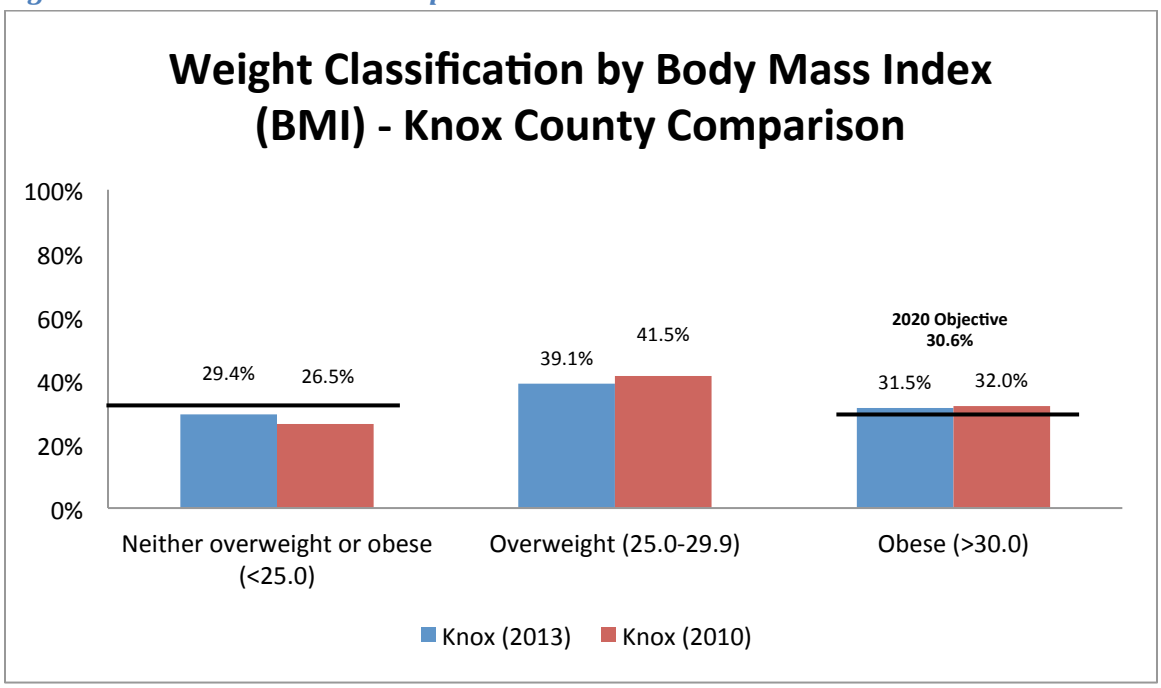


Figure 20: BMI 2010 – 2013 Comparison



*p-value: Neither overweight or obese (<25.0): 0.302; Overweight (25.0-29.9): 0.4396; Obese (>30.0): 0.8651

Tobacco Use

- More Knox County adults (61.5%) and total respondents (61.4%) never smoked compared to 52.4% in Indiana and 57.4% of U.S. adults (Figure 21).
- Fewer Knox County (14.4%) adults and total respondents (14.5%) were current smokers compared to Indiana (23.4%) and U.S. (16.9%) adults (Figure 21).
- About one-quarter of Knox County adults (24.1%), total respondents (24.1%), Indiana residents (23.9%), and U.S. residents (24.7%) had quit smoking (Figure 21).
- The comparison of the 2013 survey results to the 2010 survey showed no significant difference among Knox County residents in their Smoking Status (Figure 22).
- More Knox County adults (7.0%) and total respondents (6.7%) smoked a pipe, cigar or other tobacco products than Indiana (4.6%) and U.S. adults (4.5%) (Figure 23).

- The comparison of the 2013 survey responses to the 2010 survey did not showed a significant difference among Knox County residents in their Use of Cigar, Pipe, or Other Tobacco Products (Figure 24).
- Slightly fewer Knox County adults (5.6%) and total respondents (4.9%) used smokeless tobacco compared to Indiana (5.8%), but more than U.S. (3.2%) adults (Figure 25).
- Knox County respondents to the 2013 survey showed a significant increase in their Smokeless Tobacco Use (2013: 5.6%; 2010: 2.7%; p-value: 0.0097) (Figure 26).
- Healthy People 2020: Reduce cigarette smoking by adults to 12.0% (United States Department of Health and Human Services, 2013).
- Healthy People 2020: Reduce cigar smoking by adults to 0.2% (United States Department of Health and Human Services, 2013).
- There is no Healthy People Objective for pipe smoking.
- Healthy People 2020: Reduce the use of smokeless tobacco products by adults to 0.3% (United States Department of Health and Human Services, 2013).

Figure 21: Smoking Status

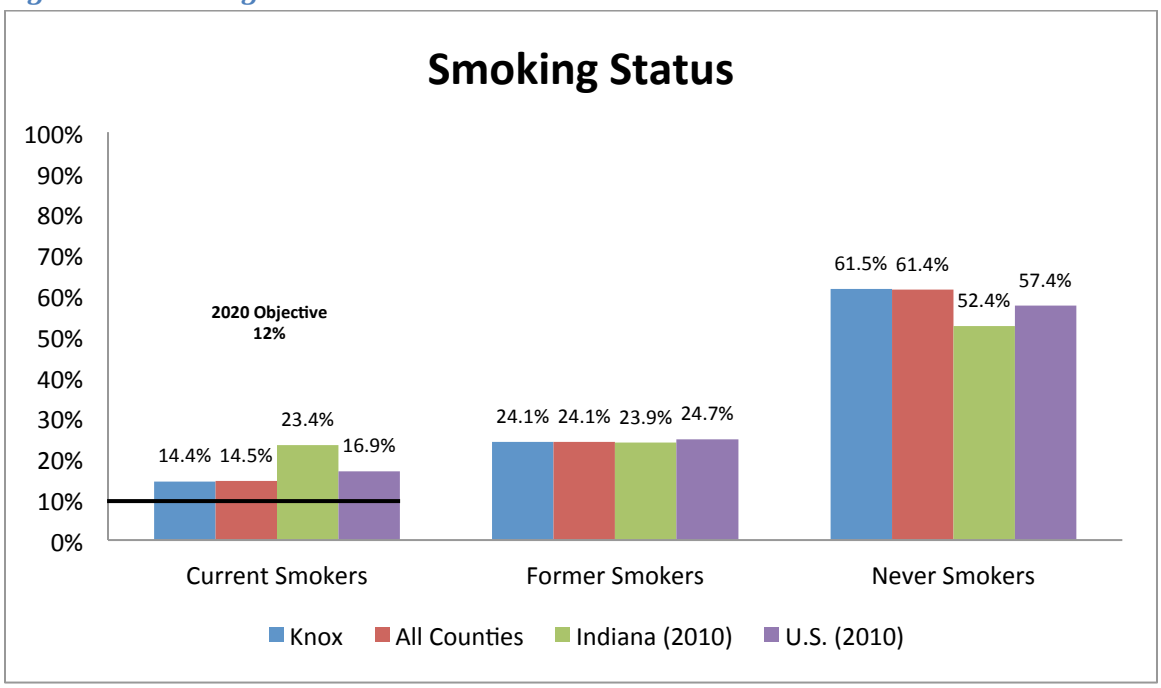
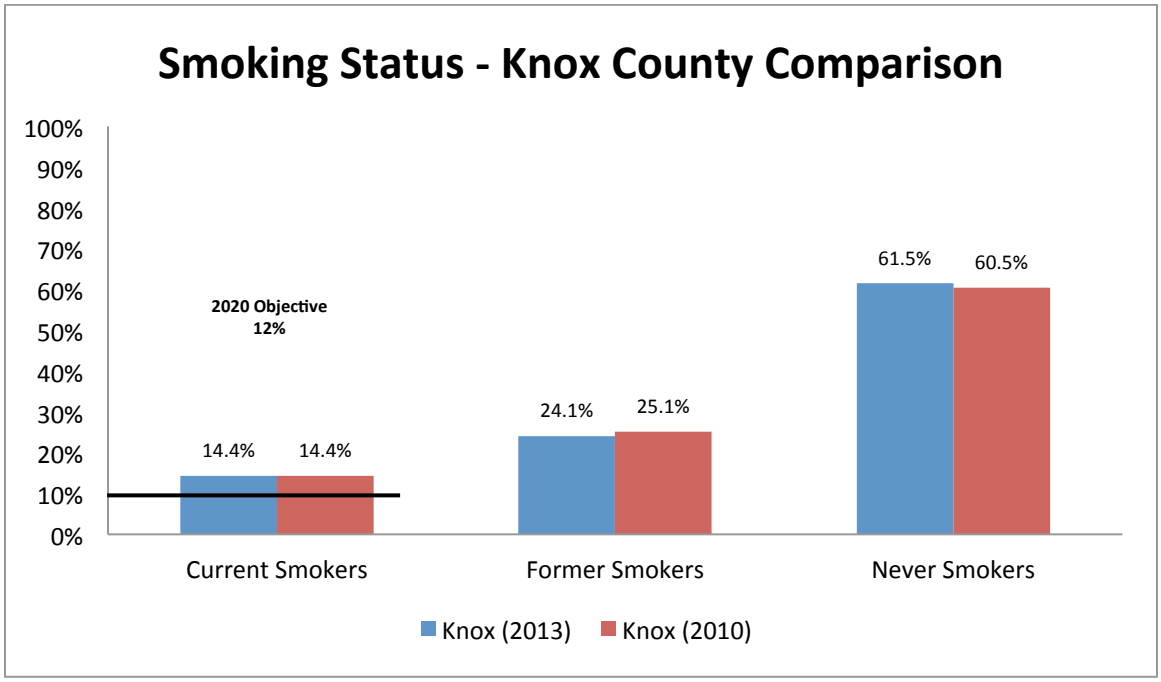


Figure 22: Smoking Status 2010 – 2013 Comparison



*p-value: Current smokers: 1.0; Former smokers: 0.7083; Never smokers: 0.7405

Figure 23: Cigar and Pipe Use

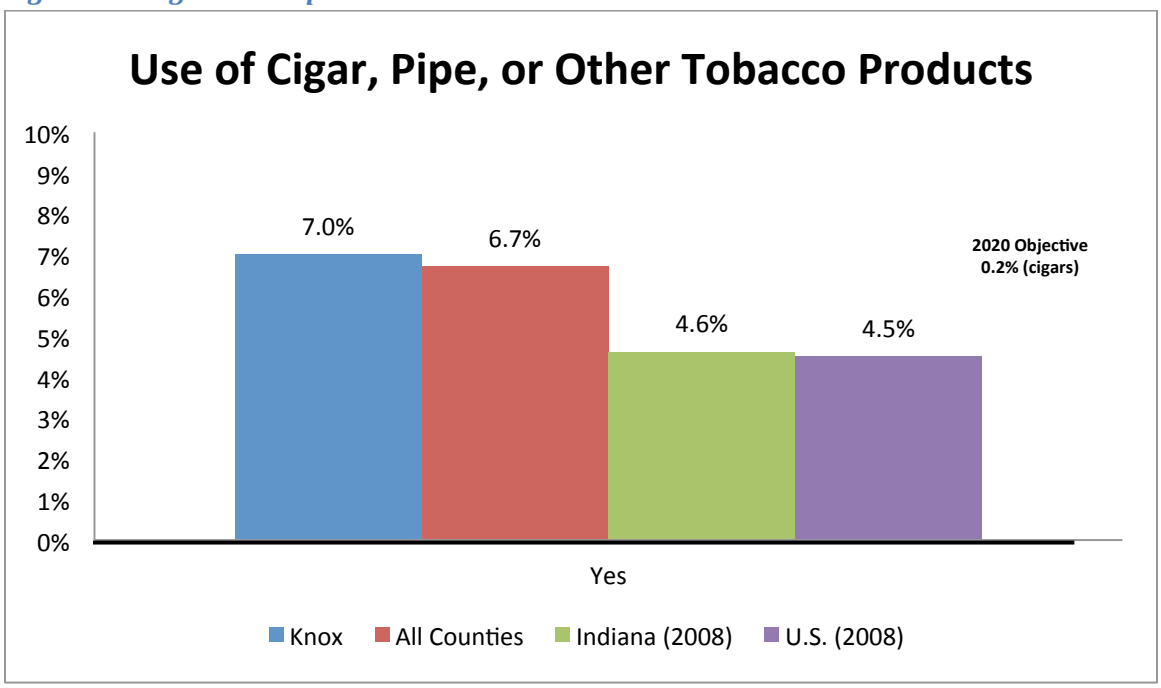
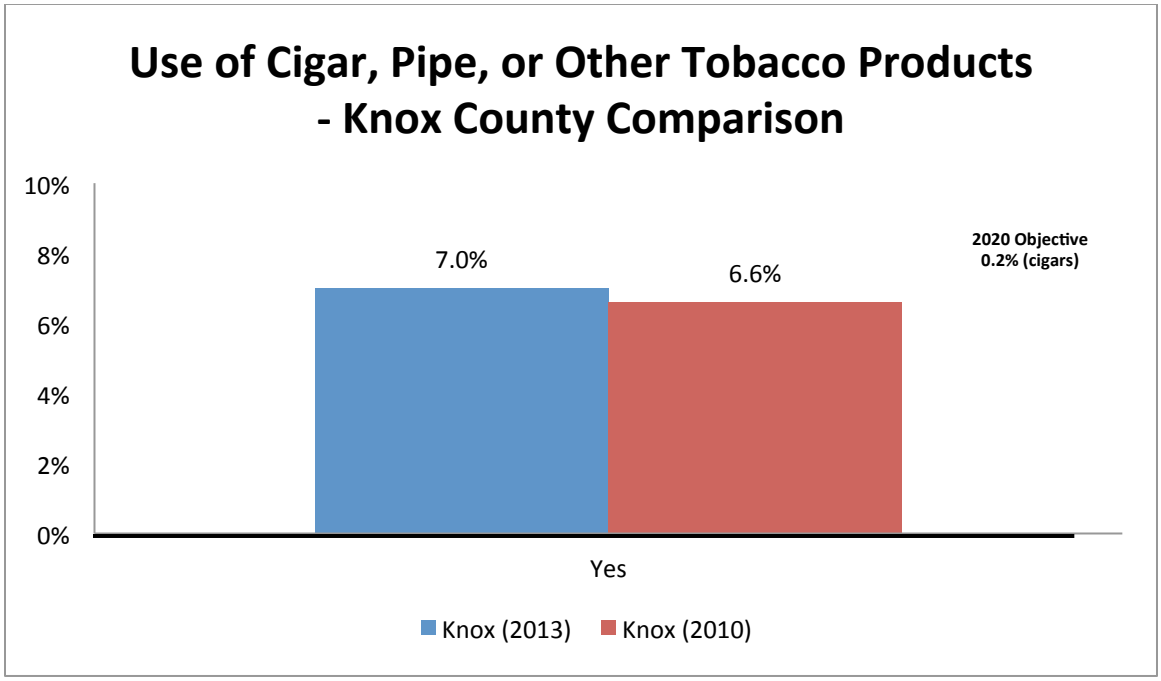


Figure 24: Cigar and Pipe Use 2010 – 2013 Comparison



*p-value: 0.7959

Figure 25: Smokeless Tobacco Use

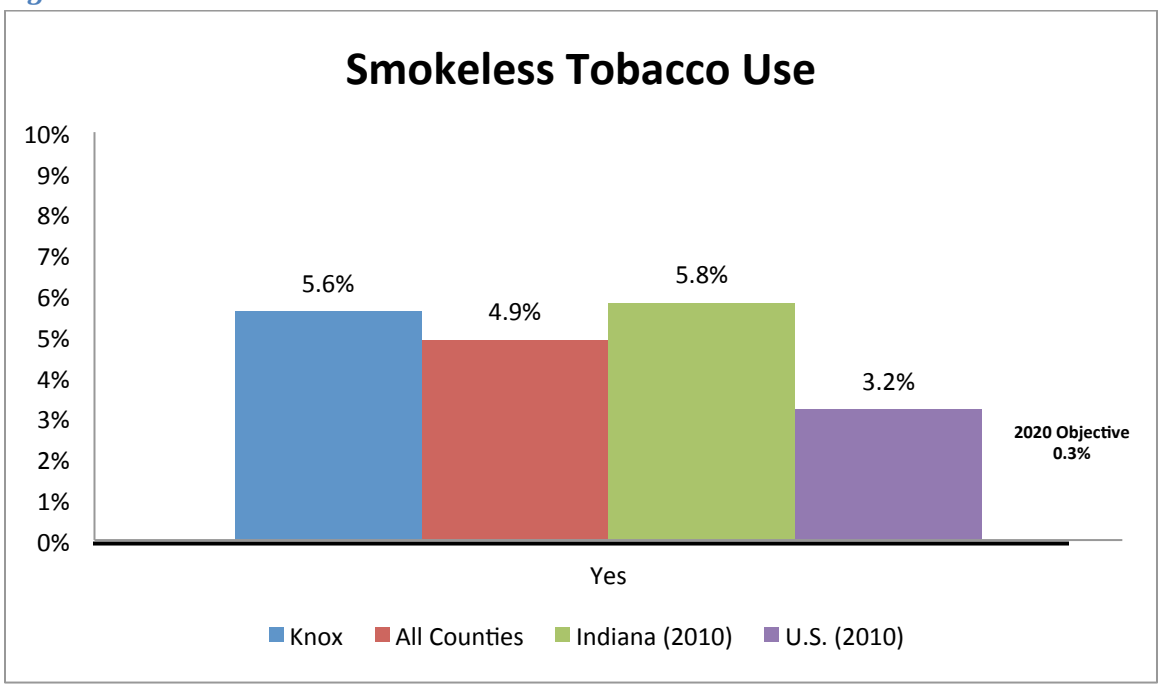
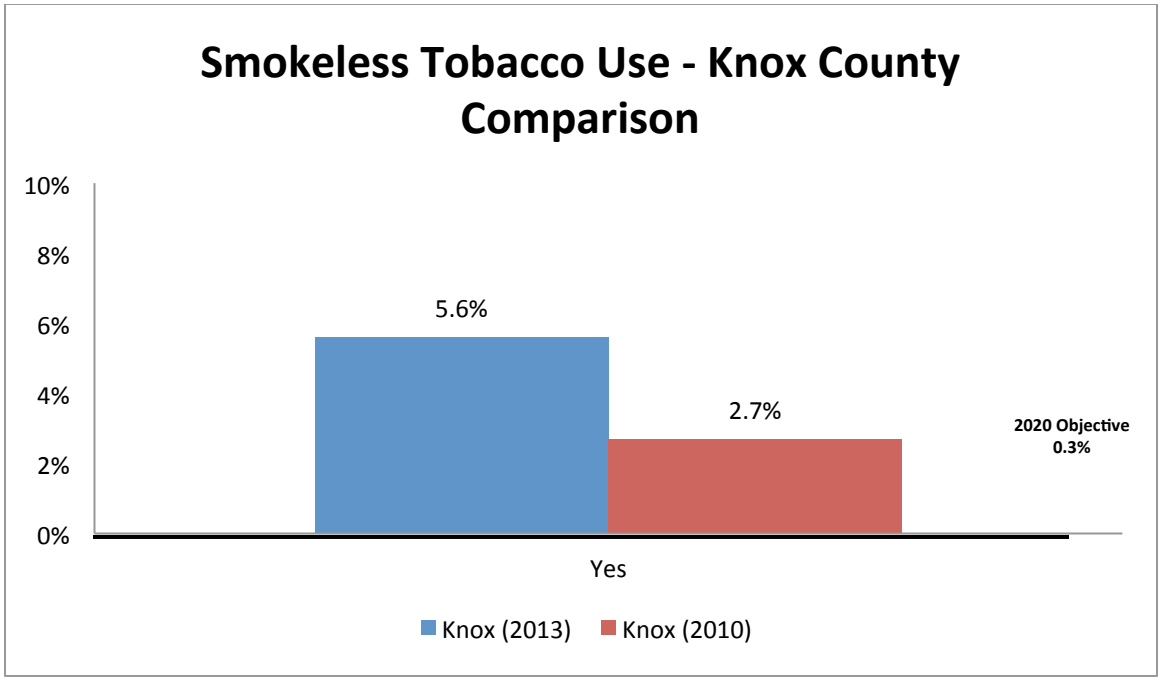


Figure 26: Smokeless Tobacco Use 2010 – 2013 Comparison

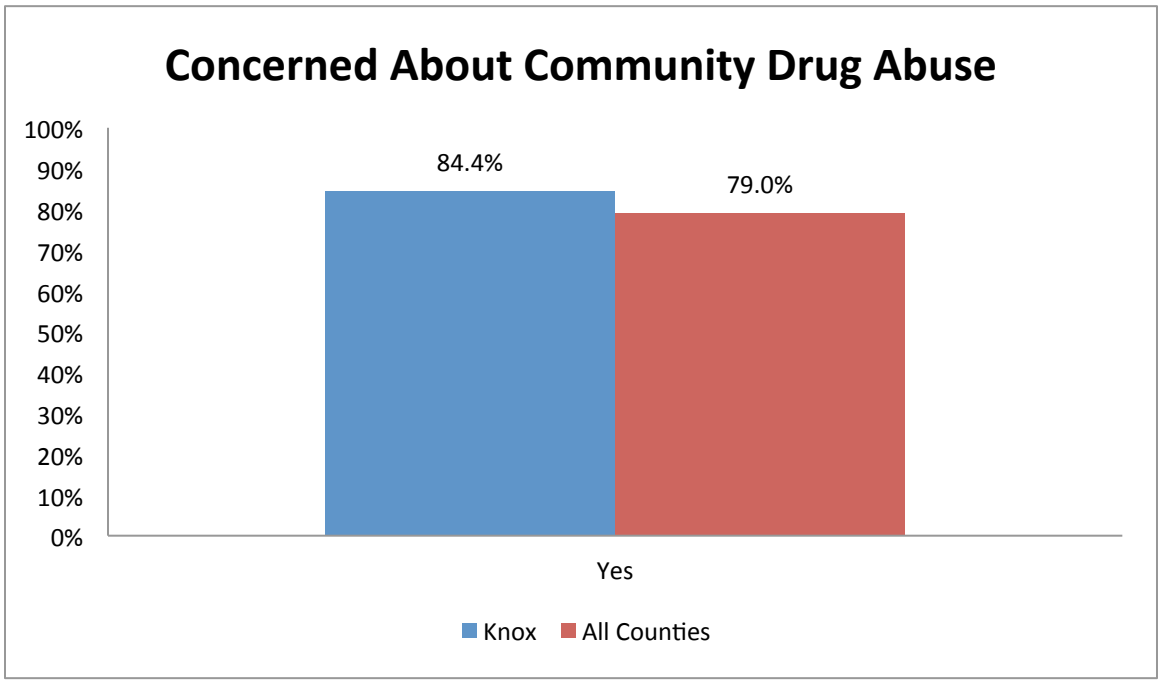


*p-value: 0.0097

Community Drug Abuse

- The majority of Knox County adults (84.4%) and total respondents (79.0%) are concerned that drug abuse is a major problem in their community (Figure 27).

Figure 27: Community Drug Use



Clinical Diagnosis of Chronic Disease

- Nearly one-third (31.5%) of the total respondents had a past clinical diagnosis of high blood pressure.
- Nearly one-quarter (23.7%) of the total respondents had a past clinical diagnosis of high cholesterol.
- One-sixth (16.5%) of the total respondents had a past clinical diagnosis of arthritis / rheumatism.
- Nearly fifteen percent (14.9%) of the total respondents had a past clinical diagnosis of depression.
- About one-seventh of the total respondents had a past clinical diagnosis of anxiety (13.5%).

- About one-eighth (11.9%) of the total respondents had a past clinical diagnosis of obesity.
- Over one in ten (11.3%) of the total respondents had a past clinical diagnosis of diabetes.
- Between 1-9% percent of the total respondents had a past clinical diagnosis of asthma (8.3%), cancer (5.4%), osteoporosis (4.8%), angina (4.1%), lung diseases (3.6%), heart attack (3.2%), stroke (2.0%), and kidney disease (1.8%), and (Table 8).

Table 8: Clinical Diagnosis of Chronic Disease (All Respondents)

Health Concern	%
Angina or coronary heart disease	4.1
Asthma	8.3
Arthritis/rheumatism	16.5
Anxiety	13.5
Depression	14.9
Cancer	5.4
Diabetes	11.3
High blood pressure	31.5
High cholesterol	23.7
Heart attack	3.2
Kidney disease	1.8
Lung disease such as emphysema or COPD	3.6
Obesity	11.9
Osteoporosis	4.8
Stroke	2
Other	7.1

- The comparison of the 2013 survey responses to the 2010 survey showed significant reductions among Knox County residents in the prevalence of three Chronic Diseases (Table 9).
    - Arthritis/rheumatism (2013: 14.0%; 2010: 20.5%; p-value: 0.0072)
    - High blood pressure (2013: 28.5%; 2010: 34.7% p-value: 0.0327)
    - Osteoporosis (2013: 3.4%; 2010: 6.2%; p-value: 0.0477)

Table 9: Clinical Diagnosis of Chronic Disease 2010 – 2013 Knox County Comparison

	2013	2010	p-value
Health Concern	%	%	
Angina or coronary heart disease	4.0	4.7	0.5858
Asthma	6.5	9.3	0.1066
Arthritis/rheumatism	14.0	20.5	0.0072
Anxiety	11.9	11.4	0.7994
Depression	15.0	15.3	0.8923
Cancer	4.8	7.5	0.0839
Diabetes	9.6	8.8	0.6499
High blood pressure	28.5	34.7	0.0327
High cholesterol	22.3	25.0	0.3079
Heart attack	3.3	3.9	0.6094
Kidney disease	1.3	0.6	0.1891
Lung disease such as emphysema or COPD	3.0	3.5	0.6541
Obesity	11.7	11.9	0.9201
Osteoporosis	3.4	6.2	0.0477
Stroke	1.6	2.2	0.4941
Other	5.8	N/A	

- Other chronic diseases (less than 3% of respondents) listed included:
  - Atrial-Fibulation
  - Acid Reflux
  - Addiction
  - Addison's Disease
  - Attention Deficit Disorder
  - Allergies
  - Alzheimer's
  - Aneurism
  - Arthritis
  - Bone Pain
  - Cardiomyopathy
  - Celiac Disease
  - Cerebral Palsy
  - Chronic Back Pain/Back Pain
  - Chronic Bronchitis
  - Cirrhosis
  - Colitis
  - Congestive Heart Failure
  - Crohn's Disease
  - Kidney Stones
  - Deaf
  - Degenerative Disc Disease
  - Dementia
  - Diverticulitis
  - Eczema

- Endocarditis
- Enlarged Prostate
- Epilepsy
- Fibromyalgia
- Glaucoma
- Grave's Disease
- Hepatitis C
- HPV
- Hypo-Thyroidism
- Hypotension
- Irritable Bowel Syndrome
- Intestinal Cystitis
- Kidney Stones
- Lyme Disease
- Lupus
- Mental Illness
- Migraines
- Multiple Sclerosis
- Muscular Dystrophy
- Neuropathy
- Osteoporosis/Brittle Bones
- Paraplegic
- Parkinson's
- Peripheral Neuropathy
- Polymyalgia
- Polyp's
- Poor Circulation
- Psoriasis
- Scoliosis
- Seizures
- Ulcers
- Ulcerative Colitis
- Wegener's Granulomatosis
- West Nile Virus

Sunburn

- Six in ten Knox County adults (57.9%), total respondents (58.3%), and Indiana residents (61.1%) had "zero" sunburns in the past 12 months compared to seventy-nine percent (79.0%) of U.S. adults (Figure 28).
- More Knox County residents (37.7%) and total respondents (37.1%), had "one" or "two" sunburns during the past 12 months compared to adults living in Indiana (24.2%) the U.S. (17.1%) (Figure 28).
- Healthy People 2020: Reduce the proportion of adults aged 18 years and older who report sunburn (this objective is under development).
- Comparing the responses to the 2013 survey to the 2010 survey showed more Knox County residents reported that they had two red or painful sunburns in the past 12 months (2013: 14.6%; 2010: 10.1%; p-value: 0.0201) (Figure 29).
- About the same proportion of Knox County residents (30.9%) and total respondents (29.9%) reported using sunscreen "every time" or "most times" they were in the sun for a prolonged period of time over the past 12 months (Figure 30).

Figure 28: Sunburn

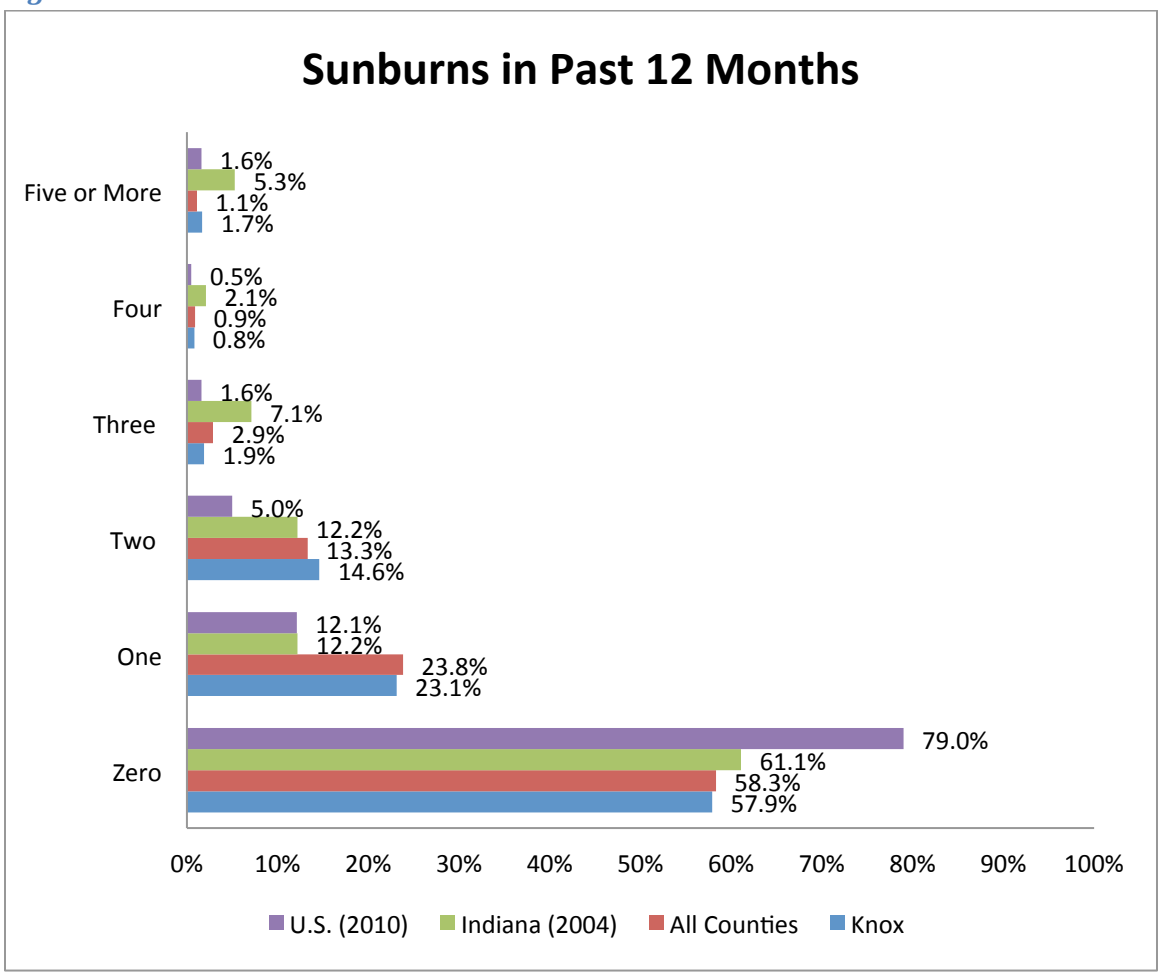
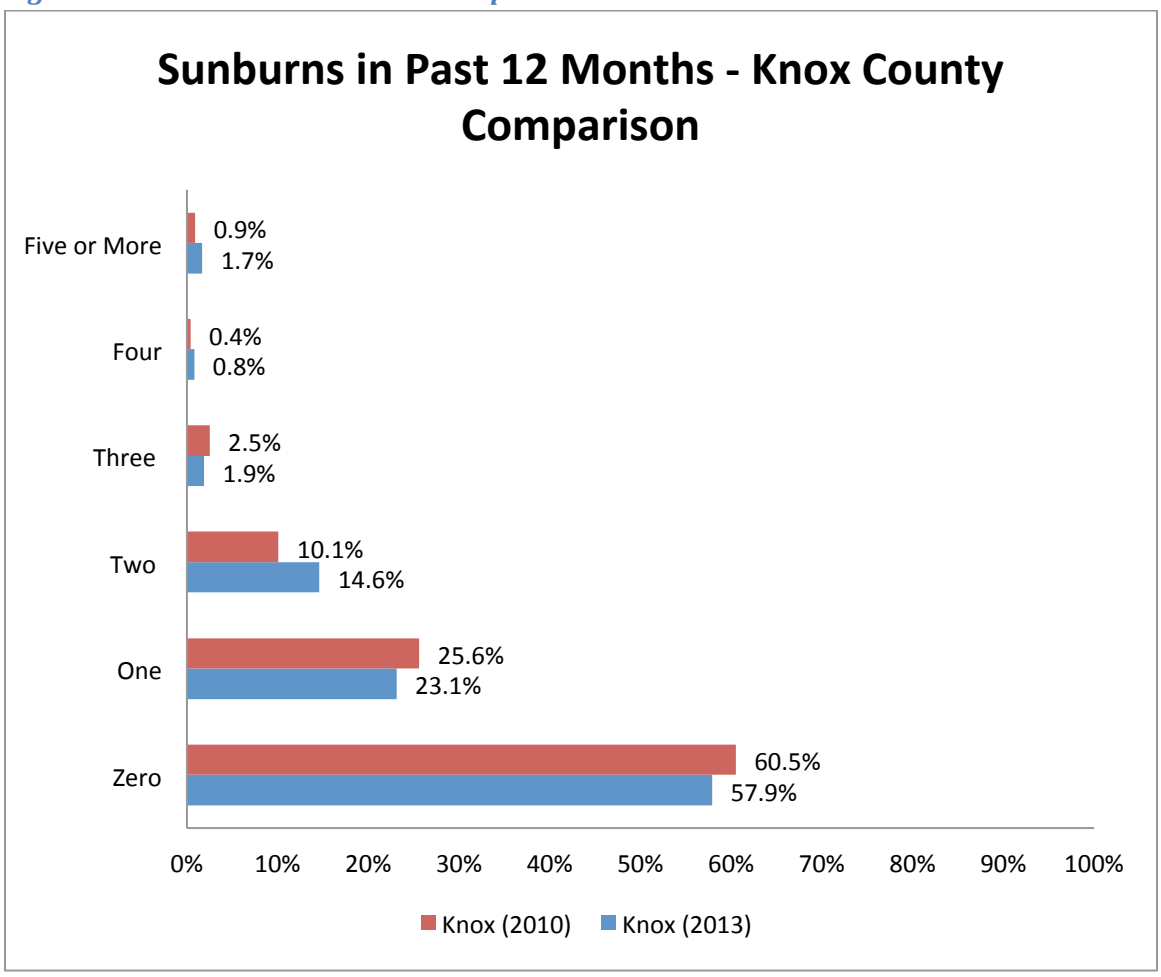
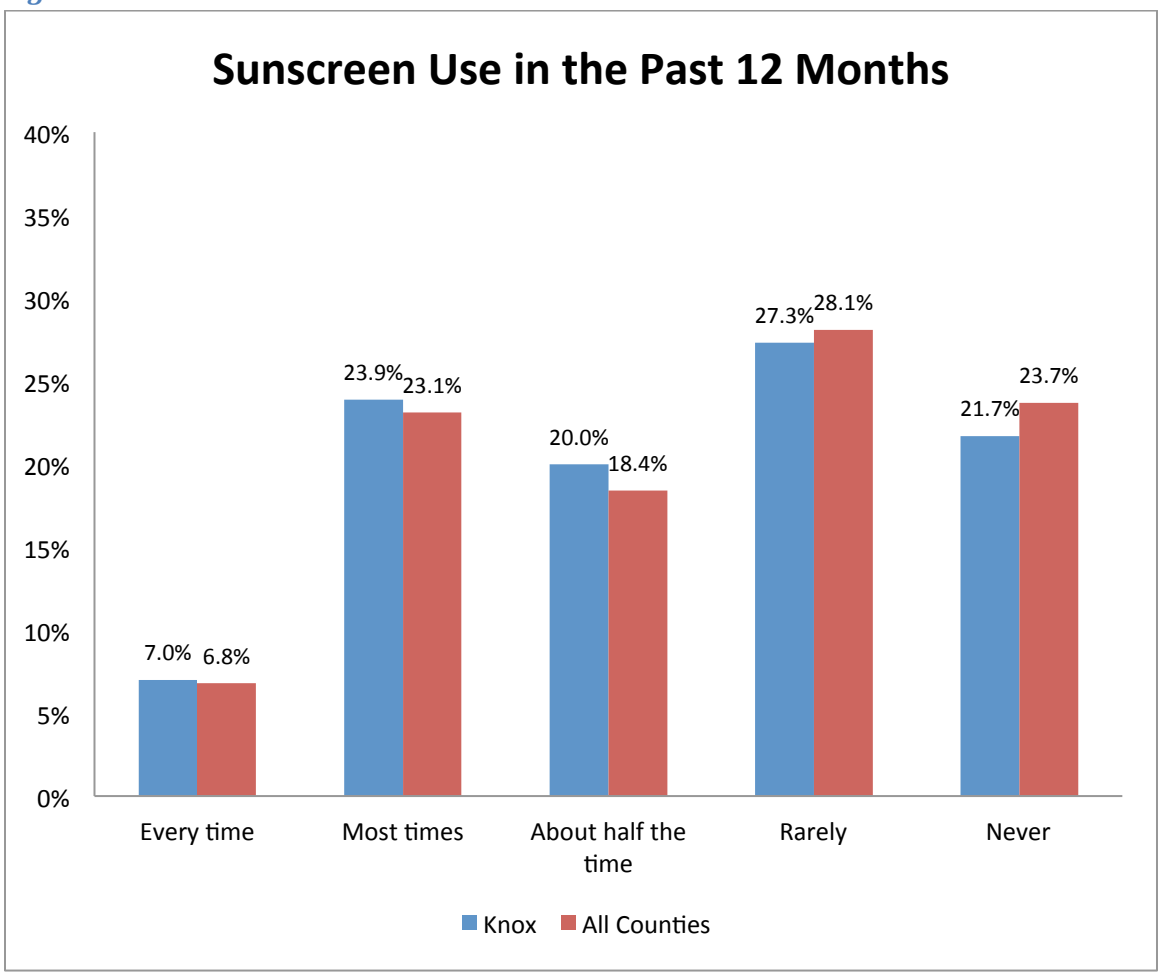


Figure 29: Sunburn 2010 – 2013 Comparison



*p-value: Zero: 0.3991; One: 0.35; Two: 0.0201; Three: 0.5227; Four: 0.3528; Five or More: 0.2093

Figure 30: Sunscreen



Adequate Rest and Sleep

- Less than half of Knox County adults (44.6%) and total respondents (46.9%) "nearly always" or "always" had adequate rest and sleep compared to 65.9% of Indiana and 67.6% U.S. adults (Figure 31).
- Slightly more Knox County adults (17.3%) and total respondents (17.1%) reported that they "seldom" or "never" get adequate rest compared to Indiana residents (13.8%), and U.S. residents (12.8%) (Figure 31).
- Healthy People 2020: Increase the proportion of adults who get sufficient sleep to 70.9% (United States Department of Health and Human Services, 2013).
- The comparison of the responses to the 2013 survey to the 2010 survey showed two significant differences among Knox County residents who had gotten Adequate Rest over the past 30 days (Figure 32).
    - Fewer "nearly always" got adequate rest (2013: 37.5%; 2010: 44.0%; p-value: 0.033)
    - More "seldom" got enough rest (2013: 15.4%; 2010: 8.1%; p-value: 0.0001)

Figure 31: Adequate Rest

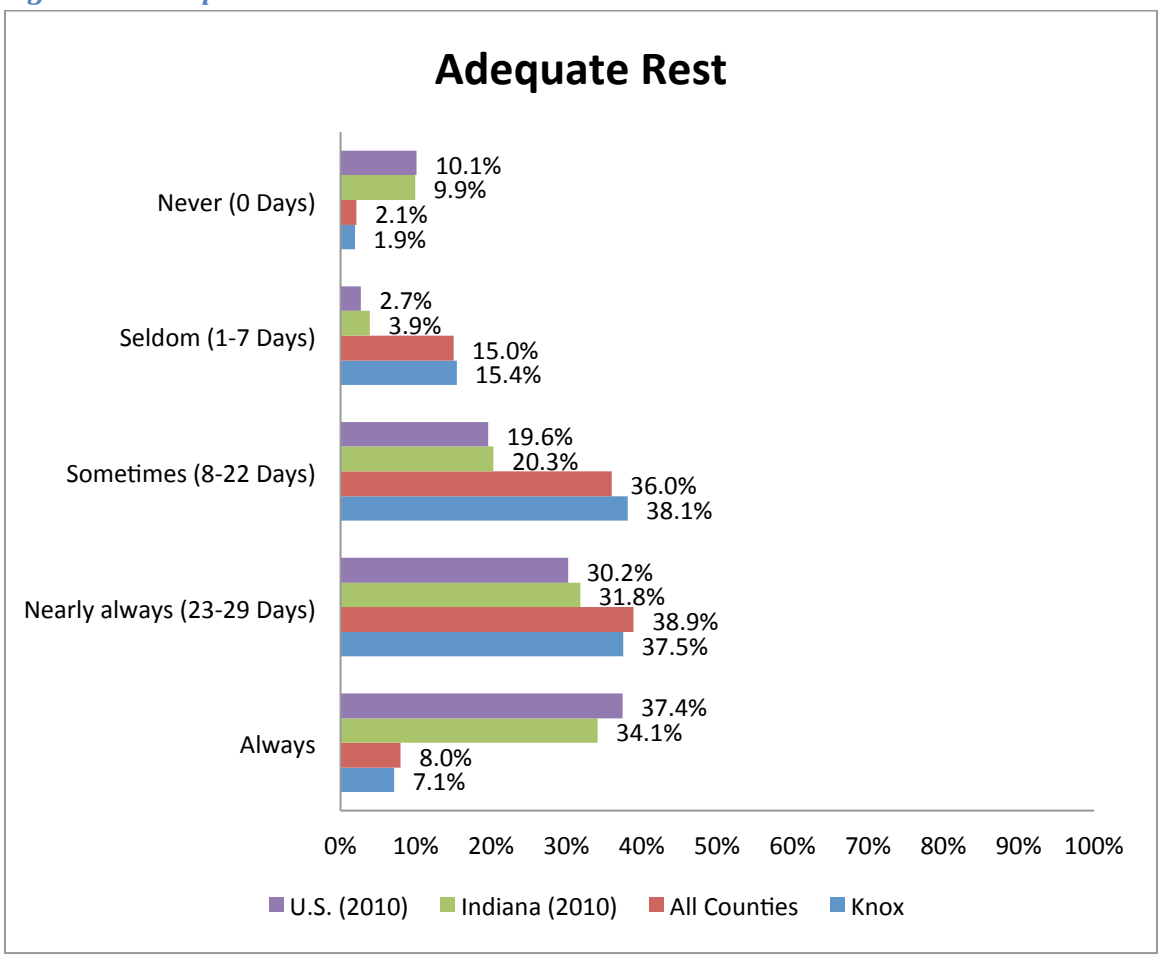
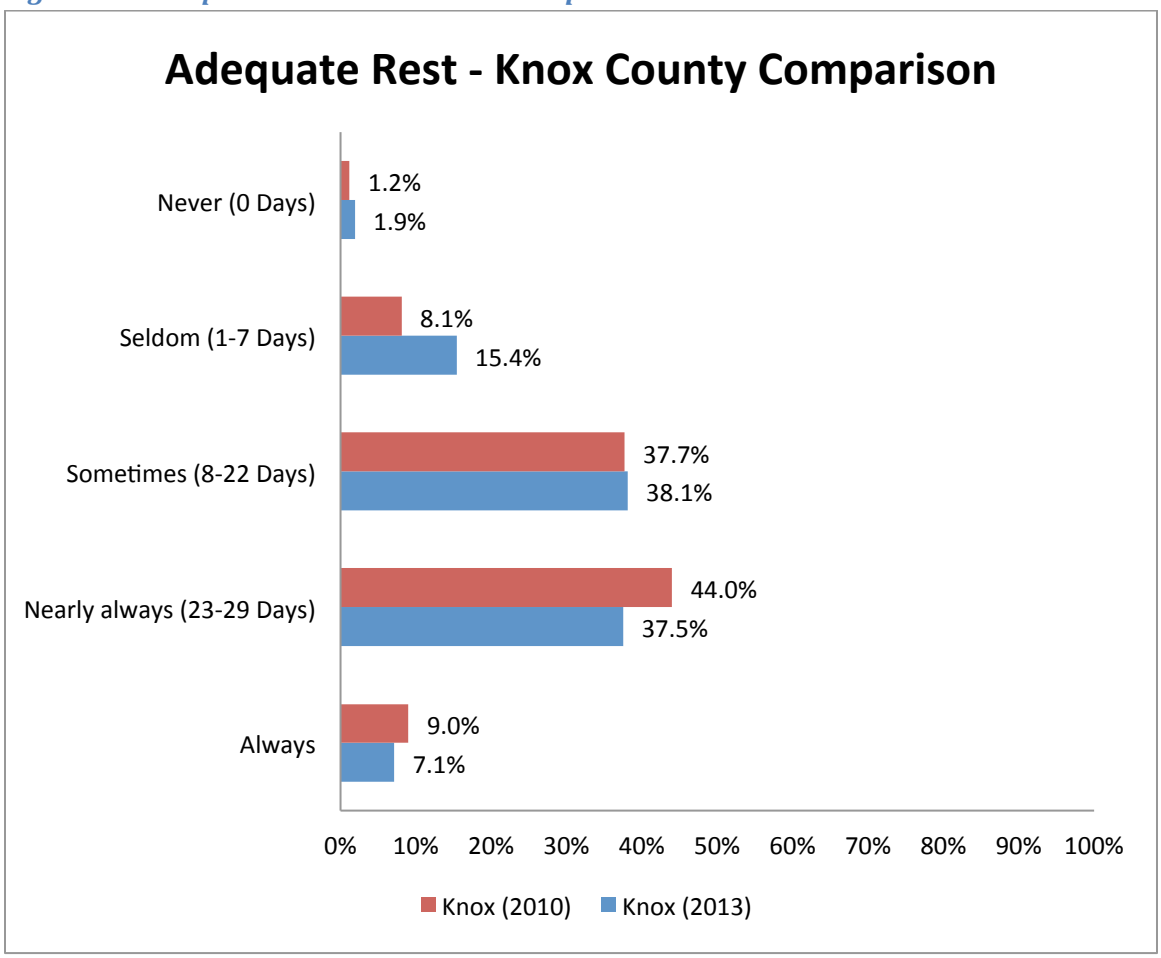


Figure 32: Adequate Rest 2010 – 2013 Comparison



*p-value: Always: 0.2718; Nearly always (23-29 days): 0.033; Sometimes (8-22 days): 0.8938; Seldom (1-7 days): 0.0001; Never (0 days): 0.3269

Seatbelt Use

- Slightly fewer Knox County adults (90.5%) and total respondents (90.6%) reported that they "always" or "nearly always" wore a seatbelt when driving or riding in a car compared to Indiana (95.3%) and U.S. (94.1%) adults (Figure 33).
- More Knox County adults (9.5%) and total respondents (9.3%) indicated that they "sometimes," "seldom," or "never" wore a seatbelt when driving or riding in a car compared to Indiana (4.6%) and U.S. (5.7%) adults (Figure 33).

- There is no single Healthy People 2020 Objective for seat belt use.
- In 2013, significantly more Knox County respondents indicated that they "never" wore their seatbelts, compared to the respondents in 2010 (2013: 1.9%; 2010: 0.7%; p-value: 0.0467) (Figure 34).

Figure 33: Seatbelt Use

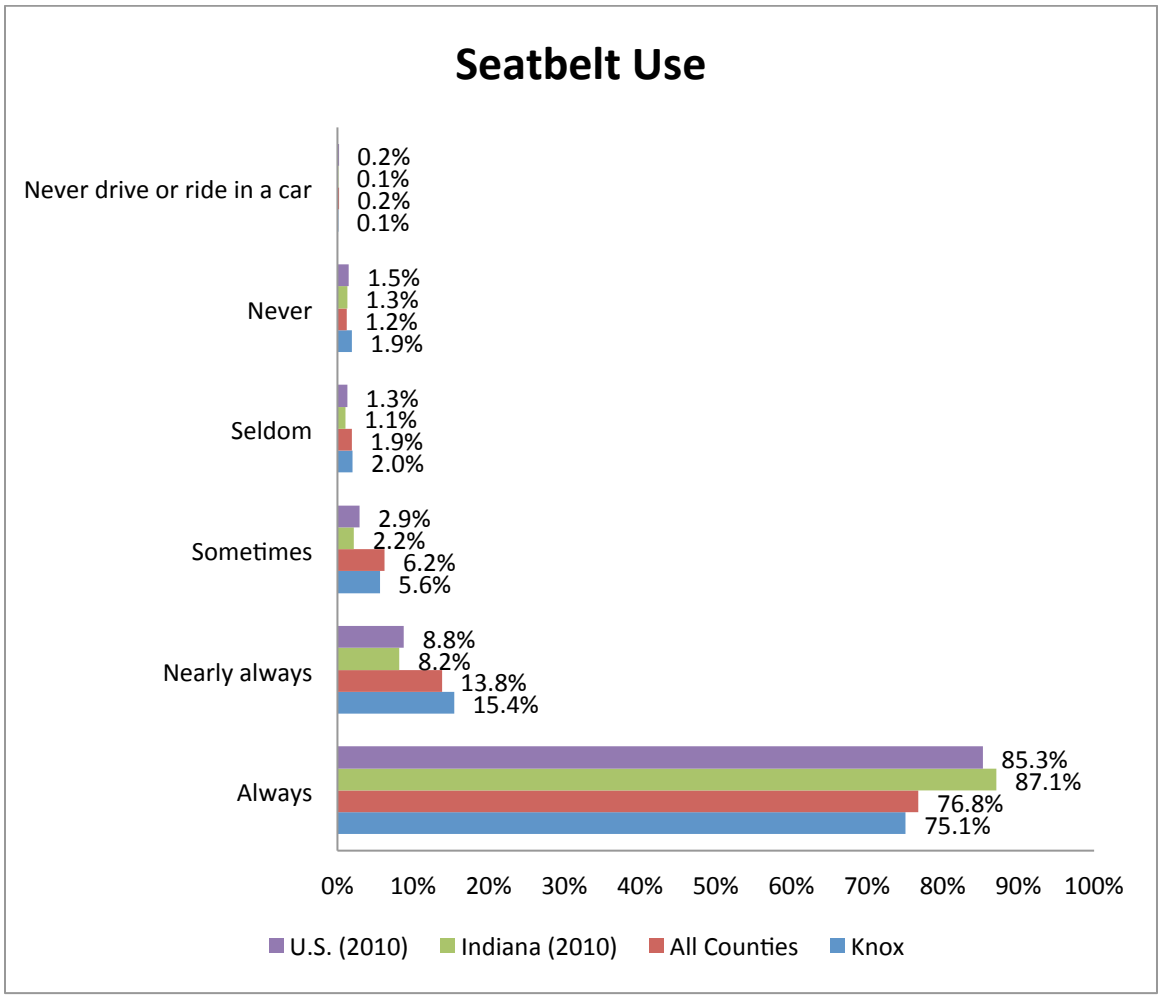
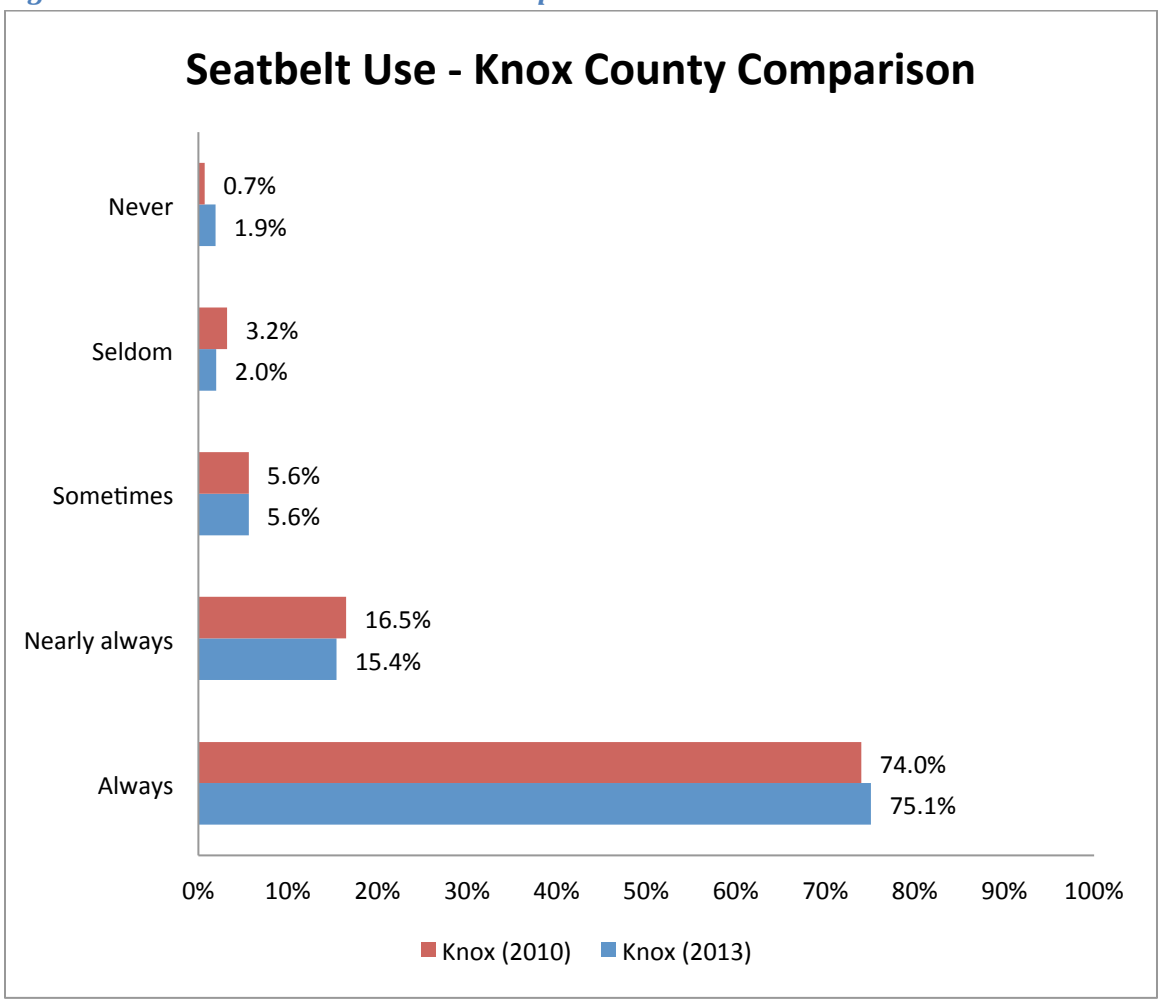


Figure 34: Seatbelt Use 2010 – 2013 Comparison



*p-value: Always: 0.6835; Nearly always: 0.6289; Sometimes: 1.0; Seldom: 0.2488; Never: 0.0467

Section III: Emotional Support and Life Satisfaction (Community Survey)

Social and Emotional Support

- Fewer Knox County adults (74.5%) and total respondents (72.4%) reported that they "always" or "nearly always" received needed social and emotional support compared to Indiana (78.6%) and U.S. adults (78.1%) (Figure 35).
- More Knox County adults (15.4%) and total respondents (16.6%) replied that they only "sometimes" received needed social and emotional support needed compared to Indiana (12.4%) and U.S. adults (11.0%) (Figure 35).
- There is no single Healthy People 2020 Objective for Emotional Support.
- The comparison to the 2010 survey showed no significant differences among Knox County residents and how often they received Social or Emotional Support (Figure 36).

Figure 35: Emotional Support

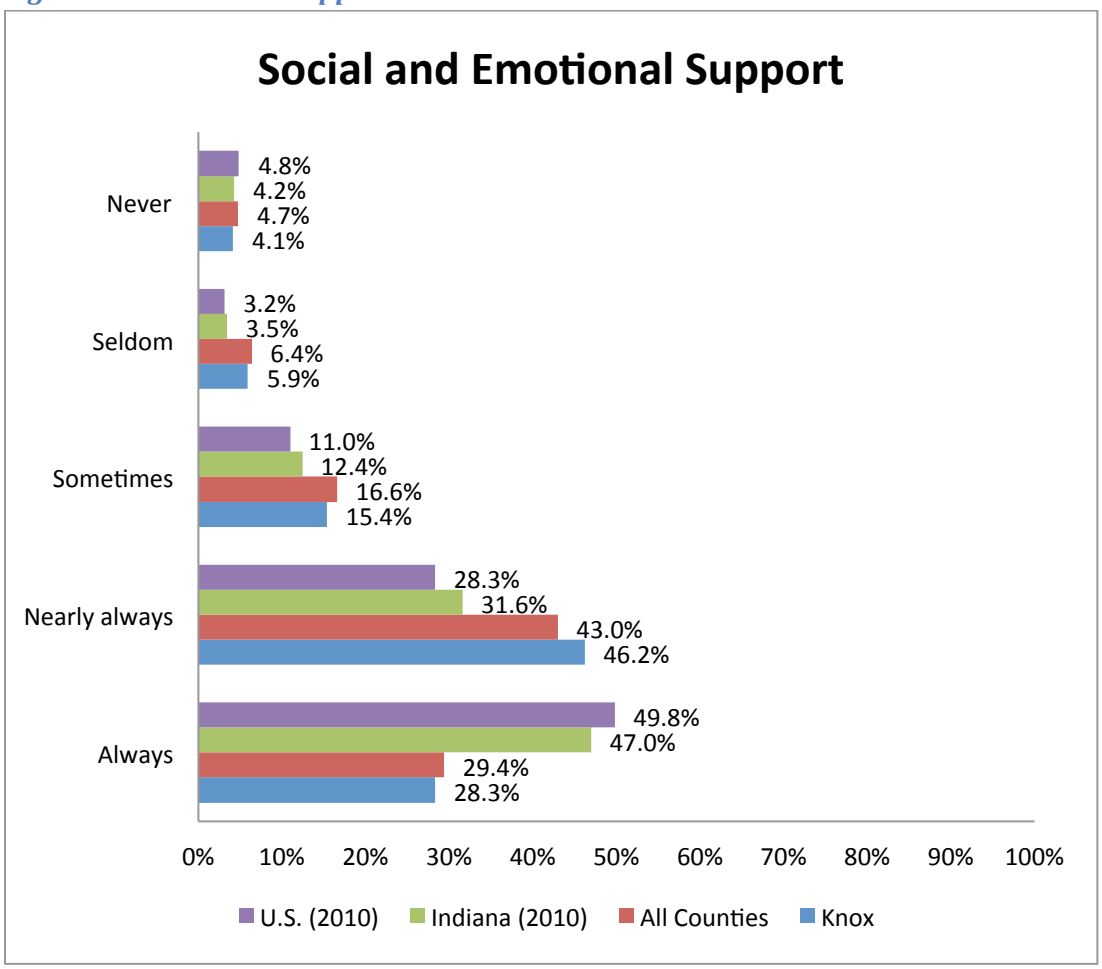
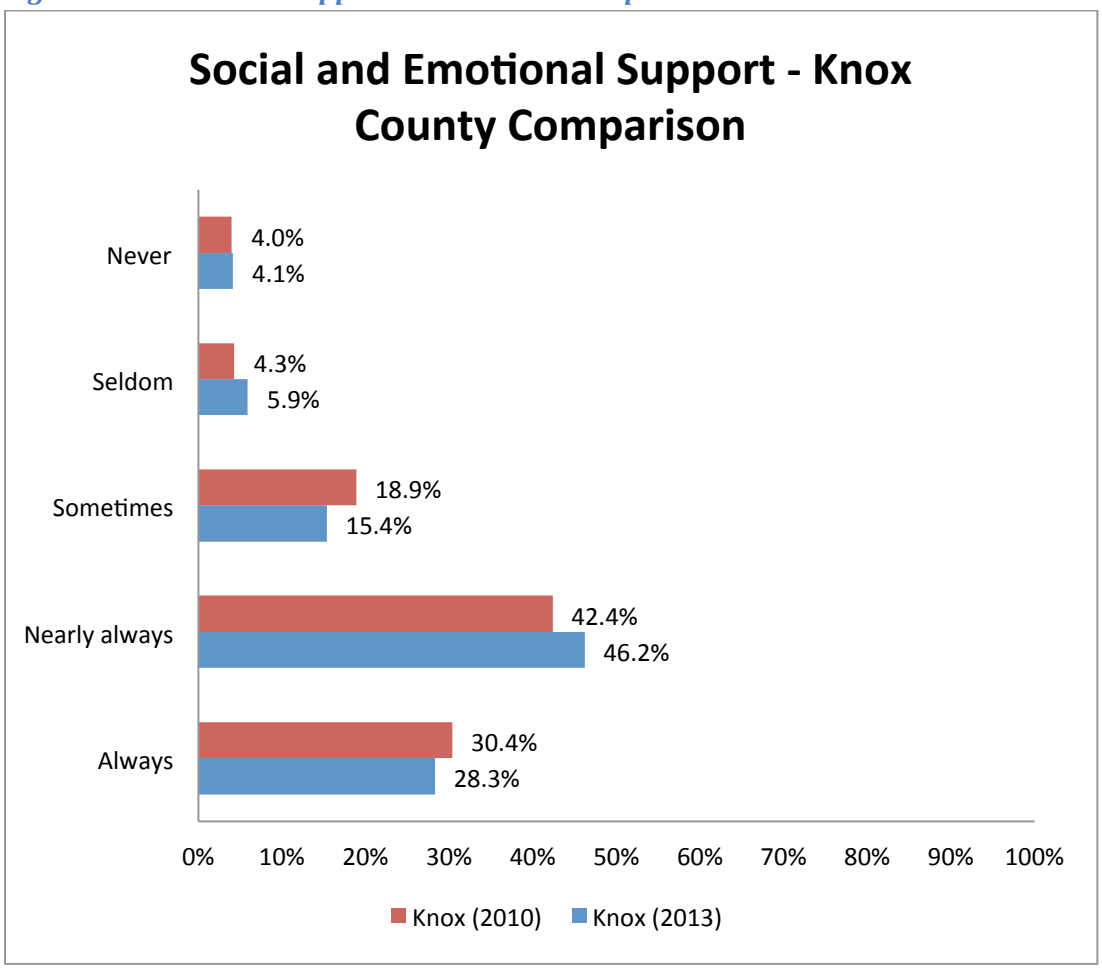


Figure 36: Emotional Support 2010 – 2013 Comparison



*p-value: Always: 0.4605; Nearly always: 0.2168; Sometimes: 0.1435; Seldom: 0.2212; Never: 0.9347

Life Satisfaction

- Slightly fewer Knox County adults (89.6%) and total respondents (89.2%) were "very satisfied" or "satisfied" with their life compared to Indiana (93.6%) and U.S. adults (92.6%) (Figure 37).
- More (10.3%) Knox County adults and total respondents (10.8%) were "dissatisfied" or "very dissatisfied" with their life compared to Indiana (5.8%) and U.S. adults (5.3%) (Figure 37).
- There is no single Healthy People 2020 Objective for Life Satisfaction.
- The comparison to the 2010 survey showed no significant differences among Knox County residents and their Life Satisfaction (Figure 38).

Figure 37: Life Satisfaction

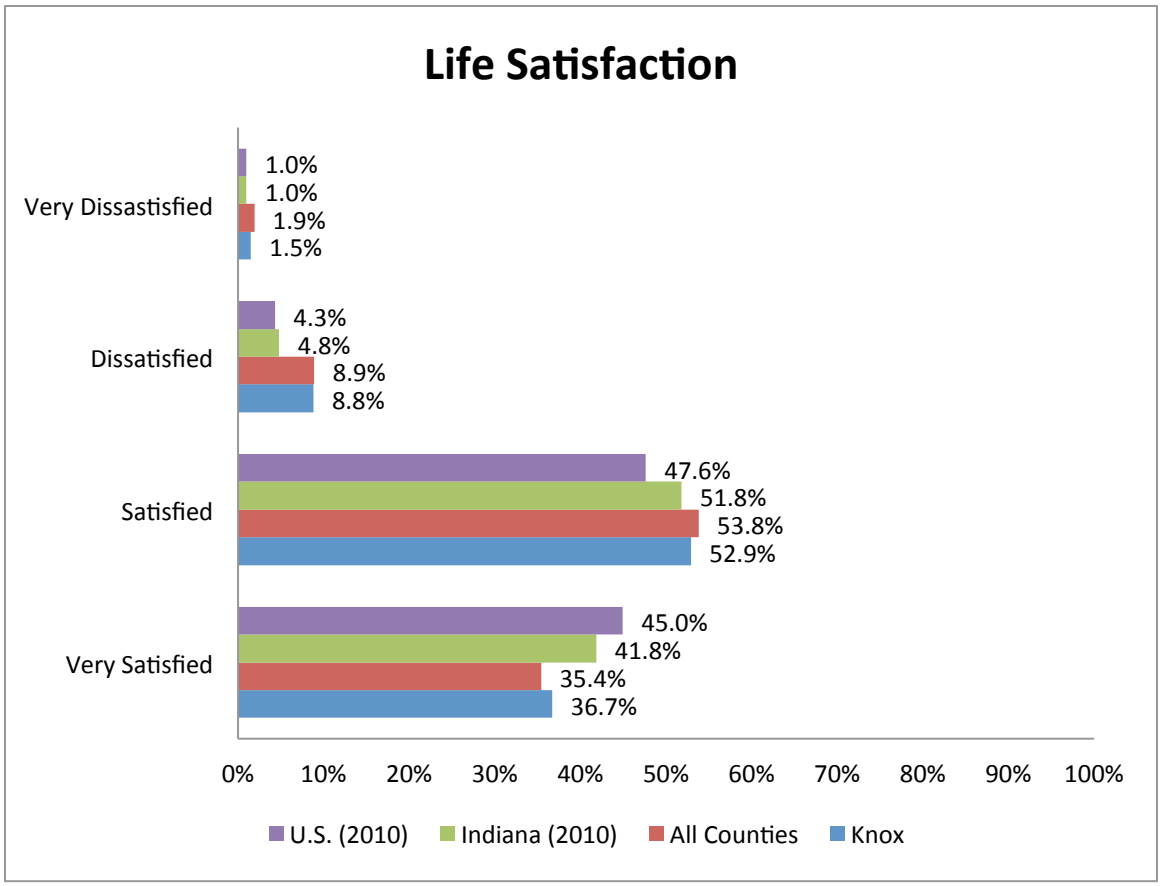
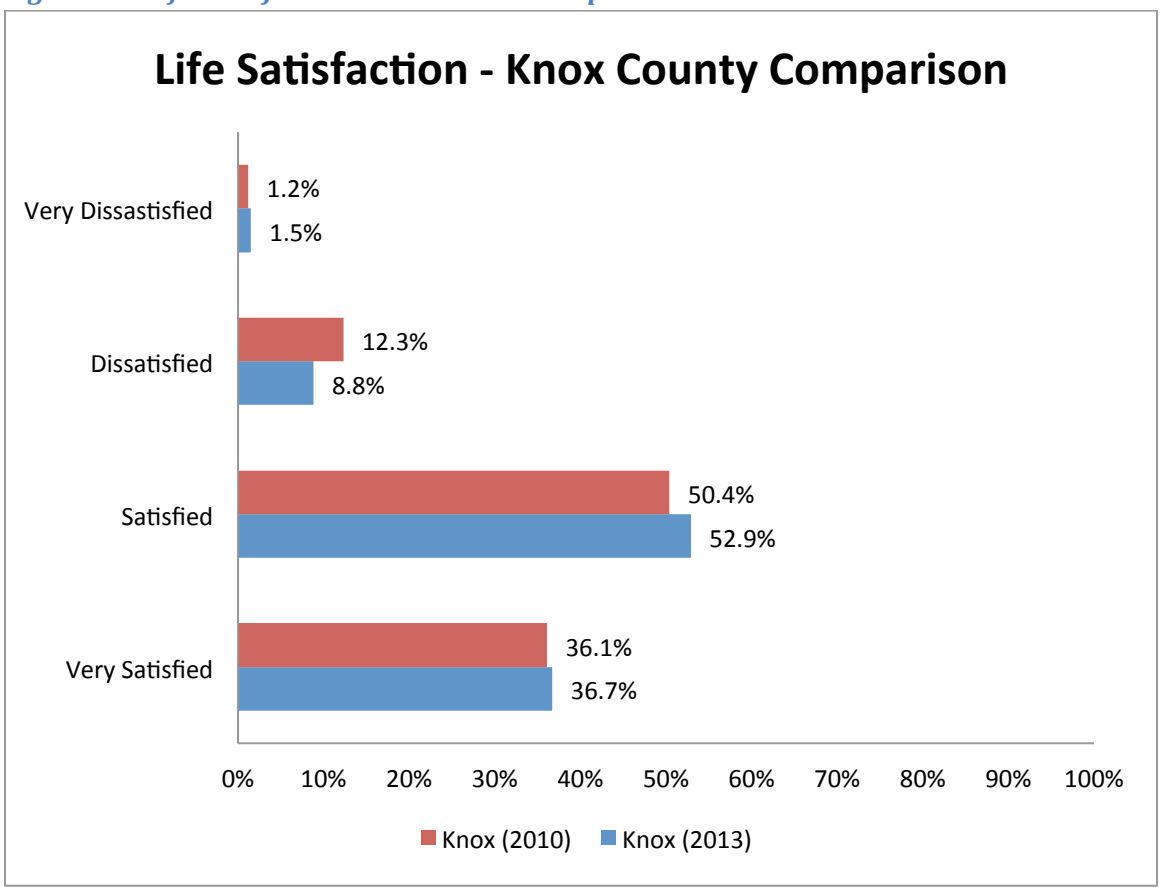


Figure 38: Life Satisfaction 2010 – 2013 Comparison



*p-value: Very Satisfied: 0.8401; Satisfied: 0.4187; Dissatisfied: 0.076; Very Dissatisfied: 0.6646

Memory Loss

- Approximately one-eighth of Knox County adults (12.2%) and one-seventh of total respondents (14.9%) experienced worsening or more frequent confusion or memory loss during the past 12 months (Figure 39).
- There is no Healthy People 2020 Objective for memory loss.
- The comparison to the 2010 survey did not show a significant difference among Knox County residents and their experience of Memory Loss over the previous 12 months (Figure 40).

Figure 39: Memory Loss

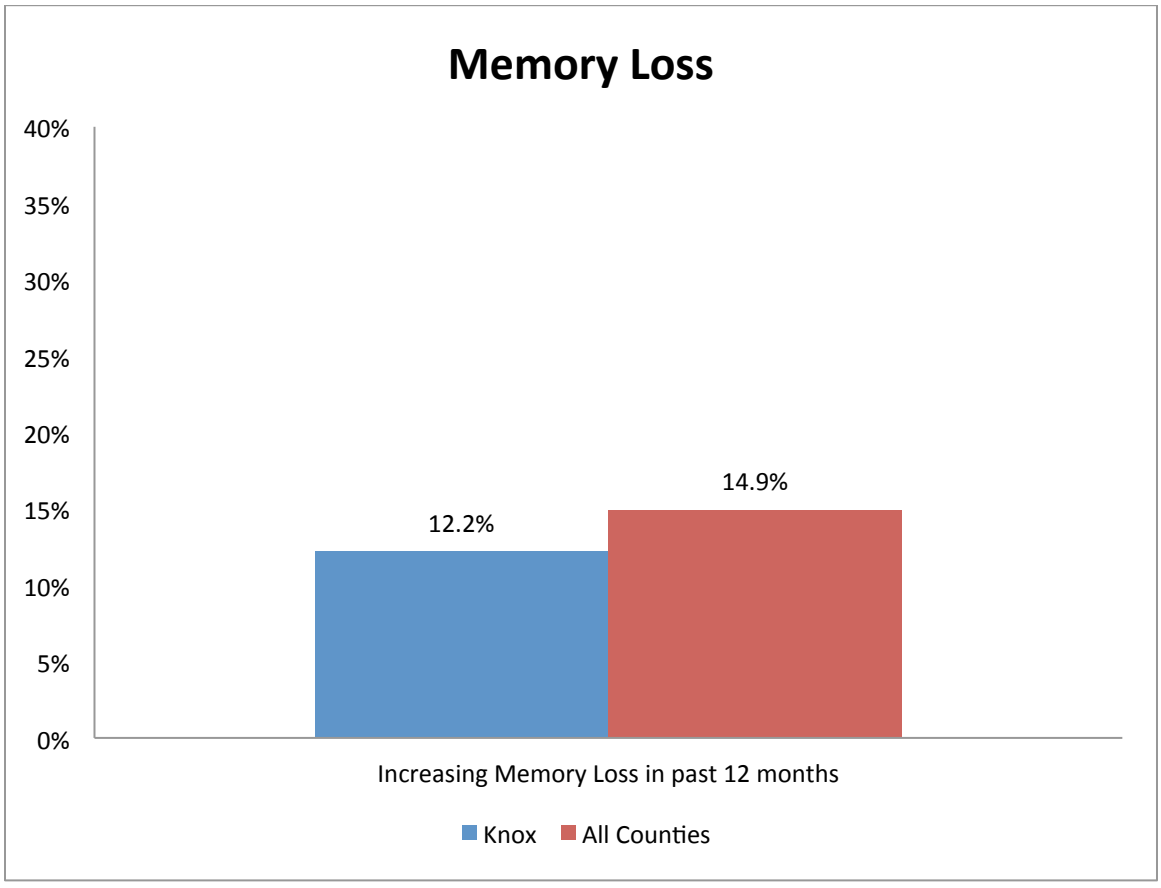
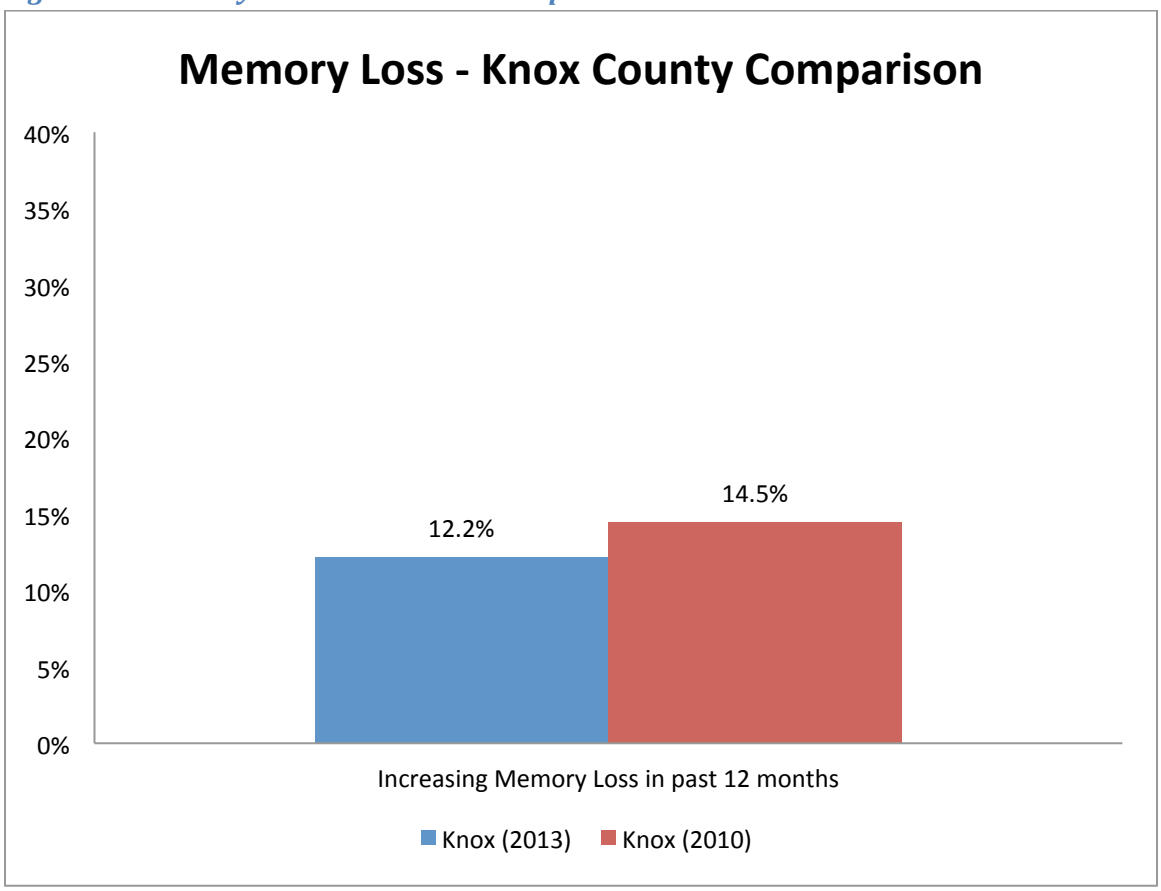


Figure 40: Memory Loss 2010 – 2013 Comparison



*p-value: 0.2839

Section IV: Health Care Access (Community Survey)

Health Care Coverage

- Slightly more Knox County adults (88.7%) and total respondents (87.6%) had health care coverage compared to Indiana (83.7%) and U.S. adults (84.5%) (Figure 41).
- The comparison to the 2010 survey did not show a significant difference among Knox County residents who had Health Insurance (Figure 42).
- Reasons the total respondents gave for not having health insurance included: they could not afford a personal policy (33.1%), their employer does not offer health care coverage and can't

afford a personal policy (34.9%), and their employer offers health care coverage, but they can't afford the employee cost (15.8%).

- In comparing the responses to the 2013 survey to the 2010 survey two significant differences among Knox County residents were seen in the Reasons for not having Health Insurance (Table 10).
    - Employer does not offer health care coverage and can't afford a personal policy (2013: 48.1%; 2010: 18.6%; p-value: 0.0001)
    - Employer offers health care coverage, but can't afford the employee cost (2013: 4.4%; 2010: 21.4%; p-value: 0.0135)
- Healthy People 2020: Increase the proportion of persons with health insurance to 100% (United States Department of Health and Human Services, 2013).

Figure 41: Health Insurance

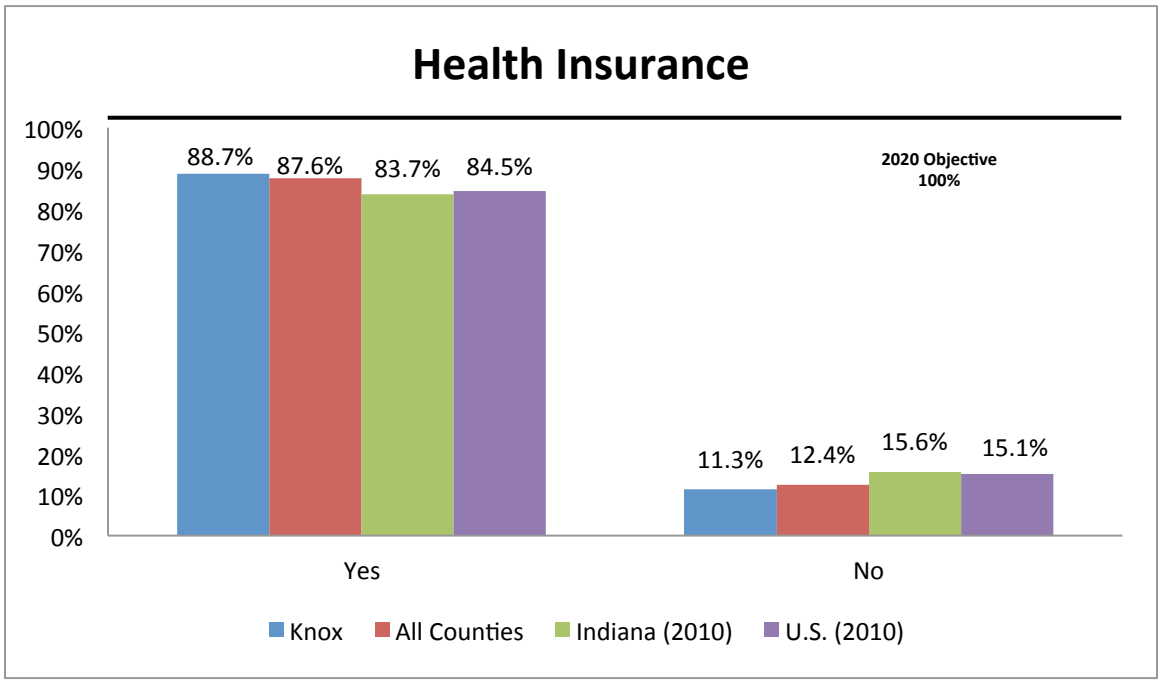
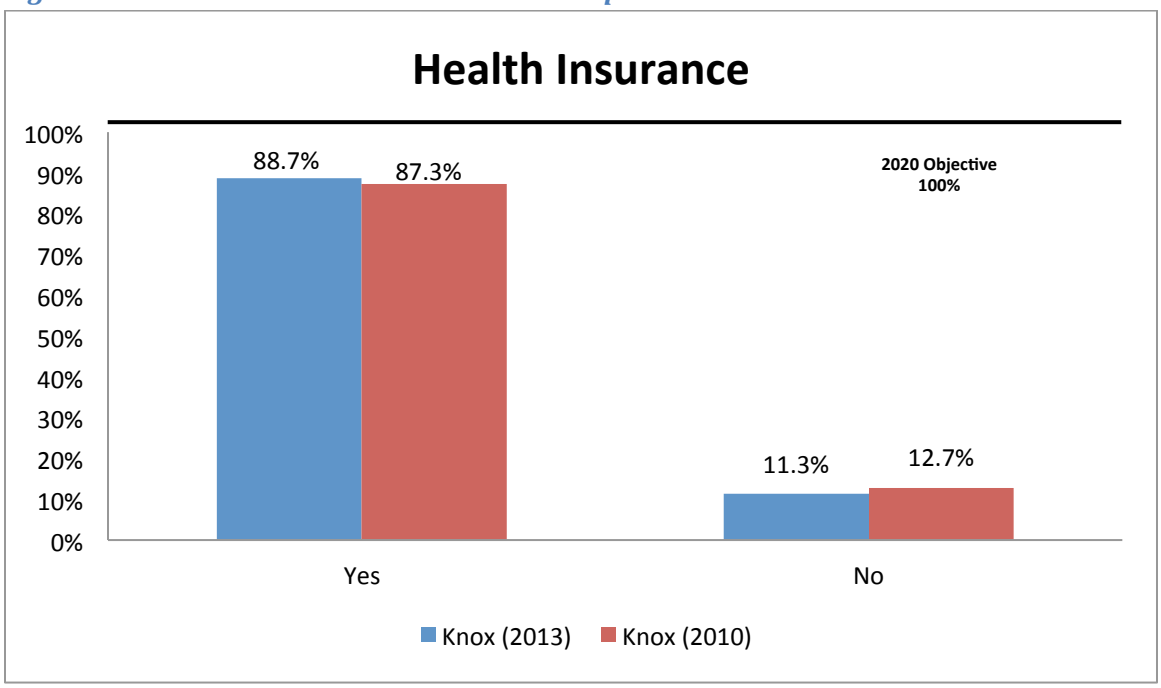


Figure 42: Health Insurance 2010 – 2013 Comparison



*p-value: Yes: 0.4919

Table 10: Reasons for not having Health Insurance 2010 – 2013 Knox County Comparison

	2013	2010	p-value
Reason:	%	%	
Employer does not offer health care coverage and can't afford a personal policy	48.1	18.6	0.0001
Employer offers health care coverage, but can't afford the employee cost	4.4	21.4	0.0135
Can't afford a personal policy (if self-employed or not employed)	35.6	45.0	0.3
Other	11.9	14.9	0.6402

Prescription Medication Use

- Approximately six in ten Knox County adults (62.4%) and total respondents (62.6%) take prescription medications on a regular basis (Figure 43).
- Of those who take prescriptions on a regular basis, more than 90% of both the Knox County adults (93.7%) and the total respondents (93.2%) reported that they take these medications as prescribed (Figure 44).
- Reasons for not taking prescription medications as instructed included: the medications are too expensive and the respondent does not always have the money to purchase them (33.9%), trying to make lifestyle changes so taking prescription medications is no longer necessary (17.8%), the respondent thinks natural supplements and vitamins work as well as prescription medications (3.5%), and no or limited transportation to get to the pharmacy (0.3%) (Table 11).

Figure 43: Prescription Medication Use

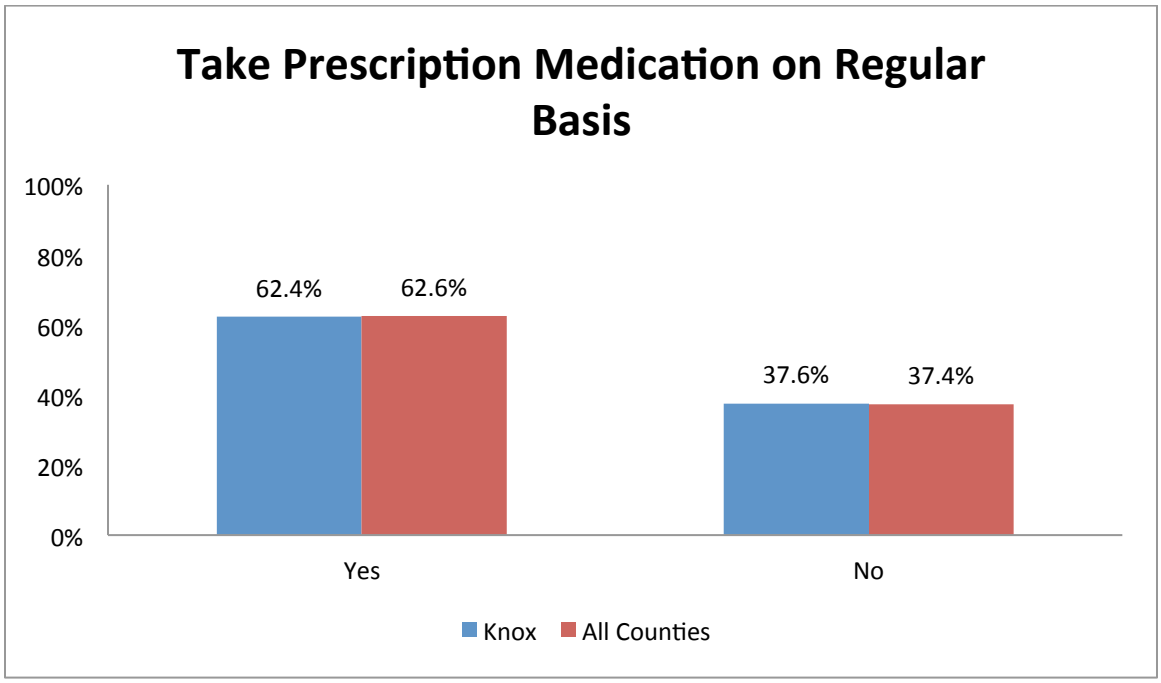


Figure 44: Use Prescription Medication as Prescribed

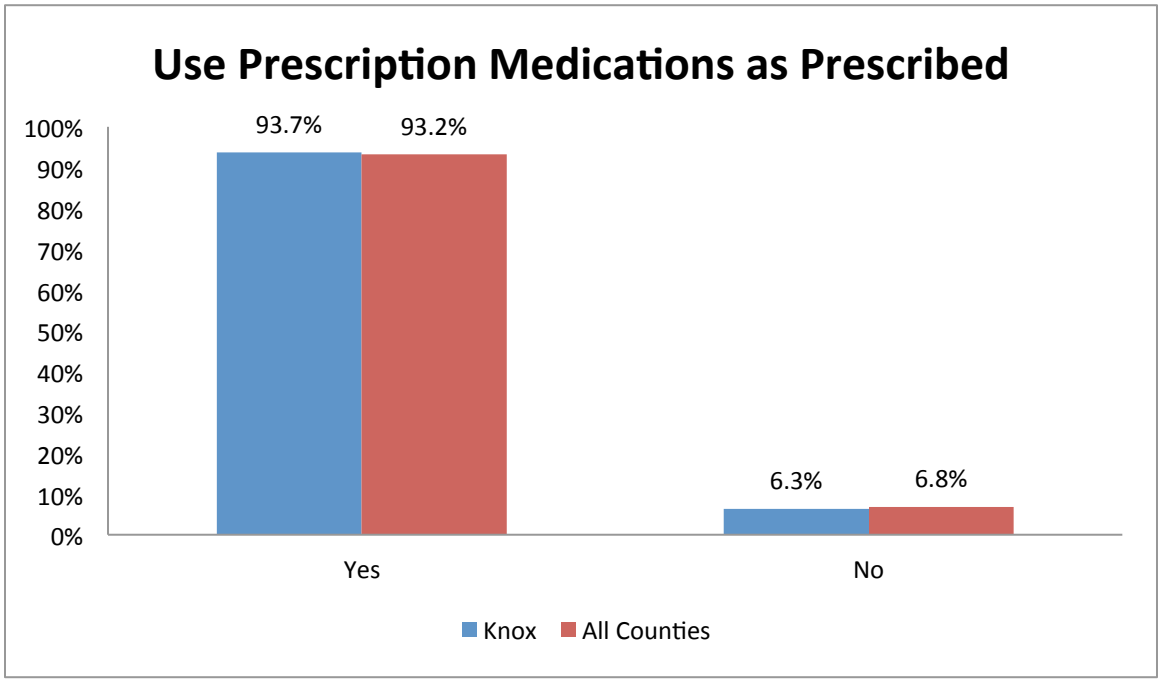


Table 11: Reasons for Not Taking Prescription Medication as Indicated (All Respondents)

	%
Prescription medications are expensive and I do not always have the money to purchase them	33.9
I am trying to make lifestyle changes so I do not have to take these medications anymore	17.8
I think natural supplements and vitamins work as well as what my doctor prescribed	3.5
Other	44.8

- Other Reasons for Not Taking Prescription Medication as Indicated Included (number of respondents):
    - Forget to take them (35)
    - Don't want to take them (5)
    - Don't want to live (1)
    - Have reactions/side effects to medications (4)
    - They are too strong (1)
    - Don't have symptoms so don't take medicine (6)
    - Take more than prescribed for certain conditions (1)
    - Stretch them out to make them last longer (1)
    - Too expensive (4)

Good Samaritan Hospital Screening Programs

- Two-thirds of Knox County adults (66.2%) have heard about the Good Samaritan Hospital free health screening program compared to less than half of the total respondents (46.0%) (Figure 45).
- The comparison to the 2010 survey did not show a significant difference among Knox County residents who had heard of the GSH Free Screening Program (Figure 46).
- Of all of the respondents who had heard of the Good Samaritan Hospital free screening program, about one-quarter read about the program in the local newspaper (23.1%), sixteen percent (15.6%) read about the program through the Good Samaritan Health magazine called "Health Connections," fifteen percent heard about it from a local radio broadcast (15.3%), and fourteen percent heard about it from friends or family members (14.0%). Others indicated they learned about the program from a local news broadcast (4.3%), from Facebook (4.2%), or from the internet (4.0%) (Table 12).
- The comparison of the responses to the 2013 survey to the 2010 survey showed four significant differences among Knox County residents and how they learned about the GSH Free Screening Program (Table 13).
    - Less likely from the local newspaper (2013: 33.2%; 2010: 58.2%; p-value: <0.0001)
    - Less likely from Local radio broadcast (2013: 24.7%; 2010: 36.0%; p-value: 0.0007)
    - Less likely from Health Connections – Good Samaritan Health Magazine (2013: 21.2%; 2010: 30.3%; p-value: 0.0041)
    - Less likely from Friends or family members (2013: 21.0%; 2010: 29.5%; p-value: 0.0069)
- Less than one-third of Knox County adults (28.8%) and approximately one-fifth of total respondents (20.8%) indicated that they had participated in the Good Samaritan Hospital free health screening program (Figure 47).

- Significantly fewer Knox County respondents to the 2013 community survey reported that they had participated in the GSH Free Screening Program, compared to the respondents to the 2010 survey (2013: 28.8%; 2010: 37.8%; p-value: 0.0069) (Figure 48).

Figure 45: Heard of Free Screening Program offered at Good Samaritan Hospital

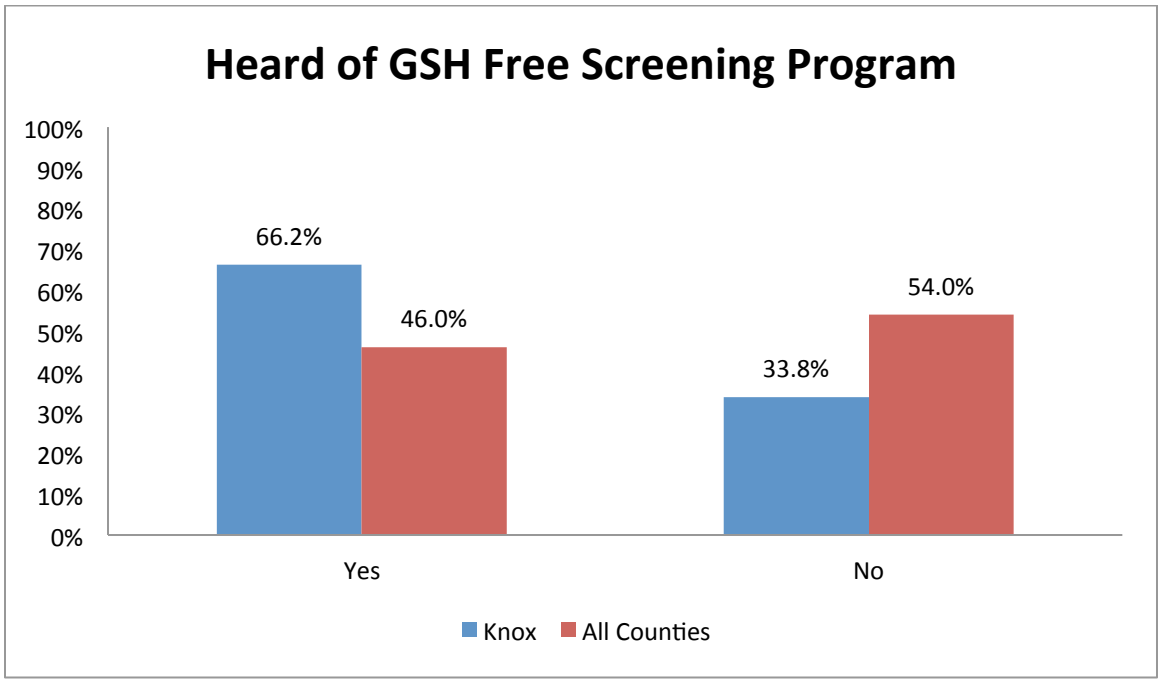
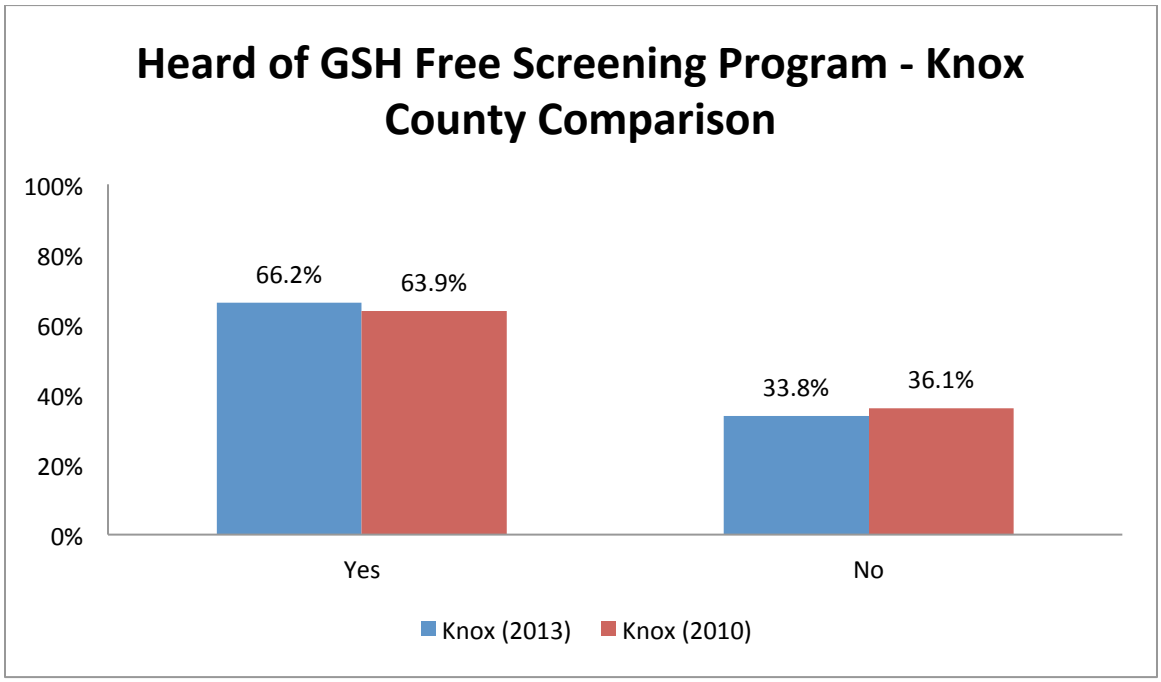


Figure 46: Heard of Free Screening Program offered at Good Samaritan Hospital 2010 – 2013 Comparison



*p-value: Yes: 0.4435

Table 12: Awareness of the Good Samaritan Hospital Health Screenings Program (All Respondents)	%
Local newspaper	23.1
Local news broadcast	4.3
Local radio broadcast	15.3
Internet/website	4.0
Health Connections – Good Samaritan Health Magazine	15.6
Friends or family members	14.0
Facebook	4.2
Other	5.4

Table 13: Awareness of the Good Samaritan Hospital Health Screenings Program 2010 – 2013 Knox County Comparison

	2013	2010	p-value
Awareness from:	%	%	
Local newspaper	33.2	58.2	<0.0001
Local news broadcast	6.4	9.7	0.0969
Local radio broadcast	24.7	36.0	0.0007
Internet/website	6.4	3.6	0.0686
Health Connections – Good Samaritan Health Magazine	21.2	30.3	0.0041
Friends or family members	21.0	29.5	0.0069
Facebook	3.5	N/A	N/A
Other	5.5	N/A	N/A

- Other Ways that Respondents had Heard of the GSH Health Screening Program Included:
  - Advertising in doctor's office
  - Employee or GSH volunteer
  - Billboards
  - Card sent through mail/Direct mailings
  - Church
  - Farm show
  - Farmer's market
  - Food Pantry
  - Goodwill
  - John Deere
  - Kiwanis
  - Library
  - Senior center

Figure 47: Participated in Free Screening Program at Good Samaritan Hospital

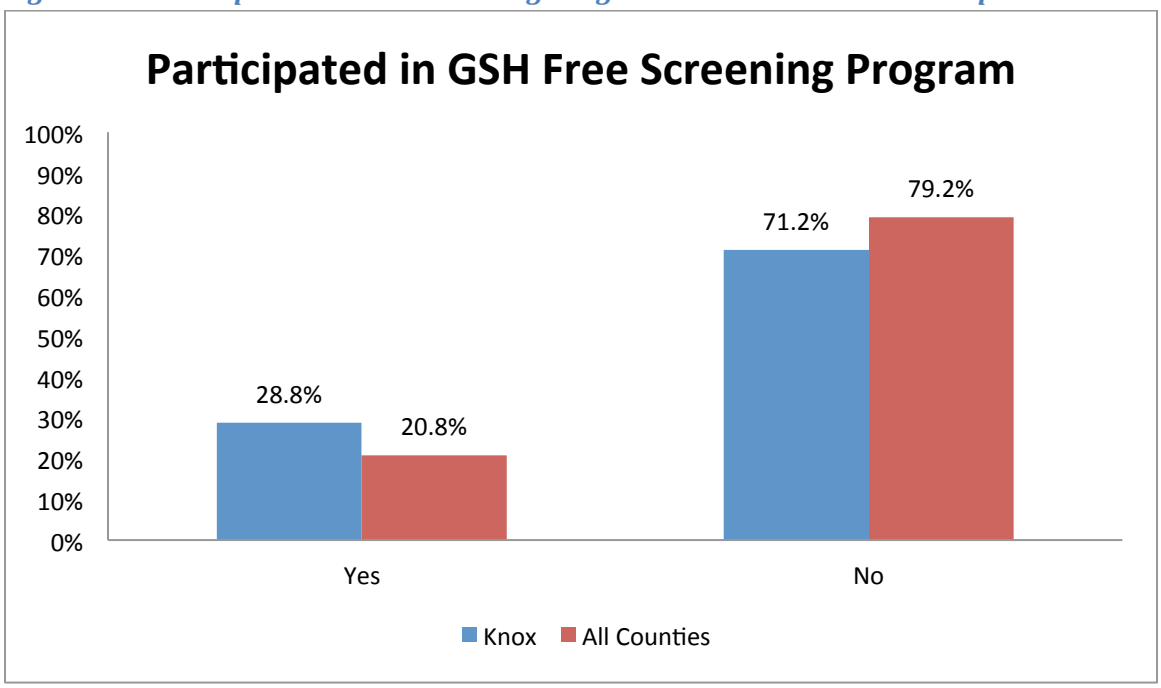
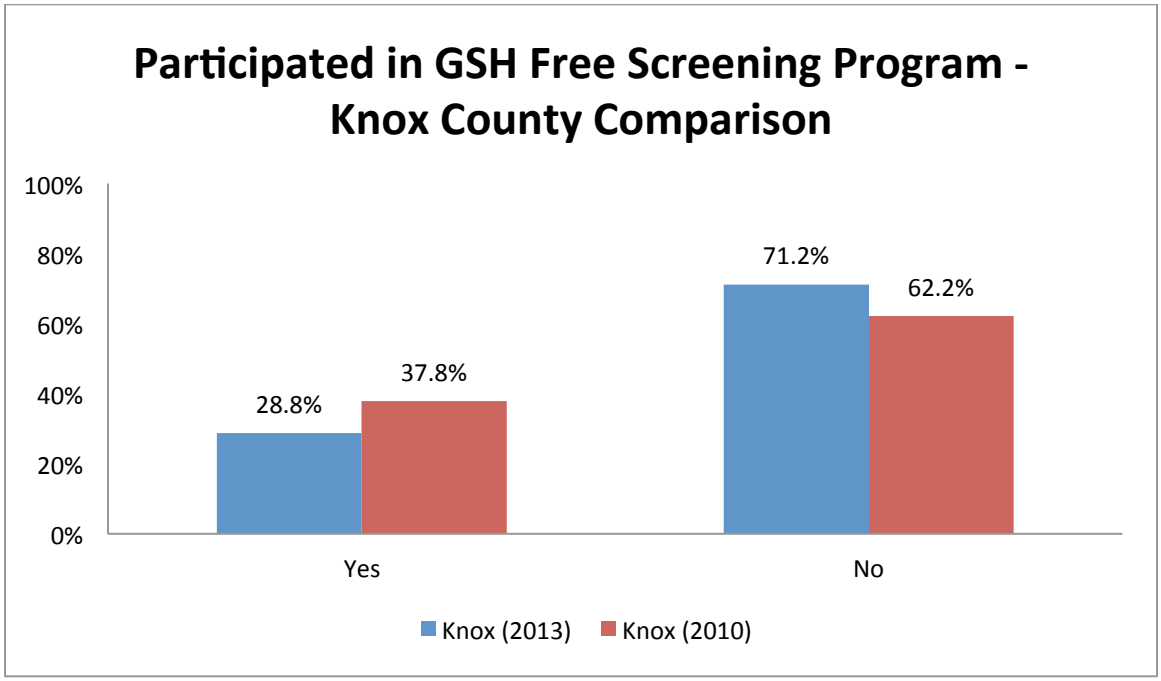


Figure 48: Participated in Free Screening Program at Good Samaritan Hospital 2010 – 2013 Comparison



*p-value: Yes: 0.0069

Good Samaritan Hospital Primary Care Programs

- Two-thirds of Knox County adults (65.4%) and only four in ten total respondents (40.4%) knew about the Good Samaritan Hospital Primary Care Clinic (Figure 49). Of those who knew about the clinic, about one-seventh of Knox County adults (15.7%) and total respondents (13.5%) have received care at the clinic (Figure 50).
- The comparison of the responses to the 2013 survey to the 2010 survey showed a significant difference among Knox County residents who had heard of the GSH Primary Care Clinic (Figure 51) and those who had received care at the GSH Primary Care Clinic (Figure 52).
    - More had heard of the GSH Primary Care Clinic (2013: 65.4%; 2010: 40.0%; p-value: <0.0001) (Figure 51).
    - More had Received Care at the GSH Primary Care Clinic (2013: 15.7%; 2010: 10.1%; p-value: 0.0231) (Figure 52).

Figure 49: Heard of Good Samaritan Hospital Primary Care Clinic

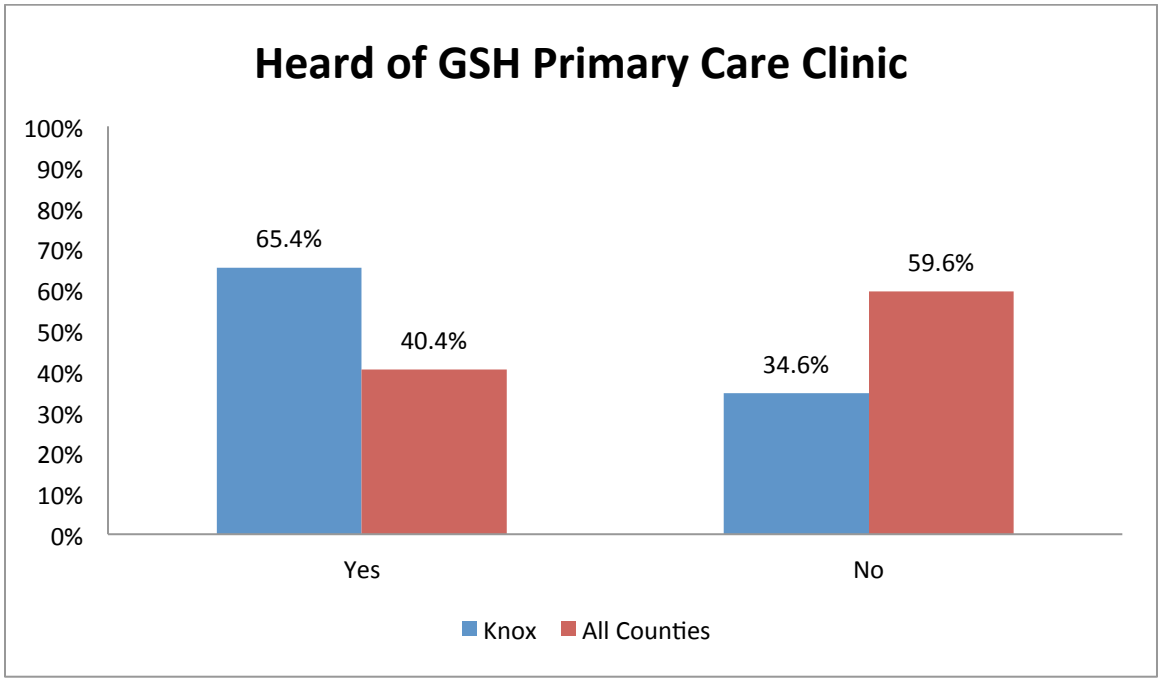


Figure 50: Received Care at Good Samaritan Hospital Primary Care Clinic

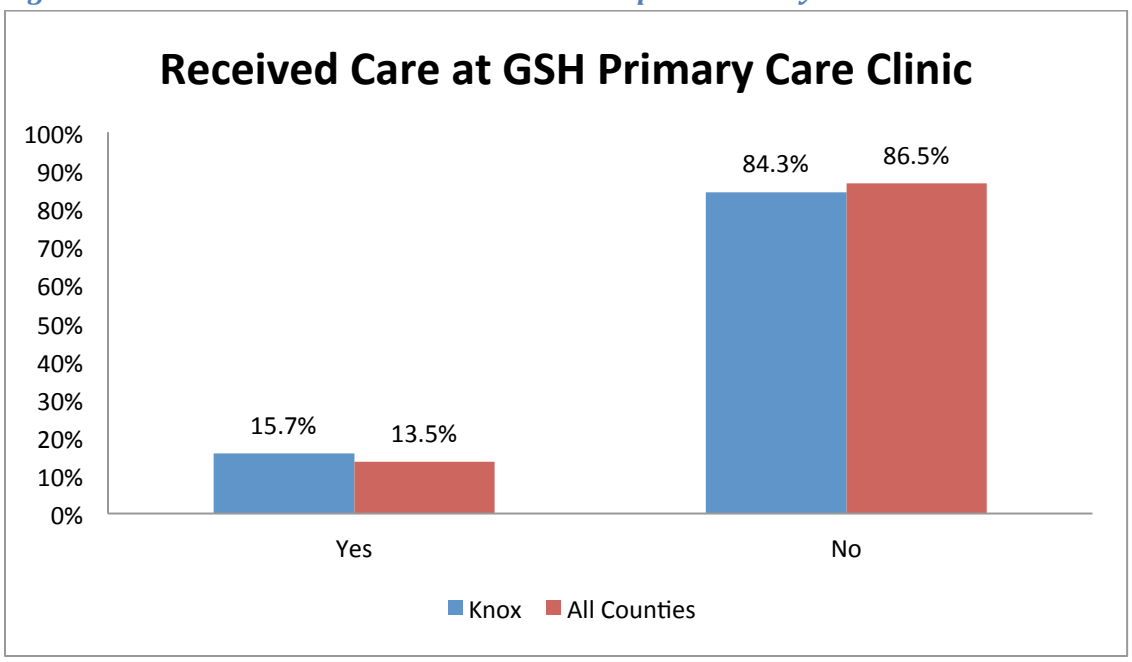
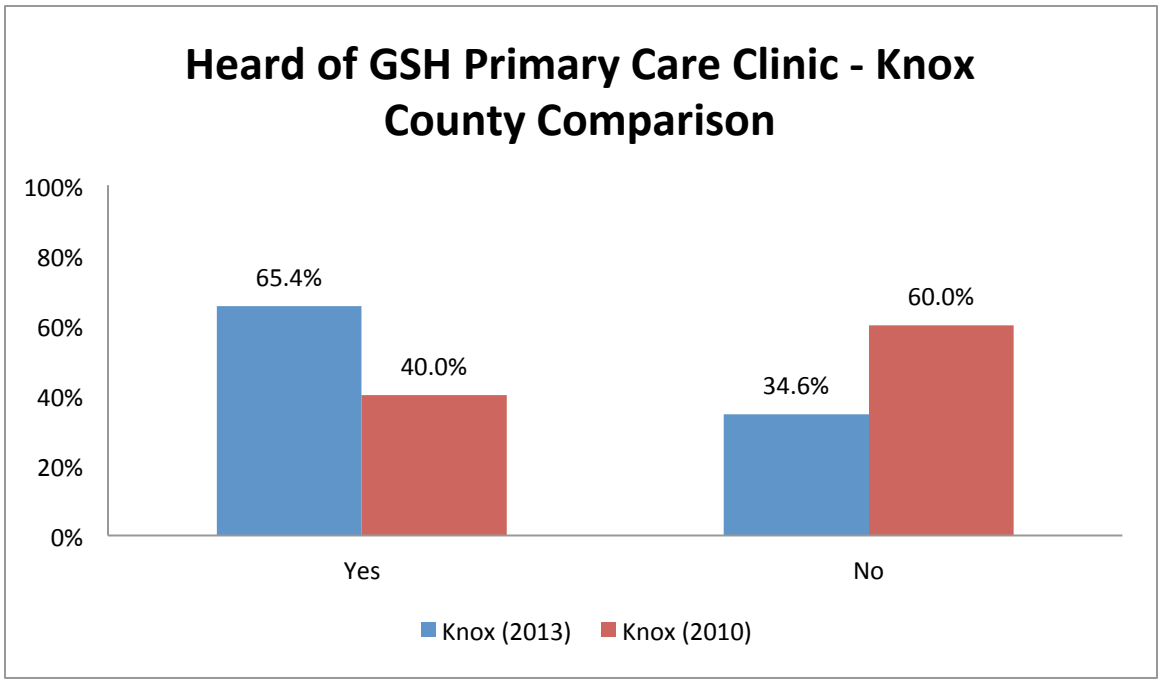
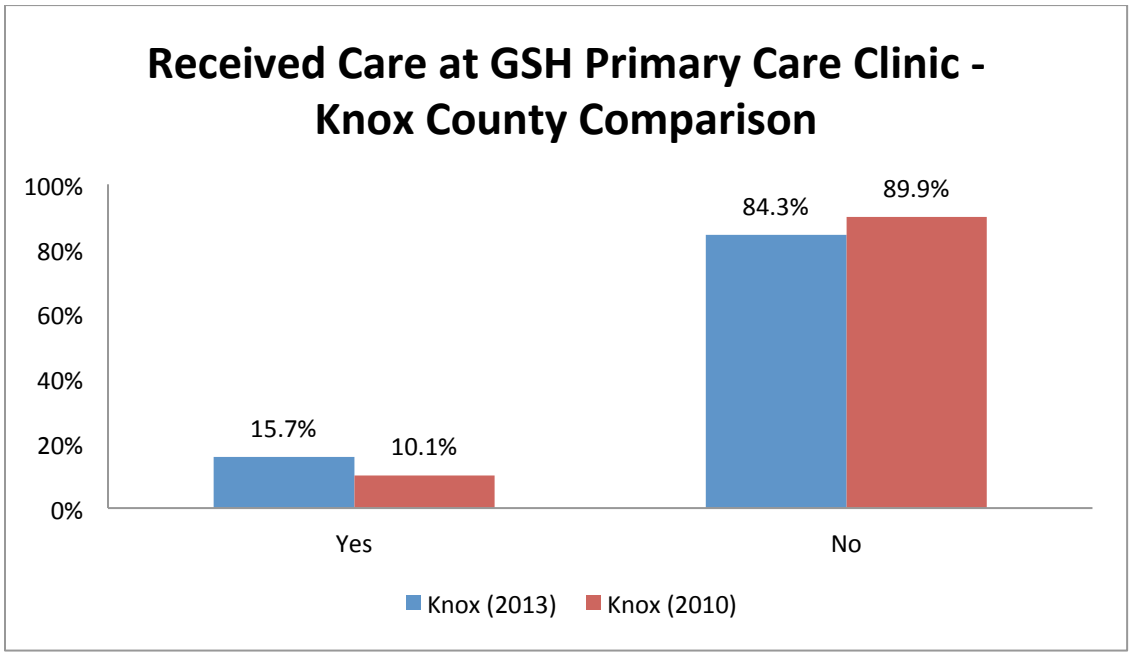


Figure 51: Heard of Good Samaritan Hospital Primary Care Clinic 2010 – 2013 Comparison



*p-value: Yes: <0.0001

Figure 52: Received Care at Good Samaritan Hospital Primary Care Clinic 2010 – 2013 Comparison



*p-value: Yes: 0.0231

- Most of the survey respondents did not have problems seeing a doctor or other health care provider during the past year (67.8%). About one-eighth (11.7%) were not able to pay the costs associated with medical care and one-twelfth found it difficult to get to a physician's office (8.9%) or did not have a personal doctor or healthcare provider (8.3%). Less than 5% could not schedule an appointment because physicians were not taking new patients (3.7%), did not have transportation (1.9%), did not have childcare (1.8%), or have difficulty with the English language (0.1%) (Table 14).
- When comparing the responses to the 2013 survey to the 2010 survey most of the barriers to receiving care had not changed; however, in 2013, more Knox County residents reported not getting child care was a barrier to receiving health care (2013: 2.8%; 2010: 1.1%; p-value: 0.0217) (Table 15).

Table 14: Barriers to Care (All Respondents)	%
I had no problems seeing a doctor or other health care provider during the past year	67.8
I do not have a personal doctor or health care provider	8.3
I couldn't get an appointment because doctors are not taking new patients	3.7
It was difficult to get to a physician's office (not open when you could go, etc.)	8.9
I couldn't pay the costs associated with medical care (can't afford health care services, services not covered by insurance)	11.7
I didn't have transportation	1.9
I couldn't get childcare	1.8
Other	3.4

Table 15: Barriers to Care 2010 – 2013 Knox County Comparison

	2013	2010	p-value
Barriers	%	%	
I had no problems seeing a doctor or other health care provider during the past year	68.6	71.3	0.3348
I do not have a personal doctor or health care provider	6.0	4.3	0.1903
I couldn't get an appointment because doctors are not taking new patients	3.3	4.1	0.5030
It was difficult to get to a physician's office (not open when you could go, etc.)	10.3	8.3	0.2496
I couldn't pay the costs associated with medical care (can't afford health care services, services not covered by insurance)	12.0	10.2	0.3417
I didn't have transportation	1.6	0.6	0.0713
I couldn't get childcare	2.8	1.1	0.0217
Other	2.8	N/A	N/A

Section V: Demographics (Provider Survey)

Provider Demographics: Sex, Age, Race, and Ethnicity

Slightly more of the provider respondents were females (55.2%) and most were over 45 years of age (75.9%). The mean age was 53.0 years. Almost all of the respondents were white (89.3%) and all were non-Hispanic/Latino (100.0%) (Table 16).

Table 16: Sex, Age, Race, and Ethnicity

	n	%
Survey Respondents		
Sex		
Male	13	44.8
Female	16	55.2
Total	29	100.0
Missing	0	
Age (mean age = 53.0)		
18-24	0	0.0
25-34	3	10.3
35-44	4	13.8
45-54	8	27.6
55-64	6	20.7
65+	8	27.6
Total	29	100.0
Missing	0	
Race		
White	25	89.3
Black or African American	0	0.0
Asian	3	10.7
Native Hawaiian or Other Pacific Islander	0	0.0
American Indian or Alaskan Native	0	0.0
Other	0	0.0
Total	28	100.0
Missing	1	
Ethnicity		
Hispanic/Latino	0	0.0
Non-Hispanic/Latino	25	100.0
Total	25	100.0
Missing	4	

Provider Demographics: Provider Category

Nearly half of the respondents to the provider survey were physicians (48.3%). The majority of physician specialties that were listed by providers were family medicine/general practice/internal medicine (n=8; 66.7%). Other physician specialties included ENT, Orthopedics, Psychiatry, and Hematology/Oncology (n=1 for each specialty) (Table 17).

Table 17: Provider Category

	n	%
Survey Respondents		
Specialty		
Physician	14	48.3
Nurse Practitioner	0	0.0
Registered Nurse (RN)	6	20.7
Licensed Practical Nurse (LPN)	0	0.0
Public Health Official	0	0.0
Health Advocate (Health Coalition, Leaders, Organization Director, etc.)	2	6.9
Public Safety (Police, Fire, EMS, etc.)	0	0.0
Education (e.g. School Nurse)	3	10.3
Voluntary Organization (United Way, etc.)	0	0.0
Social Worker/Case Worker	2	6.9
Other	1	3.4
Missing	1	3.4
Total	29	100.0

Section VI: Health Behaviors (Provider Survey)

Physical Activity

Survey questions:

"About what percent of your patients/clients tell you they are physically active?"

"I talk with my patients/clients about their physical activity."

Less than half of the provider respondents (43.4%) reported that greater than 50% of their patients told them that they were physically active (Figure 53). Even though the majority of provider respondents (56.6%) had less than 50% of their patients tell them they were physically active, only slightly more than half (52.0%) of the provider respondents always or nearly always discussed the importance of physical activity with their patients (Figure 54).

Figure 53: Patient Physical Activity

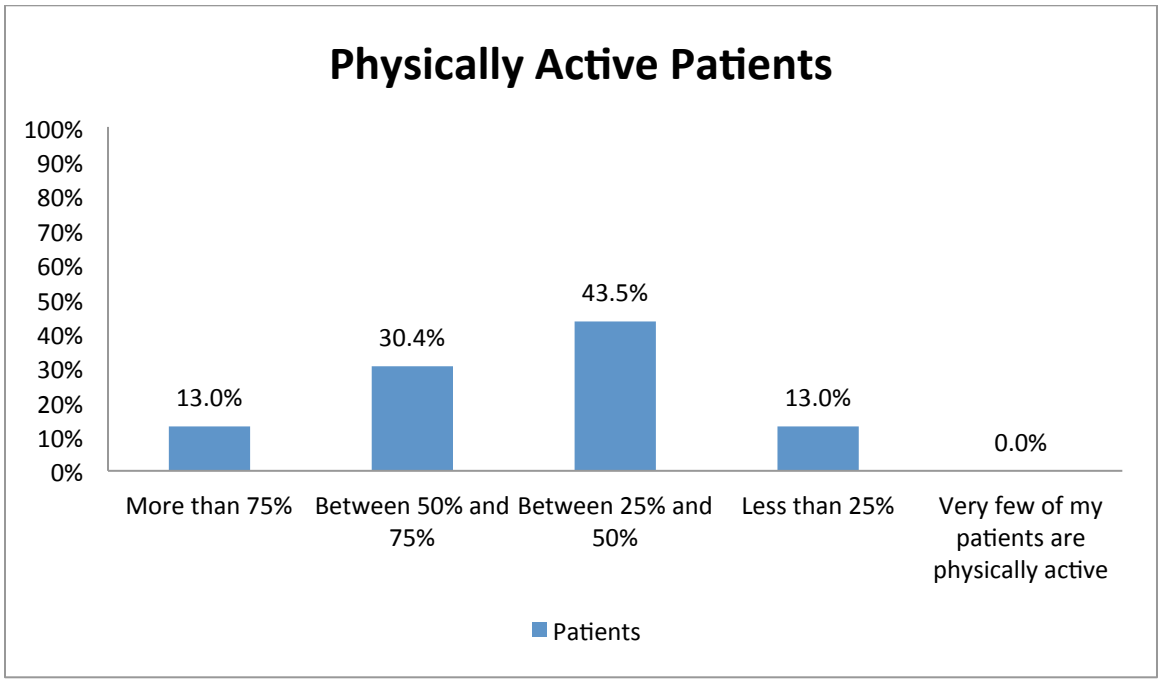
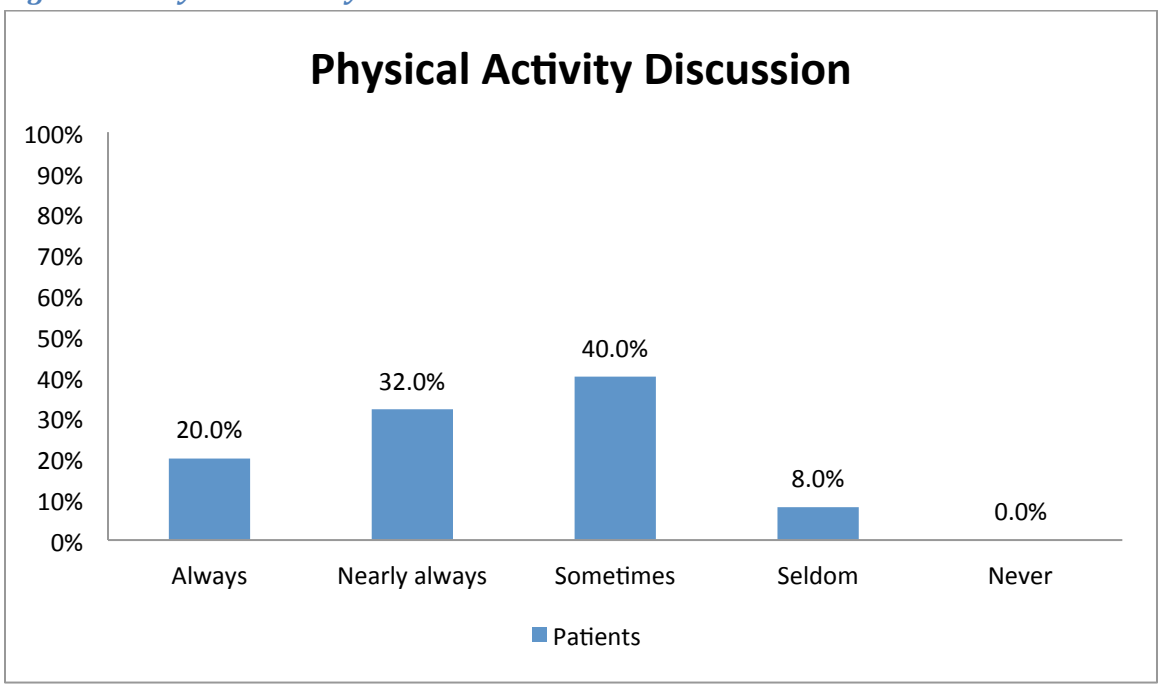


Figure 54: Physical Activity Discussion



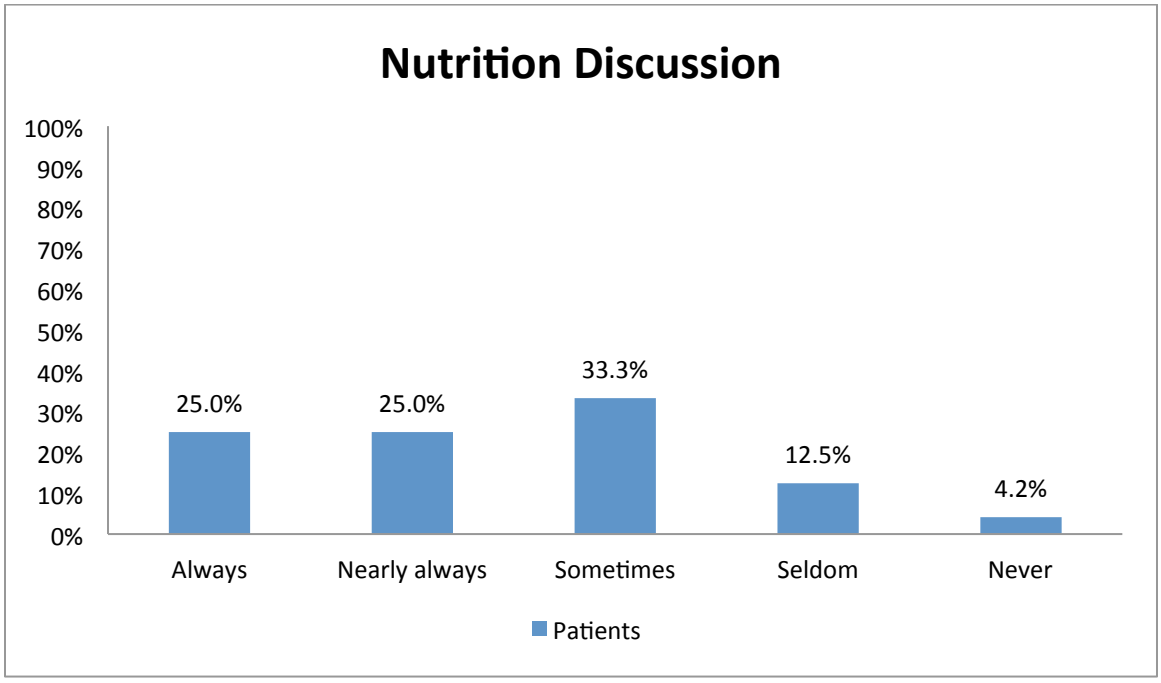
Nutrition

Survey question:

"I talk with my patients/clients about their nutrition, specifically the importance of eating fruits and vegetables."

50% of the provider respondents always or nearly always discussed the importance of good nutrition with their patients (Figure 55).

Figure 55: Nutrition Discussion



Tobacco Use

Survey questions:

"About what percent of your patients/clients smoke or use any other kind of tobacco product (including pipes, cigars, chewing tobacco, snuff, etc.) on a regular basis?"

"I talk with my patients/clients about their smoking and/or use of other tobacco products such as pipes, cigars, chewing tobacco, snuff, etc."

Half (50.0%) of the provider respondents indicated that at least 25% of their patients indicated that they use tobacco products (Figure 56). A majority of these providers (75.0%) indicated that they always or nearly always have a discussion with their patients about the dangers of tobacco use (Figure 57), which is considerably higher than with the proportion of providers who indicated that they always or nearly always discuss physical activity (52.0%) or nutrition (50.0%).

Figure 56: Patient Tobacco Use

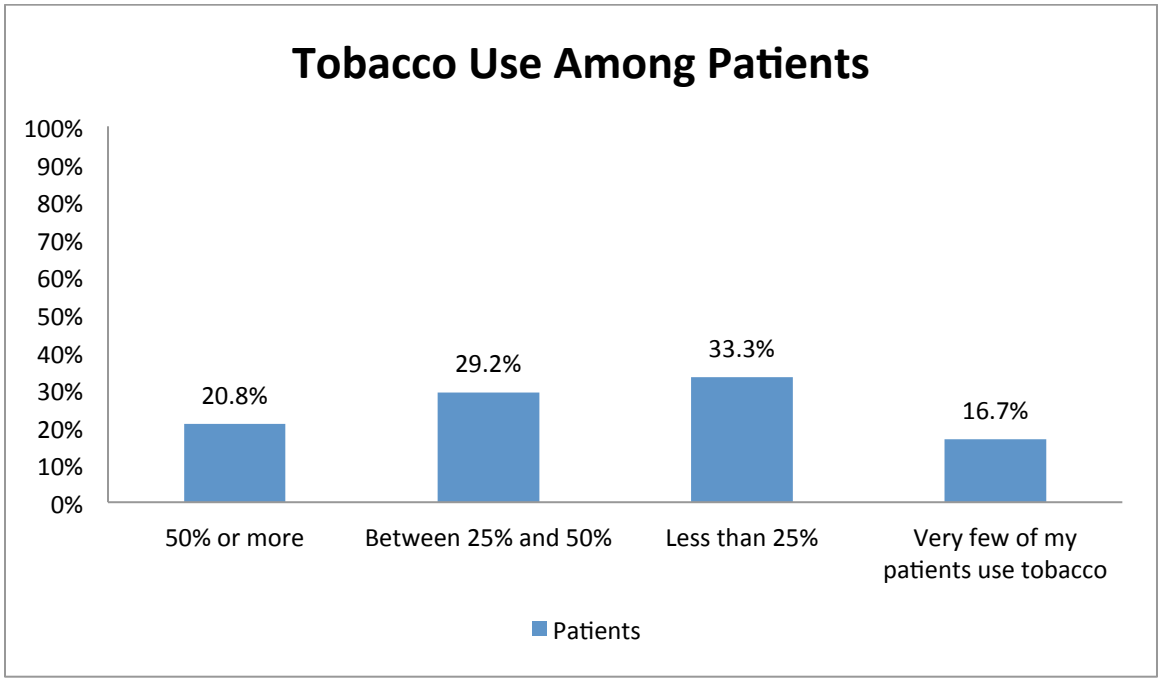
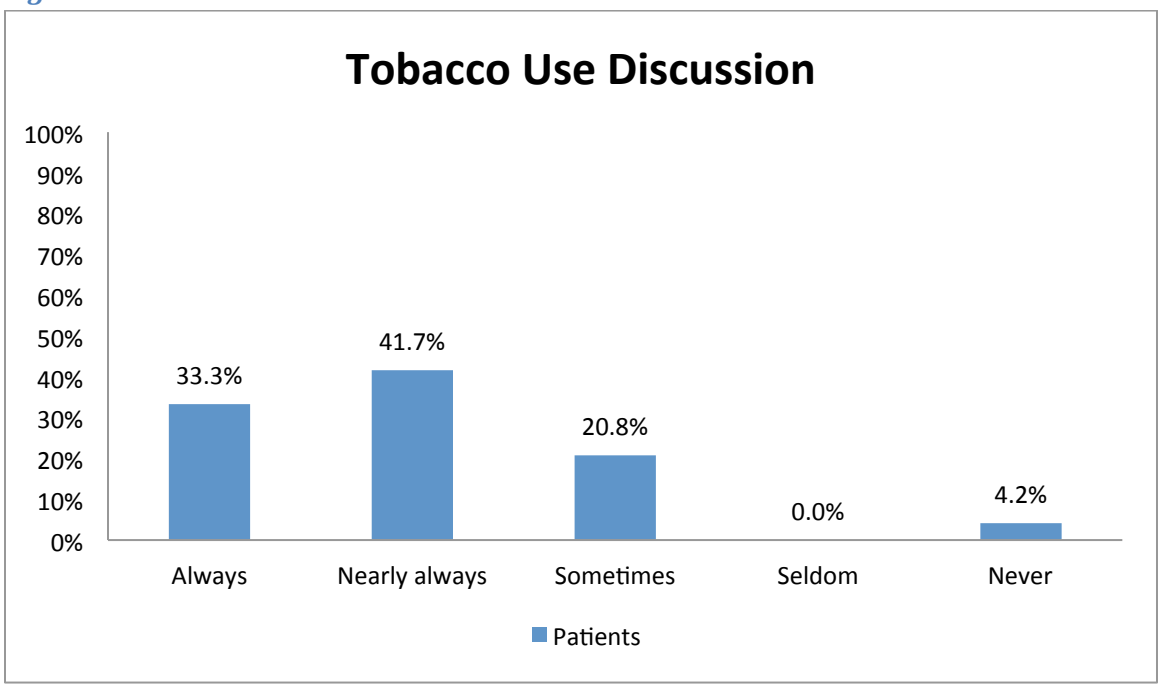


Figure 57: Tobacco Use Discussion



Obesity

Survey questions:

"About what percent of your patients/clients are obese?"

"I always discuss the dangers of obesity and the importance of losing weight with my obese and morbidly obese patients/clients."

The majority of provider respondents (88.0%) indicated that at least 25% of their patients were obese (Figure 58). Nearly three-quarters of provider respondents (70.9%) indicated that they strongly agree or agree that they always discuss the dangers of obesity and the importance of losing weight with their obese or morbidly obese patients (Figure 59).

Figure 58: Patient Obesity

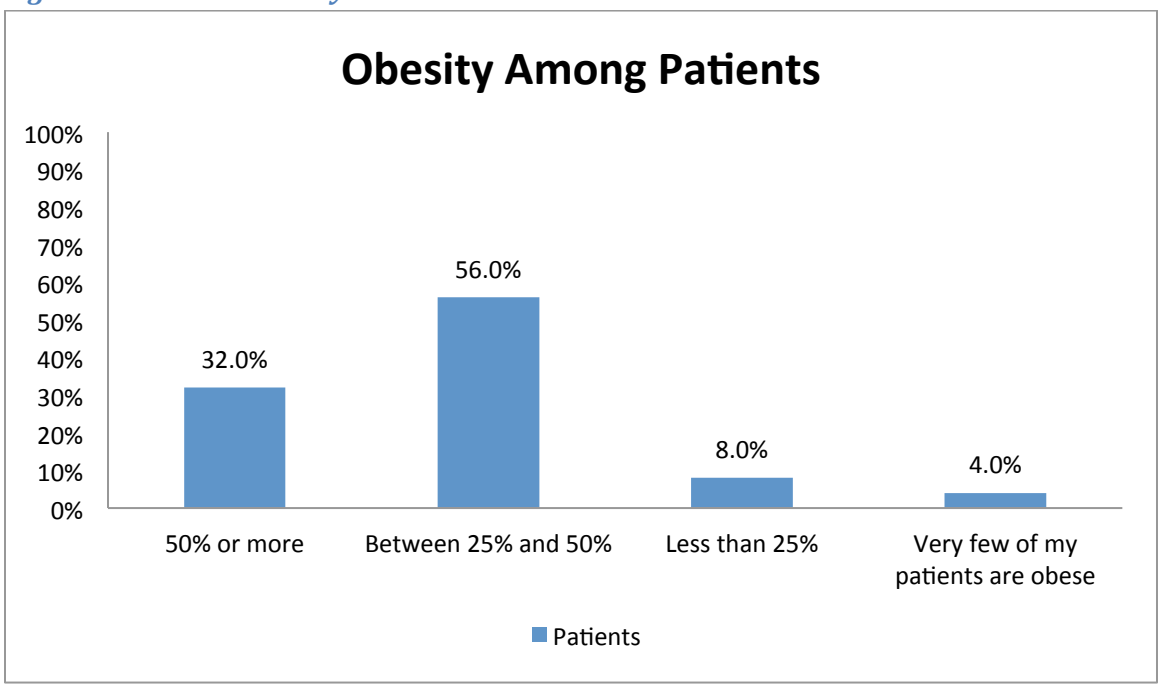
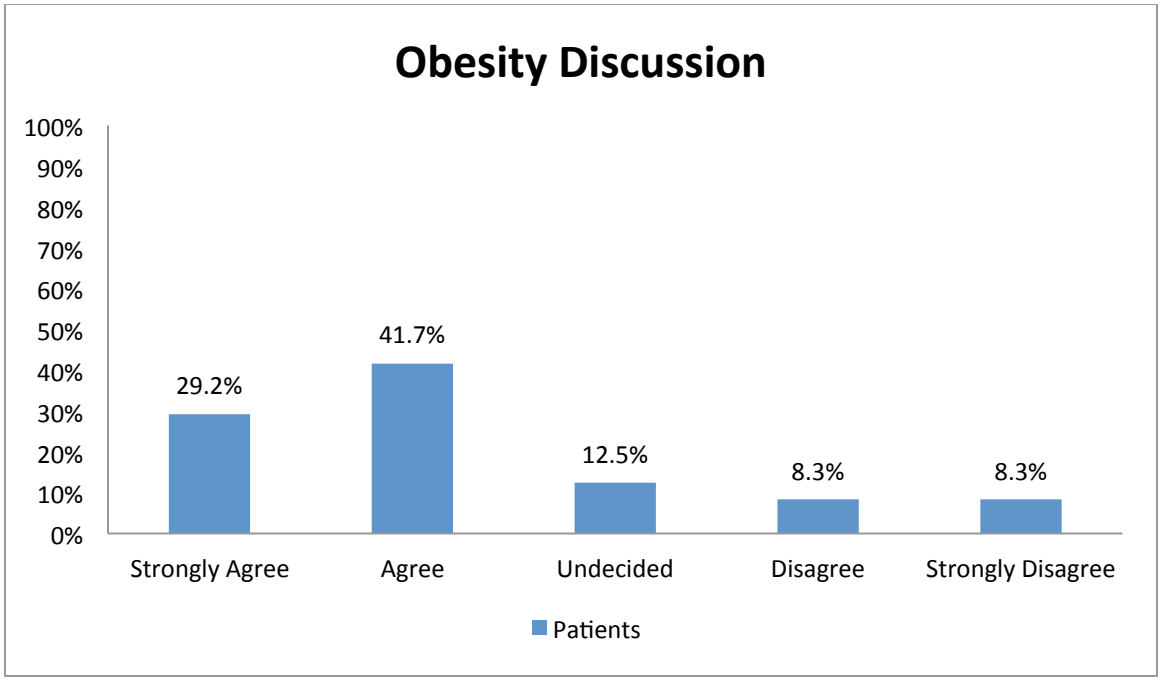


Figure 59: Obesity Discussion



Section VII: Community Health Status

Key Community Health Problems

Survey question (responses are in no particular order):

"In general, what do you consider to be the largest one or two key health problems for the community that you serve?"

- 1) Drug use (prescription pills); 2) nutrition; 3) sex education
- 1) Lack of medical insurance for many people; 2) decrease in primary care providers
- 1)Obesity; 2) substance abuse (in particular RX drug misuse)
- 1) People not going to Dr.'s for issues they may be having. They just go to ER because at Dr. you have to pay up front and at ER you don't. I see people that go to ER 3-4 times per month; 2) Meth epidemic; 3) cost of meds
- The economic aspect of health care – Ex: No insurance, large deductible, etc. impacts the patients compliance
- A large proportion of uninsured and/or those with Medicaid who can't find a local provider
- Access to primary care
- Cancer, diabetes, renal – see a lot of these in aging population
- 1) Chronic pain; 2) narcotics/substance abuse; 3) psychiatric/social service issues
- 1) Depression/anxiety in youth; 2) Also lack of adequate rest
- Education and health resources for uninsured
- Headache/stomach ache
- I find that due to payment being due up front, many residents can't utilize "convenient care" services and unnecessarily utilize the ER when it isn't an emergent situation

- 1) Increase doctor shortage/lack of availability; 2) primary care physicians overtaxed with excessive record keeping/paper work; 3) lack of physician satisfaction in care providing
- Insurance coverage which prevents patients from seeking healthcare if they have none or have large deductible
- 1) Lack of health insurance for marginal incomes and abuse of Medicaid in those that have it; 2) Lack of physician coverage after office hours forces ER abuse
- Lack of insurance and primary care M.D.'s
- Mental illness and obesity
- Obesity/diabetes
- Obesity and osteoarthritis
- Obesity, Type II DM, and HBP
- 1) One key health problem is COPD, even at young age and the inability or unwillingness to discontinue smoking; 2) also seems like increased demented/Alzheimer's patients are more common
- For the population my agency serves – fall risk and isolation
- Quick or convenient type clinic that has extended hours is needed, parents sometimes cannot get appointments in a timely fashion
- Smoking, obesity
- Substance use/abuse and mental health issues
- 1) Their parents are drug users; 2) childhood obesity
- 1) Uninsured patients; 2) inadequate EMR's; 3) too much govt. red tape; 4) no national data system to access patient records
- 1) Uninsured patients' 2) treating illness "late in the game"

Table 18: Key Community Health Problems Summary

Category	Number of Mentions
Healthcare Cost/Access to Care/No Insurance	14
Nutrition/Obesity	9
Chronic disease	6
Drug use	5
Mental Health	4
ER visits	2
Smoking	2
Accidents	1
Acute disease	1
Adequate rest	1
Sex education	1

Health Care Needs of Low Income, Working Poor, and Uninsured

Survey question (responses are in no particular order):

"Focusing on the low income, working poor, or uninsured people in the community, in your opinion, what can the health care system do specifically to better meet their health care needs?"

- 1) Analyze how the population mentioned above fell into this category – then the problem might be better addressed; 2) provide insurance for all but certain conditions – like smoking, obesity, etc.
- 1) Provide health insurance like Medicaid does but have patients pay a small copay to avoid abuse; 2) have higher copays for those who smoke
- Educate and possible use of convenient care vs. ER misuse. Families I work with generally do not plan ahead to see a Dr. during general office hours
- Education, quicker Medicaid process
- Education, screening, and more education
- Education/information about illnesses, clinic with sliding scale, clinic to serve Spanish population

- Either find more providers somehow, or convince those already participating to enlarge their patients
- Find alternative to ER for primary care
- Free clinic 1X per (week or month) – wellness type of facility – free immunizations/treatment, use as benevolent service to community
- Have a NP paid by hospital to see clients and base payments on income base. Also they cannot afford to pay for their prescriptions, even people with insurance the cost is too high
- Have quick care clinics with regular hours and extend to include weekend hours available for clients so they do not have to miss work for Dr.'s appointments
- I don't know
- I think access to care here is a good one, cannot be an all-knowing, all-seeing paternal figure to assume responsibilities one should take upon themselves for both themselves and their children
- 1) Increase productive preventive medicine program including health and dieting choices; 2) proactive health decreasing
- Patient-centered medical home that is strongly tied to the specialist/professionals that can address issues in number 1 (pain specialist, psychiatrist, social worker). This should be ideally within access right here
- Pay for primary care and penalize for unhealthy behavior
- 1) Provide a walk-in clinic; 2) increase education to low income about health needs; 3) increase local availability of mental health services
- Provide access to health care to low income, working poor, or uninsured people in addition to the ER
- Provide wellness and healthcare for uninsured poor, easy access, free
- Solicit grants from government to cover their needs

- Students do not pay for my services
- That group of consumers of healthcare should have accountability for their wellness and health. The GSH clinic is a great start for those without insurance. Those on Medicaid need to use a clinic setup for non-emergent care and not run to the hospital.
- Very difficult to help families due to HIPPA or due to state sending all calls to state level and unable to talk with local case workers in our county
- We offer free to these groups, they just seem to lock on to emergent room care
- Working with resources to increase their skills and find jobs that have insurance. Also empower and educate the people for improved skills and knowledge

Table 19: Health Care Needs of Low Income, Working Poor, and Uninsured Summary

Category	Number of Mentions
Provide insurance/Improved access to care	17
Education	7
Exclude lifestyle related conditions like smoking	3
Assist in finding jobs that have insurance	1
Decrease government involvement	1
Determine how this population became low income, working poor, or uninsured	1
Increase accountability	1
Money from the government	1
Screening services	1
Service to non-English speaking individuals	1

Organizations Meeting the Specific Health Needs Well

Survey question (responses are in no particular order):

"What are the particular organizations or programs in your area that seem to be doing their job well in meeting the specific health needs in your community? Please list any specific examples of these types of organizations and why you think they have been successful."

- 1) County health department – great immunization program; 2) hospitals that provide health screenings
- 1) County health dept. for immunizations paid by the state; 2) mental health care programs that have different pay scales; 3) free mammograms, health care screenings offered by hospitals/organizations
- 1) Outpatient services that come from "the willows" to do on site therapy appointments with adolescents works well; 2) community health: provides resources to schools for education and health screenings
- 1) Salvation army; 2) Good Samaritan Hospital health screening clinics that are free
- Active primary care clinic for uninsured
- Community health clinic
- 1) Daviess Co. family YMCA – at reasonable cost they provide a good range of affordable exercise options; RSVP and senior and family services – good variety of service to elderly; 2) Daviess Co. health dept. – they are expanding and increasing service to low income
- 1) Echo clinics in Evansville; 2) primary care in Vincennes
- GSH Community health programs
- GSH helps with free screenings for HBP, CHF, lab testing for cholesterol

- Health department, pregnancy care center, Daviess county family nutrition program (Purdue Ext.)
- 1) Health Dept. – provide childhood immunizations, also free kits for treating head lice; 2) health connections – provide low cost birth control services
- I think competing clinics are able to do above
- Keep Vincennes Rolling
- Mental health
- 1) PACE-Head Start – immunization, health screenings; 2) Senior center-ADS – (Do a lot of pre-screening with help of hospital) – keep RN on staff, do B/P, O2 Sat, glucose monitoring, TB, pneumonia, flu vaccine, keeps elderly healthy and prevents readmits
- Primary care clinic
- The GSH clinic is appreciated by many, people without insurance need an affordable option
- The primary care clinic has done very well, serves uninsured and those without a doctor. The transitional program and passport to health with GSH has been an asset too
- Uncertain; LAM (Life After Meth) has been fairly successful
- 1) Vista Care Hospice – does crisis care (24 hour care when client is in final stages); 2) Good Sam home health – helps prevent fee occurrence to hospital; 3) transitional nurse – helps reduce readmissions
- 1) YMCA exercise and after school program; 2) LAM – helps those who want help

Table 20: Organizations Meeting Health Needs Well Summary

Organization	Number of Mentions
Good Samaritan Community Health	8
County Health Department	5
Good Samaritan Primary Care Clinic	5
Good Samaritan Hospital Mental Health	3
Good Samaritan Hospital	3
LAM (Life After Meth)	2
YMCA	2
Competing clinics	1
Daviess County family nutrition program	1
Echo clinics in Evansville	1
Health Connections	1
Keep Vincennes Rolling	1
PACE-Head Start	1
Pregnancy care center	1
Salvation Army	1
Vista Care Hospice	1

Organizations Needing Improvement to Better Meet the Specific Health Needs of the Community

Survey question (responses are in no particular order):

"What are the particular organizations or programs in your area that have the potential for increasing or improving their health care service to the community? Please list any specific examples of these types of organizations and any specific suggestions you have on what they can do to improve their programs"

- 1) Local urgent care clinic would be nice for families that struggle with transportation to Vincennes; 2) GSH community health – provides several screenings for health care services
- Don't know the specifics
- Good Sam Hospice – quicker response from a nurse when called. Continuous care when client is in last stage of dying

- Having a Geriatric Behavioral Unit meeting the needs of baby boomers and the increased demented/Alzheimer's patients
- Health Dept.
- Home health coverage could provide better information to their clients about their health problems
- MHC could use more group home beds for chronic mentally ill who end up being admitted over and over again
- 1) Need more Medicaid or low income resources for dental care for youth; 2) would be great to see YMCA have an outreach for the area for our youth and families to increase fitness
- Needs more wellness, education, and accountability
- Physician extenders – that can provide education, screening, and support
- Public health dept. – increase services for needy like lead testing, STD clinic, etc.
- 1) Samaritan center and Daviess Co hospital need to increase mental health services available in Daviess Co, particularly for children, teens, and adults; 2) Daviess community hospital needs walk-in clinic (not just a quick-care clinic) for low income patients
- See 2 above
- Sr. center with nurse on staff – clients can be monitored regularly, assist with meds and appointments (Call Dr. at first sign of problem), keep wellness checkups, help to prevent readmission after hospital stay
- There is a lack of communication between the various organizations that provide health care services to individuals. We need to enhance partnerships and communications to better serve the entire community.

Table 21: Organizations Needing Improvements Summary

Organization	Number of Mentions
Good Samaritan Hospital	3
Samaritan Center	3
Health Department	2
Daviess County Hospital	2
Home Health	1
Lack of communication between organizations	1
Local Urgent Care	1
Medicaid	1
Physician Extenders	1
Senior Center	1
Wellness education	1
YMCA	1

Screenings

Survey questions:

"Most of the patients/clients that I see keep up-to-date on their colon cancer screening tests (sigmoidoscopy, colonoscopy, etc.)."

"Most of the patients/clients that I see keep up-to-date on their prostate cancer screening tests (PSA test, digital rectal exam)."

"Most of the patients/clients that I see keep up-to-date on their Pap test for cervical cancer screening."

"Most of the patients/clients that I see keep up-to-date on their mammograms for breast cancer screening."

Providers were asked if they thought that most of their patients kept up-to-date with certain cancer screening tests (colon, prostate, cervical, and breast). Less than one-half of the providers responded that they strongly agreed or agreed their patients were up-to-date with three of the four tests (Colon: 38.9% (Figure 60); Prostate: 41.2% (Figure 61); and Cervical: 42.1% (Figure 62)). Only for breast cancer did the provider respondents indicate that they strongly agree or agree that most of their patients kept up to date with the screening test (55.5%) (Figure 63). The reason for this discrepancy between colon, prostate, and cervical cancer screening tests and breast cancer screening tests may be due to the invasive nature of the screening procedures.

Figure 60: Most Patients are Up-to-date with Colon Cancer Screening

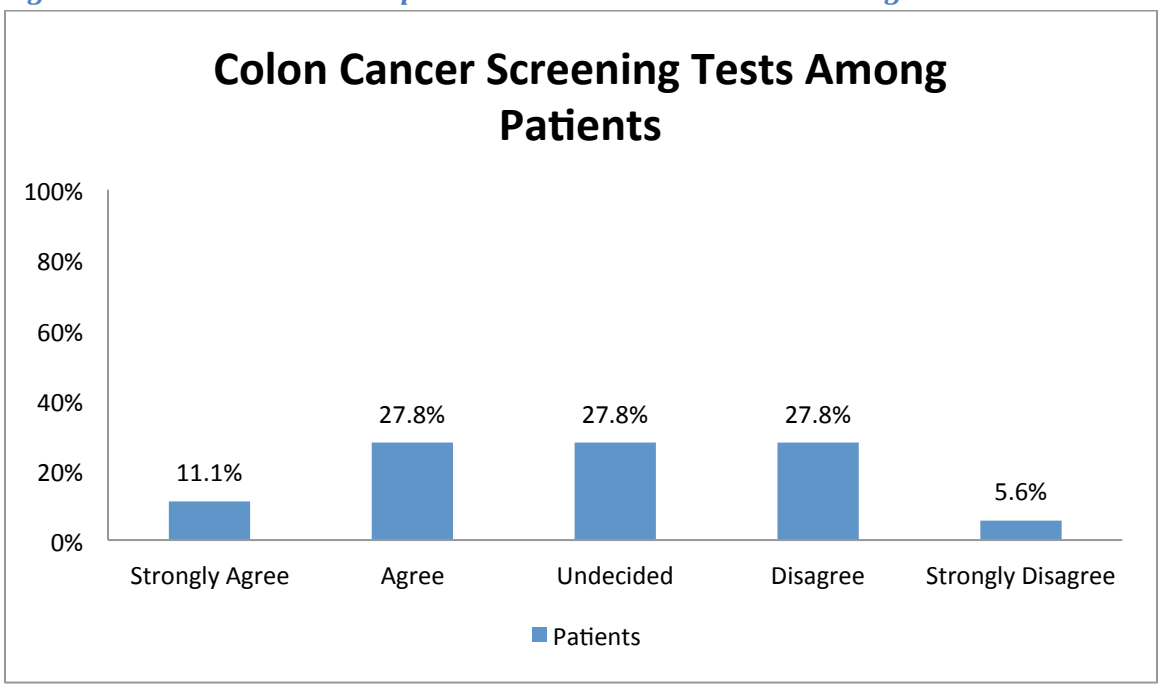


Figure 61: Most Patients are Up-to-date with Prostate Cancer Screening

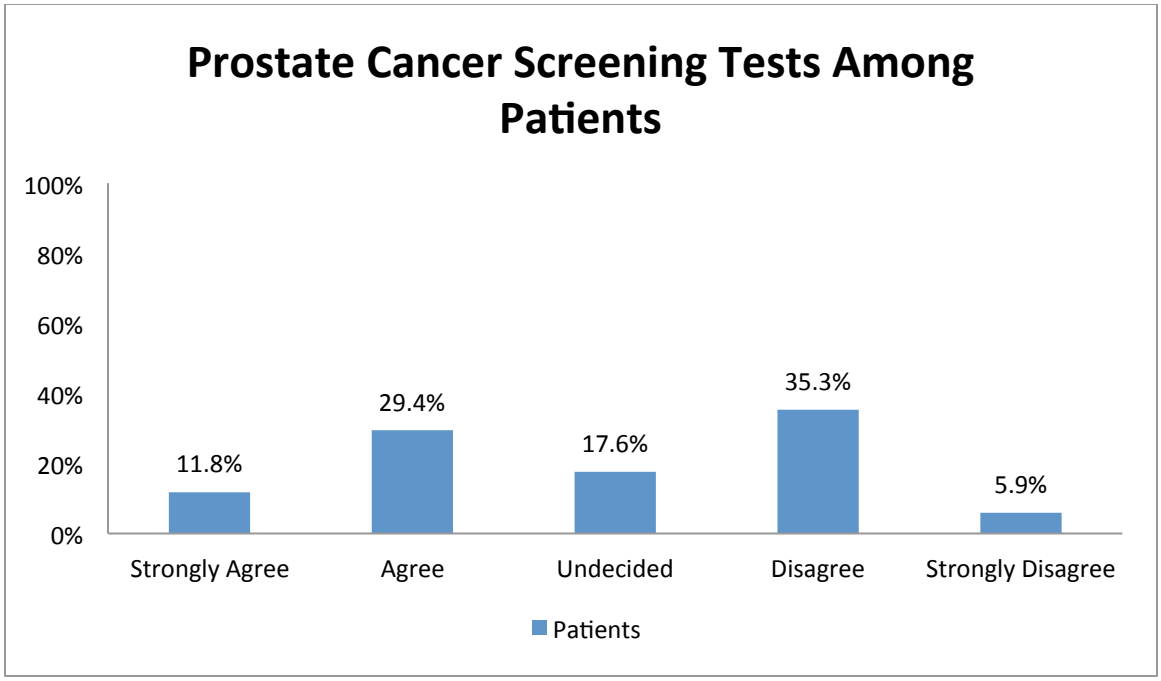


Figure 62: Most Patients are Up-to-date with Cervical Cancer Screening

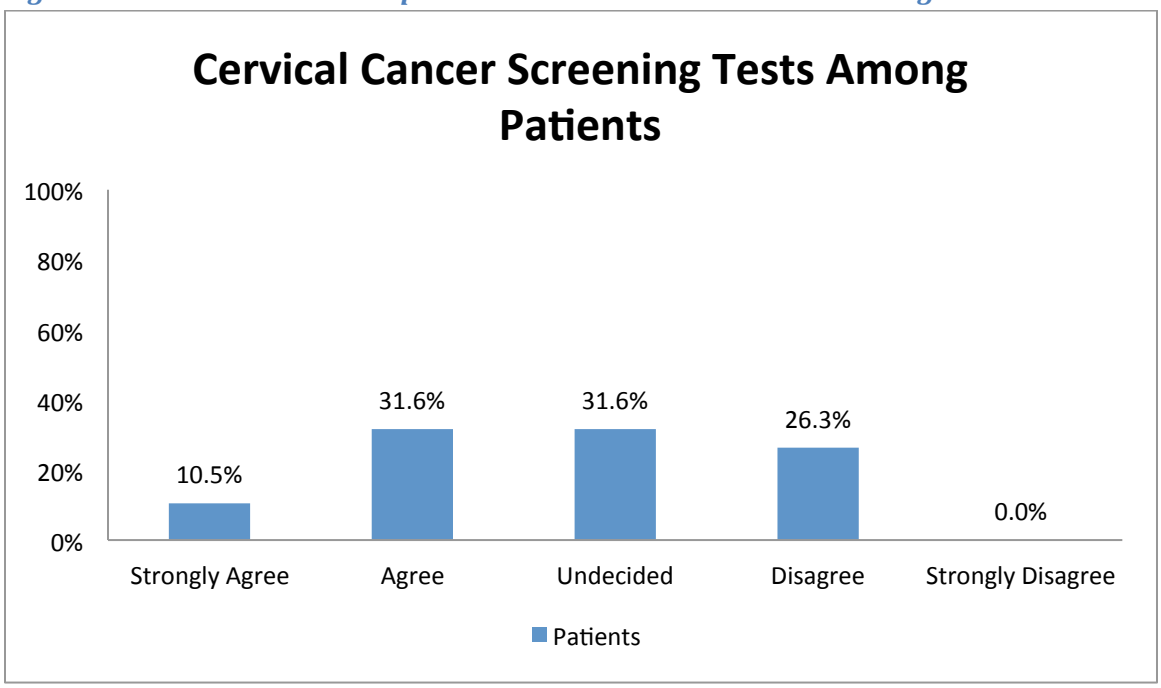
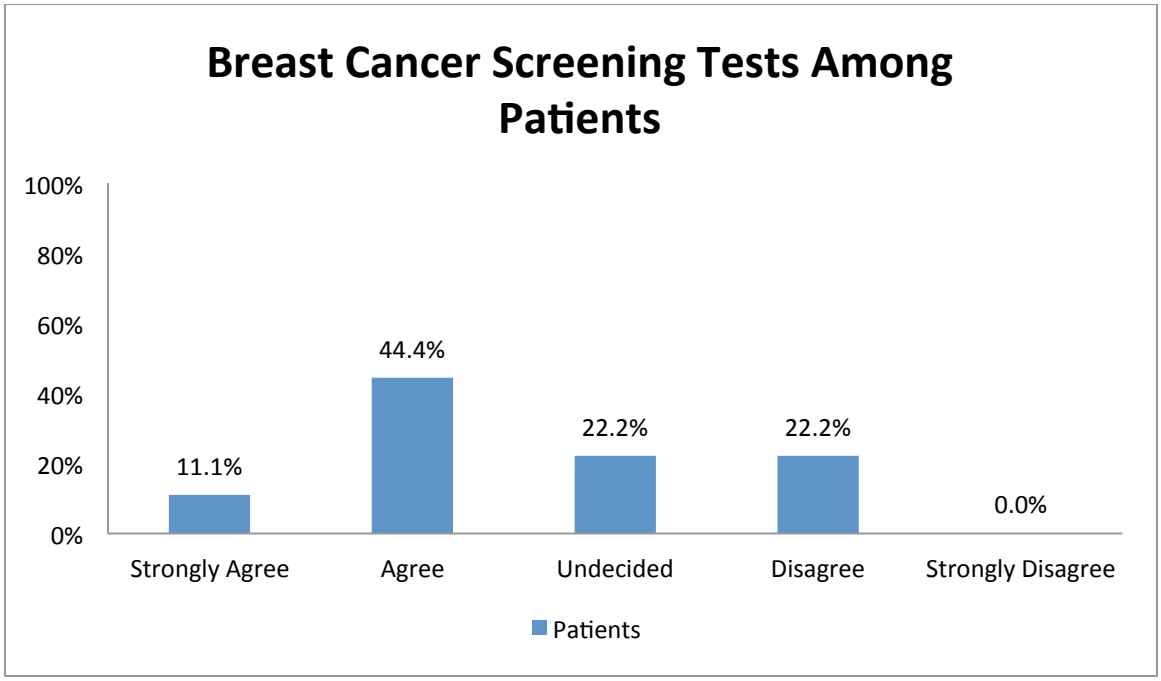


Figure 63: Most Patients are Up-to-date with Breast Cancer Screening



Provider Survey Additional Comments

- I work primarily as a school nurse (Jr./Sr. high school)
- T.V. ads are quite effective in educating and reminding patients - especially the one showing patients who had bypass or lost their limbs or have artificial voice box. More ads should be on obesity, exercise, lifestyle changes, diet, even if they are just 30 seconds or 1 minute
- We also need a dedicated "intake" specifically to assume the "plugging" of new patient information into EMR charts because building new EMR from old records is taxing on any given day

CONCLUSIONS

Overall, the health needs identified included many unhealthy lifestyle behaviors, such as lack of adequate physical activity, not always wearing seatbelts, not always using sunscreen, and high tobacco use, as well as lack of use of preventive care, such as cancer screening and immunizations for seasonal flu. The unhealthy lifestyles are linked to higher rates of obesity, hypertension and dyslipidemia. These factors are also linked to higher rates of diabetes and higher death rates for numerous conditions linked to these factors, such as heart disease, cancer, strokes, diabetes, lung disease, kidney disease and accidents. In addition a number of mental health needs were identified including high rates of depression and anxiety, not getting social and emotional support needed, perceived lower health status, and less satisfaction with their lives. The health care providers often do not discuss healthy behaviors with their patients and often are unaware of whether the patients are up-to-date with the recommended cancer screenings. Other needs included concerns over drug use and barriers to access primary care and mental health services.

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APPENDICES

Appendix A: Community Survey Instrument

GOOD SAMARITAN HOSPITAL

Community Health Assessment

Instructions: Please answer these questions as completely as you can. Print your answers or carefully fill in the correct circles in the spaces provided. Your answers will help us serve you and our community better. Completing this survey is voluntary, but your opinions are very important to us. Your answers will be kept confidential.

Section I: Health Status Information

1. Would you say that in general your health is...?

   ○ Excellent ○ Very Good ○ Good ○ Fair ○ Poor

2. During the past 12 months, have you had a seasonal flu shot (a flu shot is an influenza vaccine injected into your arm) or nasal mist flu vaccine?

   ○ Yes ○ No

3. For the following table, please indicate if and/or when you completed the health screening test.

HAVE YOU EVER HAD A...	No, I have never had this test	Yes, I have this test performed annually	Yes, within the past 12 months, but not annually	Yes, within the past 1-2 years	Yes, within the past 2-3 years	Yes, within the past 3-4 years	Yes, within the past 4-5 years	Yes, 5 or more years ago
MEN AND WOMEN'S HEALTH								
Blood stool test using a home kit (a special kit used at home to determine if the stool contains blood)	○	○	○	○	○	○	○	○
Sigmoidoscopy (a flexible tube is inserted into the rectum to look for signs of cancer or other health problems)	○	○	○	○	○	○	○	○
Colonoscopy (similar to sigmoidoscopy, but uses longer tube, and you are usually given a medication through a needle in your arm to make you sleepy and told to have someone else drive you home after the test)	○	○	○	○	○	○	○	○
MEN ONLY								
PSA test (blood test used to check men for prostate cancer)	○	○	○	○	○	○	○	○
Digital rectal exam (exam in which a doctor, nurse, or other health professional places a gloved finger into the rectum to feel the size, shape, and hardness of the prostate gland)	○	○	○	○	○	○	○	○
WOMEN ONLY								
Mammogram (x-ray of each breast to look for breast cancer)	○	○	○	○	○	○	○	○
Pap test (test for cancer of the cervix)	○	○	○	○	○	○	○	○

4. WOMEN ONLY: Please indicate if you have had a.... ☐ Complete hysterectomy ☐ Double masectomy

Please provide any additional comments:

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Section II: Health Behaviors

5. When you are at work (if employed or self-employed) which of the following best describes what you do?
   - O Mostly sitting or standing
   - O Mostly heavy labor or physically demaning work
   - O Mostly Walking
   - O I do not work outside the home

6. During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?
   - O Yes (continue with #7)
   - O No (go to #9)

7. Over the past month, approximately how many days per week did you participate in physical activities or exercises?
   - O 1 day per week
   - O 2-3 days per week
   - O 4-5 days per week
   - O 6-7 days per week

8. Over the past month on days when you were participating in physical activities or exercises, approximately how much time on average did you spend on these activities each time?
   - O 15 minutes or less
   - O 15-30 minutes
   - O 30-60 minutes
   - O More than 60 minutes

9. Over the past month, approximately how many servings of fruit did you eat per day on average (a serving is equal to approximately a half cup)? Include fresh, frozen, or canned fruit in your estimate.
   - O 0 servings
   - O 1-2 servings
   - O 3-4 servings
   - O 5 or more servings

10. Over the past month, approximately how many servings of vegetables did you eat per day on average (a serving is equal to approximately a half cup)? Include beans, dark green vegetables, orange colored vegetables, and other vegetables such as tomatoes, eggplant, peas, lettuce, cabbage, and white potatoes in your estimate.
    - O 0 servings
    - O 1-2 servings
    - O 3-4 servings
    - O 5 or more servings

11. Has a doctor or other health professional told you that you had any of the following: (check all that apply)
    - ☐ Angina or coronary heart disease
    - ☐ Asthma
    - ☐ Arthritis/Rheumatism
    - ☐ Anxiety
    - ☐ Depression
    - ☐ Cancer
    - ☐ Diabetes
    - ☐ High blood pressure
    - ☐ High cholesterol
    - ☐ Heart attack
    - ☐ Kidney disease
    - ☐ Lung disease such as emphysema or COPD
    - ☐ Obesity
    - ☐ Osteoporosis
    - ☐ Stroke
    - ☐ Other (Please list any chronic disease or condition not mentioned in the list)_____

12. About how much do you weigh without shoes? ☐☐☐ pounds

13. About how tall are you without shoes? ☐ feet ☐☐ inches

14. Have you smoked at least 100 cigarettes in your entire life? NOTE: 5 packs = 100 cigarettes
    - O Yes
    - O No

15. Do you now smoke cigarettes every day, some days, or not at all?
    - O Every day
    - O Some days
    - O Not at all

16. Do you now smoke a pipe, cigars or other tobacco products every day, some days, or not at all?
    - O Every day
    - O Some days
    - O Not at all

17. Do you currently use chewing tobacco, snuff, or snus (Swedish for snuff) every day, some days, or not at all?
    - O Every day
    - O Some days
    - O Not at all

18. Do you perceive drug abuse to be a major problem in your community?
    - O Yes
    - O No

19. In the past 12 months, how often did you use sunscreen when you knew you woud be out in the sun for an extended period of time (an hour or more)?
    - O Every time
    - O Most times
    - O About half of the time
    - O Rarely
    - O Never

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20. In the past 12 months, how many times did you have a red OR painful sunburn that lasted a day or more?

O Zero O One O Two O Three O Four O Five or more

21. During the past month, how often did you get enough rest or sleep?

O Always O Nearly always O Sometimes O Seldom O Never

22. How often do you use seatbelts when you drive or ride in a car? Would you say...

O Always O Nearly always O Sometimes O Seldom O Never O Never drive or ride in a car

Section III: Emotional Support and Life Satisfaction

23. How often do you get the social and emotional support you need? (Please include support from any source)

O Always O Usually O Sometimes O Rarely O Never

24. In general, how satisfied are you with your life?

O Very Satisfied O Satisfied O Dissatisfied O Very dissatisfied

25. During the past 12 months, have you experienced confusion or memory loss that is happening more often or is getting worse?

O Yes O No

Section IV: Health Care Access

26. Do you have any kind of health care insurance coverage, including commercial health insurance, prepaid plans such as HMOs, or government plans such as Medicare?

O Yes (go to #27) O No (continue with #26a)

26a. If no, please indicate your reason for not having any kind of health care coverage.

O Employer does not offer health care coverage and can't afford personal policy
O Employer offers health care coverage, but can't afford the employee cost
O Can't afford a personal policy (if self-employed or not employed)
O Other (please specify):_____

27. Do you take any presription medications on a routine basis (Ex: blood pressure medication, diabetic medication, etc.)?

O Yes (go to #28) O No (go to #29)

28. Do you always take your routine prescrption medications as they are prescribed to you?

O Yes (go to #29) O No (go to #28a)

28a. If no, please indicate your reason for not taking your prescription medications as they are indicated:

O Prescription medications are expensive and I do not always have the money to purchase them
O I am trying to make lifestyle changes so I do not have to take these medications anymore
O No transportation or limited transportation to get to the pharmacy
O I think natural supplements and vitamins work as well as what my doctor prescribed
O Other (please specify):_____

29. Do you recall hearing or reading about Good Samaritan Hospital free health screening programs?

O Yes (continue with #29a) O No (go to #30)

29a. If yes, please indicate how you heard or where you read about the Good Samaritan Hospital free health screenings health program. (check all that apply)

☐ Local newspaper
☐ Local news broadcast
☐ Local radio broadcast
☐ Internet/website
☐ Health Connections - Good Samaritan Health Magazine
☐ Friends or family members
☐ Facebook
☐ Other (please specify):_____

29b. Have you participated in the Good Samaritan Hospital free health screening programs?

O Yes O No

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30. Do you know about the Good Samaritan Hospital Primary Care Clinic (low cost primary care health clinic)?

O Yes (continue with #30a) O No (go to #31)

30a. Have you received care at the Good Samaritan Hospital Primary Care Clinic?

O Yes O No

31. Sometimes people have difficulty seeing a doctor regularly or when needed. Have you experienced any of the follow reasons for not seeing a doctor or other health care provider during the past year? (check all that apply)

☐ I had no problems seeing a doctor or other health care provider during the past year
☐ I do not have a personal doctor or health care provider
☐ I couldn't get an appointment because doctors are not taking new patients
☐ It was difficult to get to a physician's office (not open when you could go, etc.)
☐ I couldn't pay the costs associated with medical care (can't afford health care services, services not covered by insurance)
☐ I didn't have transportation
☐ I couldn't get childcare
☐ I have difficulty with the English language
☐ Other: _____

Section V: Demographic Information

32. What county do you live in? _____

33. What year were you born? ☐☐☐☐

34. Are you...? O Male O Female

35. Are you...? O Married O Divorced O Widowed O Separated O Never married O Member of an unmarried couple

36. What is the highest grade or year of school you completed?

O Never attended school or only attended kindergarten
O Grades 1- 8 (Elementary)
O Grades 9-11 (Some high school)
O Grade 12 or GED (High school graduate)
O College 1 to 3 years (Some college or technical school)
O College 4 years or more (College graduate)

37. Are you currently...?

O Employed for wages
O Self-employed
O A homemaker
O Retired
O Out of work for less than 1 year
O Out of work for more than 1 year
O Unable to work
O A Student

38. Is your annual household income from all sources...?

O Less than $10,000
O 10,000 - $14,999
O $15,000 - $19,999
O $20,000-$24,999
O $25,000 -$34,999
O $35,000 - $49,999
O $50,000 - $74,999
O $75,000 – 100,000
O More than $100,000

39. How many children less than 18 years of age live in your household? ☐☐ Number of children O None

40. How many adults 18 years of age and older live in your household? ☐☐ Number of adults O None

41. Are you Hispanic or Latino? O Yes O No

42. Which of the following would you say best represents your race?

O White
O Black or African American
O Asian
O Native Hawaiian or other Pacific Islander
O American Indian or Alaskan Native
O Other: (please specify) _____

Please provide any additional comments:

Thank you very much for completing this health questionnaire!

Appendix B: Community Survey Cover Letter

February 27, 2013

Dear XXXXXX County Resident,

Good Samaritan Hospital values your health and quality of life. In order to better serve you and others in our community, we have teamed up with the Indiana University Fairbanks School and Public Health and the School of Medicine Department of Family Medicine Bowen Research Center to conduct a survey to learn more about your health care needs.

Your responses will help Good Samaritan Hospital identify unmet needs in our community and work together with partnering agencies and groups to provide care and services to those in need.

Please complete and return your questionnaire in the postage paid envelope that has been provided for your convenience.

Your responses will be kept confidential. No individual responses will be identified and all data will be reported in an aggregate format.

Let's work together to create a healthier community. Thank you in advance for your participation in this survey.

Sincerely,

XXXXXXXXXXXXXXXXXXX

Appendix C: Healthcare Provider Survey Instrument

Provider Health Assessment

Instructions: Please answer these questions as completely as you can. Print your answers or carefully fill in the correct circles in the spaces provided. Your answers will help us serve the community better. Completing this survey is voluntary, but your opinions are very important to us. Your answers will be kept confidential.

Section I: Community Health Status Information

1. In general, what do you consider to be the largest one or two key health problems for the community that you serve?

2. Focusing on the low income, working poor, or uninsured people in the community, in your opinion, what can the health care system do specifically to better meet their health care needs?

3. What are the particular organizations or programs in your area that seem to be doing their job well in meeting the specific health needs in your community? Please list any specific examples of these types of organizations and why you think they have been successful.

4. What are the particular organizations or programs in your area that have the potential for increasing or improving their health care service to the community? Please list any specific examples of these types of organizations and any specific suggestions you have on what they can do to improve their programs.

Note: If you do not directly see patients/clients you may skip to question #16

5. Most of the patients/clients that I see keep up-to-date on their colon cancer screening tests (Sigmoidoscopy, Colonoscopy, Etc.).

   O Stongly Agree O Agree O Undecided O Disagree O Strongly Disagree

6. Most of the male patients/clients that I see keep up-to-date on their prostate cancer screening tests (PSA test and/or Digital Rectal Exam).

   O Stongly Agree O Agree O Undecided O Disagree O Strongly Disagree

7. Most of the female patients/clients that I see keep up-to-date with their Pap test for cervical cancer screening.

   O Stongly Agree O Agree O Undecided O Disagree O Strongly Disagree

8. Most of the female patients/clients that I see keep up-to-date with their Mammogram's for breast cancer screening.

   O Stongly Agree O Agree O Undecided O Disagree O Strongly Disagree

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Section II: Health Behaviors

9. About what percent of your patients/clients tell you they are physically active?
   - O More than 75%
   - O Between 50% and 75%
   - O Between 25% and 50%
   - O Less than 25%
   - O Very few of my patients are physically active

10. I talk with my patients/clients about their physical activity.
    O Always O Nearly always O Sometimes O Seldom O Never

11. I talk with my patients/clients about their nutrition, specifically the importance of eating fruits and vegetables.
    O Always O Nearly always O Sometimes O Seldom O Never

12. About what percent of your patients/clients smoke or use any other kind of tobacco product (including pipes, cigars, chewing tobacco, snuff, etc.) on a regular basis?
    O 50% or more O Between 25% and 50% O Less than 25% O Very few of my patients use tobacco

13. I talk with my patients/clients about their smoking and/or use of other tobacco products such as pipes, cigars, chewing tobacco, snuff, etc.
    O Always O Usually O Sometimes O Rarely O Never

14. About what percent of your patients/clients are obese?
    O 50% or more O Between 25% and 50% O Less than 25% O Very few of my patients are obese

15. I always discuss the dangers of obesity and the importance of losing weight with my obese and morbidly obese patients/clients.
    O Stongly Agree O Agree O Undecided O Disagree O Strongly Disagree

Section III: Demographic Information

16. What county do you live in? _____

17. What year were you born? ☐☐☐☐

18. Are you...? O Male O Female

19. Which of the following would you say best represents your race?
    - O White
    - O Black or African American
    - O Asian
    - O Native Hawaiian or other Pacific Islander
    - O American Indian or Alaskan Native
    - O Other: (please specify)_____

20. Are you Hispanic or Latino?
    O Yes O No

21. Which of the following categories best describes your role as a health care provider in the community?
    - O Physician (Specialty):_____
    - O Nurse Practitioner
    - O Registered Nurse (RN)
    - O Licensed Practical Nurse (LPN)
    - O Public Health Official
    - O Health Advocate (Health coalition leaders, organization director, etc.)
    - O Public Safety (Police, Fire, EMS, etc.)
    - O Education (e.g. School Nurse)
    - O Voluntary Organization (United Way, etc.)
    - O Social Worker/Case Worker
    - O Other: (please specify)_____

22. Please provide any additional comments:

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Appendix D: Healthcare Provider Cover Letter

February 27, 2013

Dear Health Provider,

Good Samaritan Hospital values the health and quality of life of all residents in the community, as I'm sure is true for you as well. In order to find ways to better serve the community, we have teamed up with the Indiana University Fairbanks School of Public Health and the School of Medicine Department of Family Medicine Bowen Research Center to conduct a survey of health care providers to learn more about your perspectives of the health care needs of our community.

Your responses will help Good Samaritan Hospital identify unmet needs in our community and work together with partnering agencies and groups to provide care and services to those in need.

Please complete and return your questionnaire in the postage paid envelope that has been provided for your convenience. An online version of the questionnaire is also available at the following link:

https://fammdata.iusm.iu.edu/presentation/lfserver/GSHProviderSurvey

Your responses will be kept confidential. No individual responses will be identified and all data will be reported in an aggregate format.

Let's work together to create a healthier community. Thank you in advance for your participation in this survey.

Sincerely,

XXXXXXXXXXXXXXXXXXXX

Appendix E: Data Definitions

Flu Vaccination

- BRFSS: all adults who had been vaccinated against the flu with either shot or nasal mist.

gFOBT

- Survey Respondents: All adults, aged 50 or older, who ever had a blood stool test (those who indicated yes regardless of time).
- Survey Respondents/BRFSS: All adults, aged 50 or older, who had a blood test within the past 12 months (includes those who said "yes, within the past 12 months").

Sigmoidoscopy

- Survey Respondents: All adults, aged 50 orolder, who ever had a sigmoidoscopy (those who indicated yes regardless of time).
- Survey Respondents /BRFSS: All adults, aged 50 or older, who had a sigmoidoscopy within the past 5 years (includes those who said "yes, within the past 12 months", "yes, within the past 1-2 years", "yes, within the past 2-3 years", "yes within the past 3-4 years" and "yes, within the past 4-5 years"). The American Cancer Society recommends screenings every 5 years.

Colonoscopy

- Survey Respondents: All adults, aged 50 or older, who ever had a colonoscopy (those who indicated yes regardless of time).
- Survey Respondents /BRFSS: All adults, aged 50 or older, who had a colonoscopy within the past 5 years (includes those who said "yes, within the past 12 months", "yes, within the past 1-2 years", "yes, within the past 2-3 years", "yes within the past 3-4 years", and "yes, within the past 4-5 years"). The American Cancer Society recommends screenings every 10 years.

Sigmoidoscopy/Colonoscopy

- Survey Respondents: All adults, aged 50 or older, who had either a sigmoidoscopy or a colonoscopy, or both screening tests (those who indicated yes regardless of time).

Prostate Specific Antigen (PSA)

- Survey Respondents: Adult males, aged 50 or older, who ever had a PSA test (those who reported yes regardless of time).

Digital Rectal Exam

- Survey Respondents: Adult males, aged 50 or older, who ever had a digital rectal exam (those who reported yes regardless of time).

Mammogram

- Survey Respondents: Adult females, aged 40 or older (who never had a double mastectomy) ever had a mammogram (those who reported yes regardless of time).
- Survey Respondents: Female adults, aged 40 or older, (who never had a double mastectomy) who had a mammogram within the past 12 months (includes those who indicated "yes, within the past 12 months"). The American Cancer Society recommends annual mammograms.
- BRFSS: Female adults, aged 40 or older, who had a mammogram within the past 12 months (includes those who indicated "yes, within the past 12 months"). The American Cancer Society recommends annual mammograms.

Pap Test

- Survey Respondents: Adult females, who did not report having a complete hysterectomy, aged 21 or older who ever had a pap test (those who reported yes regardless of time).
- Survey Respondents /BRFSS: Female adults, who did not report having a complete hysterectomy, aged 21 or older who had a pap test within the past 12 months (includes those who indicated "yes, within the past 12 months"). The American Cancer Society recommends annual pap tests.

Moderate Physical Activity

- Survey Respondents: Adults who participated in physical activity during the past month, and reported participating in a moderate activity, at least five days per week for at least 30 minutes per session.
- CDC definition of moderate physical activity, moderate physical activity is 30 or more minutes of physical activity at a time for at least 5 days per week.

Vigorous Physical Activity

- Survey Respondents: Adults who participated in physical activity during the past month, and reported participating in a vigorous activity, at least three days per week for at least 20 minutes per session.
- CDC definition of vigorous physical activity, vigorous physical activity is 20 or more minutes of physical activity at a time for at least 3 days per week.

Physical Activity

- Survey Respondents: o Meets recommendation: adults who participated in at least moderate physical activity within the past month.
    - Insufficient physical activity: adults who participated in physical activity during the past month, but did not meet the recommendation.
    - No activity: adults who did not participate in physical activity during the past month.

Body Mass Index (BMI)

- Survey Respondents: weight in pounds by height in inches squared and multiplying by the conversion factor of 703. (BMI= weight (lb) / [height (in)]2 x 703).
    - Neither overweight nor obese: BMI of less than 25.
    - Overweight: BMI equal to or over 25, but less than 30.
    - Obese: BMI greater than or equal to 30.

Smoking Status

- Survey Respondents:
    - Current smokers are adults that smoked at least 100 cigarettes in their lifetime and now smoke some or every day.
    - Former smokers are adults who smoked at least 100 cigarettes in their lifetime, but do not currently smoke.
    - Never smoked: Adults who have not smoked 100 cigarettes in their lifetime.

Poverty Level

- Indiana/U.S.: a new variable was calculated using Census data to obtain Indiana and United States values.
- Survey Respondents: a new variable as computed using annual income and number of people in the household.
- http://www.familiesusa.org/resources/tools-for-advocates/guides/federal-poverty-guidelines.html