PHELPS COUNTY REGIONAL MEDICAL CENTER
1000 WEST TENTH STREET
ROLLA, MISSOURI 65401

Excellence in Health Care

Community Health Needs Assessment

An analysis of the needs of the communities that our hospital serves

PCRMC Planning and Decision Support

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Introduction

With the signing of The Patient Protection and Affordable Care Act in March 2010, several new requirements were instituted on hospitals to maintain their 501(c)(3) status. One of these requirements is the completion and distribution of a Community Health Needs Assessment (CHNA) once every three years effective for the hospital's taxable year after March 23, 2012 for the market area that the hospital serves. The following must be included in the CHNA:

1. A description of the community served by the hospital facility and how it was determined.

2. A description of the process and methods used to conduct the assessment, including:
   a. A description of the sources and dates of the data and other information used in the assessment.
   b. A description of any relevant information that was not available but would be useful (information gaps).
   c. A list of community organizations that collaborated on the CHNA.
   d. Disclosure of any third party that provided technical assistance on the CHNA.
   e. The analytical methods applied to identify community health needs.

3. A description of how the hospital organization considered or included information and data from individuals representing the broader interests of the community served by the hospital facility.

4. A prioritized description of all of the community health needs identified through the CHNA, as well as a description of the process and criteria used in prioritizing such health needs.

5. A description of the existing health care facilities, services and other resources within the community available to meet the community health needs identified through the CHNA.

In addition to these guidelines, the hospital must also develop an implementation plan and strategy to address the identified needs in the community as well as disseminate the information to the public.

To address the criteria listed above, the Department of Planning and Decision Support at Phelps County Regional Medical Center prepared the following Community Health Needs Assessment focusing on their service area of Phelps, Pulaski, Maries, Dent, Texas, Gasconade, and Crawford counties. Our approach to completing the CHNA for this area will be highlighted in the Methodology section which follows.

Methodology

Identifying Partners Representing Broad Interest of Community

The information included in the needs assessment was prepared by members of Planning and Decision Support at Phelps County Regional Medical Center through collaboration with The Community Partnership, The Phelps/Maries County Health Department, The Community Care Clinic, Pathways Community Behavioral Healthcare, Inc. and various other agencies. By pooling resources with these different organizations, we were able to obtain input representing the broad interest of the community that we serve.

Data Abstraction and Research

Many of the tables and figures in this community health needs assessment are the result of research from various online resources. The online resources include the Missouri Department of Health and Senior Services, the Missouri Hospital Association, County Health Rankings, the US Census Bureau, the Centers for Disease Control, and the Behavioral Risk Factor Surveillance System. Data was collected on Phelps County and the six counties that directly border it. Whenever possible, state and national measures were also provided for comparative purposes.

In order to receive input that represents the entire population in which we serve, PCRMC worked with other organizations to conduct two separate surveys and four community focus groups. The first round of surveys and the community focus groups were conducted in March 2012. The second round of surveys were distributed and analyzed in September 2012 through November 2012. Results of the surveys are contained within this report.

Prioritizing Health Needs in Community

The department of Planning and Decision Support's role in conducting this needs assessment was simply to provide relevant information that details the health status of Phelps County Regional Medical Center's service area. This information was distributed to the leadership team and Board of Directors of Phelps County Regional Medical Center in order to prioritize the health needs of the community.

Development of Strategy to Address Health Needs

In order to make use of the assessment information provided and to properly address the identified needs of our community, the leadership team of Phelps County Regional Medical Center and the hospital's Board of Trustees developed a strategy to address these issues. Details of this strategy can be found under the section of "PCRMC Strategies for Addressing Identified Services."

Distribution of CHNA

The results of the community health needs assessment will be made available to the public through the Phelps County Regional Medical website at pcrmc.com, presentations at various community meetings, and by providing paper copies per request. Any questions regarding the content of the community health needs assessment will be directed to the employees of the department of Planning and Decision Support at Phelps County Regional Medical Center where appropriate efforts will be made to provide answers.

Phelps County Regional Medical Center primarily serves the health needs of the people in the Phelps County community and surrounding counties. Phelps County is our primary market. The county is located in south-central Missouri midway between St. Louis and Springfield, Missouri on US Interstate 44 and is comprised of 674 square miles. Our secondary market consists of the counties of Maries (northwest), Gasconade (northeast), Crawford (east), Dent (southeast), Texas (south), and Pulaski (west).

Texas County is the largest county in Missouri, of which 1,178.54 square miles is land & 0.70 square miles is water. The next largest county in our service area is Dent County with an area of 753.54 square miles land & 0.97 square miles water. Crawford County has a total area of 742.52 square miles land & 1.27 square miles water. Pulaski County has a total area of 547.02 square miles of land & 4.39 square miles of water. Maries County has a total area of 527.73 square miles of land & 2.25 square miles of water. Gasconade County has a total area of 520.67 square miles of land & 5.43 square miles of water. See the sources section of this report for detailed communities and zip codes.
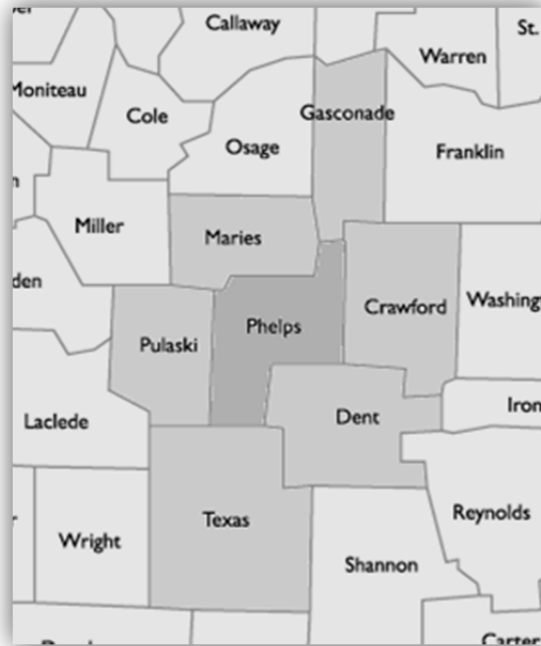
Population Projections

Having a clear understanding of the population of the communities that we serve is important in providing care that corresponds with the community needs. This section provides trends in demographic distribution of these communities. We will be referencing data from many sources and from multiple years. A summary of information available on these communities shows the changing demographics of the United States. A growing portion of the population has reached the age of 65 years. Statistical predictions of Phelps County population alone show that the growth rate in this age group will reach 92.9% by 2030. In addition, the populations of minorities will more than double. (Evans & Twohig, 2011)

Population and Gender & Other Social Characteristics

According to U.S. Census Bureau 2010 data, Phelps County has a population of 45,156. Of this population, 47.70% are female and 52.30% are male. Besides Phelps County, the population of our secondary areas of concern, as well as that of the state of Missouri, is as follows:

Table 1: Population and Gender Distribution 2010

Population & Gender Census	County							Missouri
	Crawford	Dent	Gasconade	Maries	Phelps	Pulaski	Texas	
Total Population	24,696	15,657	15,222	9,176	45,156	52,247	26,008	5,988,927
Female %	50.23%	50.40%	51.00%	49.46%	47.70%	44.12%	47.98%	51.00%
Male %	49.77%	49.60%	49.00%	50.54%	52.30%	55.88%	52.02%	49.00%
Population Density per square mile	33.26	20.78	29.24	17.39	67.11	95.56	22.07	

Source: (U.S.Census Bureau, 2013)

Figure 1: Gender Population by County 2010
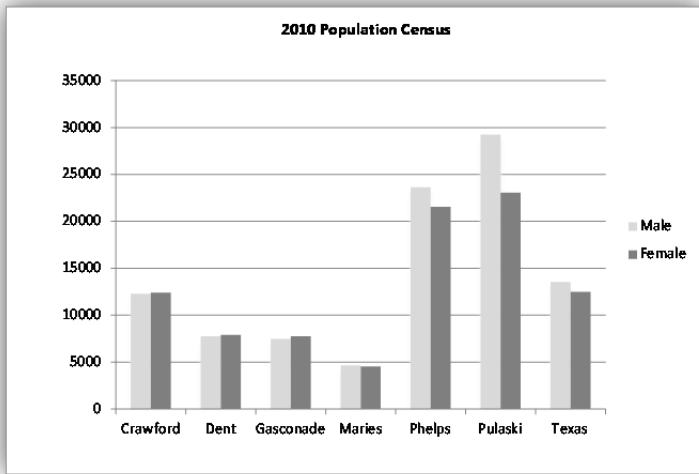
The populations of these seven counties make up 3.14 percent of the total residents of the state.

Source: (U.S.Census Bureau, 2013)

The county with the highest population density per square mile is Pulaski with 95.56 along with the largest average household size 2.58 & family size 3.22.

The lowest population density per square miles can be seen in Maries with 17.39.

2010 Population % by Gender

Male, 52.35%

Female, 47.65%
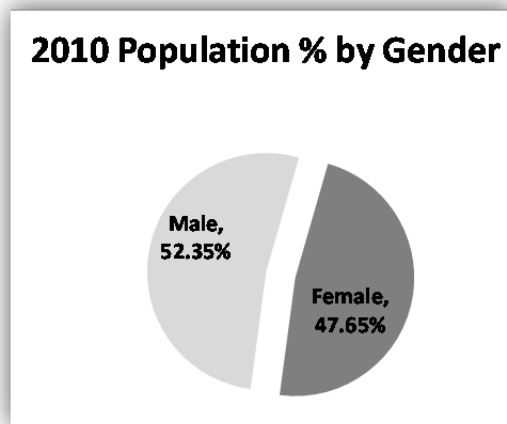
Source: (U.S.Census Bureau, 2013)

Table 2: Other Social Characteristics (Data 2010)

Other Social Characteristics	County						
	Crawford	Dent	Gasconade	Maries	Phelps	Pulaski	Texas
Avg. Household Size	2.57	2.50	2.36	2.51	2.44	2.58	2.52
Avg. Family size	3.14	2.97	2.86	3.00	3.00	3.22	3.07
Gender 15 Years & Over							
Male	9,596	6,159	6,197	3,651	18,937	22,161	10,798
Female	9,996	6,412	6,399	3,716	17,501	17,207	10,121
% Gender Now Married							
Male	56.50%	62.40%	57.80%	61.20%	46.90%	47.10%	54.60%
Female	51.00%	55.70%	57.00%	60.50%	51.50%	53.10%	54.10%

Source: (Missouri Hospital Association, 2012)

Growth rate

Within the last decade, there have been significant changes in the population of these communities. Table 3 and Figure 3 below show the changes in population from 2000 to 2010 based on United States Census data.

Table 3: Population Change (Data 2000 & 2010)

Population Census	County							Missouri
	Crawford	Dent	Gasconade	Maries	Phelps	Pulaski	Texas	
2000	22,084	14,927	15,342	8,903	39,825	41,165	23,003	5,595,211
2010	24,696	15,657	15,222	9,176	45,156	52,274	26,008	5,988,927
% Change	8.39%	4.90%	-0.83%	2.82%	13.38%	26.97%	13.10%	7.04%

Source: (United State Census 2010 and 2012, 2013)

Figure 3: County Population Change (Data 2000 & 2010)
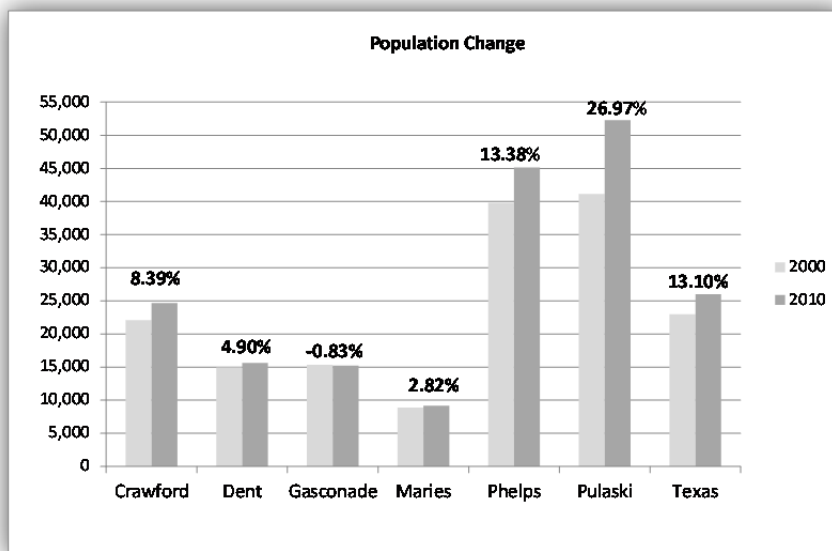
Pulaski County witnessed the highest growth rate of 26.97% from 2000 to 2010.

Source: (United State Census 2010 and 2012, 2013)

From the data available on the Census.gov website, the population of most of the counties we serve is projected to grow more slowly over the next 20 years.

Age

Detail age distribution within the counties can be seen in the Table 4 and Figure 4 below. The average median age in years for most of the counties runs between 40.6 to 45.0 years of age. Pulaski has the lowest median age at 26.6

Table 4: Age Distribution (Data 2010)

2010 Population By Age Range	County														Missouri
	Crawford		Dent		Gasconade		Maries		Phelps		Pulaski		Texas		
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	%
0 - 19	6,595	26.70%	4,022	25.69%	3,698	24.49%	2,376	25.89%	12,009	26.59%	16,755	32.05%	6,375	24.51%	26.70%
20 - 34	4,175	16.91%	2,419	15.45%	2,184	14.35%	1,401	15.27%	11,097	24.57%	16,569	31.07%	4,560	17.53%	19.80%
35 - 49	4,844	19.61%	2,988	19.08%	2,936	19.29%	1,831	19.95%	7,824	17.33%	8,952	17.13%	4,911	18.88%	19.90%
50 - 64	5,065	20.51%	3,251	20.76%	3,342	21.96%	1,922	20.95%	8,069	17.87%	6,230	11.92%	5,480	21.07%	19.50%
65 - 79	3,029	12.27%	2,217	14.16%	2,142	14.07%	1,261	13.74%	4,439	9.83%	2,911	5.57%	3,510	13.50%	10.10%
80 & older	988	4.00%	760	4.85%	920	6.04%	385	4.20%	1,718	3.80%	857	1.64%	1,172	4.51%	3.90%
Median Age (Years)	40.6		43.0		45.0		42.8		33.8		26.6		42.1		37.9

Source: (State Health Facts, 12 A.D.)

Figure 4: Total County Age Ranges (Data 2010)
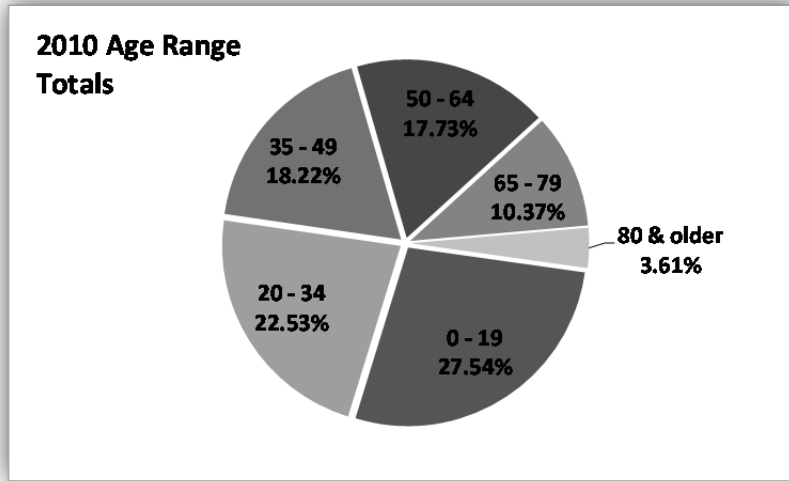
Our largest age range population is 27.54% in the 0-19 age group.

Source: (State Health Facts, 12 A.D.)

Race and Ethnicity

The counties PCRMC serves are similar in their ethnicity. The white population ranges between 92.38% in Texas County to 97.23% in Maries County. These percentages exceed those of Missouri at 82.80%. Blacks comprise from 0.18% in Gasconade County to 10.94% in Pulaski County of the service area populations compared to 11.6% average for Missouri. Less than 10% of each of the communities combined are Asian, Hispanic or classified as others.

It should be noted that the racial makeup of these communities is changing. For example in Phelps County, the minority population is growing, having increased from 6.8% to 8.3% of the population over the past 10 years. While the number of individuals remains small, the percent of growth in the last decade of Black individuals (69.1%) in the county is noteworthy. Similarly, the Hispanic population has grown 90.3% in the last decade compared to state and National figures.
Source: (Phelps Maries County Health Department, 2012b)

Table 5: Race Distribution (Data 2010)

Race Distribution	County							Missouri
	Crawford	Dent	Gasconade	Maries	Phelps	Pulaski	Texas	
White	96.44%	95.99%	97.30%	97.23%	90.42%	72.54%	92.38%	82.80%
Black	0.26%	0.40%	0.18%	0.26%	2.17%	10.94%	3.35%	11.60%
Hispanic	1.48%	0.95%	1.00%	0.82%	2.04%	9.00%	1.63%	3.50%
Asian	0.30%	0.26%	0.35%	0.05%	2.93%	2.51%	0.31%	1.60%
Other	1.53%	2.45%	1.17%	1.63%	2.43%	5.01%	2.32%	0.50%

Source: (National Association of counties, 2012)

Educational Level

The educational level of our communities varies. For example, Phelps County has the highest percentage of residents who have a Bachelor's degree and Graduate or Professional degree achievement. This could be attributed to the presence of the Missouri State University of Science and Technology and the other various outreach college campus's available in Rolla.

Table 6: Educational Level (Data 2006-2010)

Percentage Distribution of Educational Level	County						
	Crawford	Dent	Gasconade	Maries	Phelps	Pulaski	Texas
Less Than 9th Grade	8.30%	10.60%	8.10%	7.20%	5.80%	4.30%	6.90%
9th - 12th Grade	14.00%	13.40%	10.00%	13.20%	8.30%	7.60%	13.70%
High School or GED	41.20%	38.30%	40.60%	43.10%	33.30%	34.00%	44.30%
Some College	20.60%	20.20%	19.80%	16.30%	21.30%	25.70%	18.90%
Associate's Degree	5.00%	6.30%	7.40%	5.90%	6.00%	10.00%	4.50%
Bachelor's Degree	7.50%	7.60%	9.00%	8.90%	14.80%	11.50%	8.30%
Graduate or Professional Degree	3.30%	3.60%	5.10%	5.30%	10.50%	6.90%	3.50%

Source: (United States Census Bureau- American Fact Finder, 2012)

Economic Characteristics, Household Income and Poverty

The Labor Market condition data available on the U.S Bureau of Labor and Statistics website shows that the unemployment rate in Phelps County is 7.70%, this is the lowest in the seven counties that we serve. The other counties have unemployment rates of: Pulaski (7.90%), Texas (9.50%), Crawford (11.20%), Maries (7.90%), Gasconade (10.50%) and Dent (9.50%) respectively.
Source: (U.S Bureau of Labor and Statistics, 2012)

In Phelps County, 40.5% of the population is not in the labor force and this accounts for some socioeconomic imbalance in the community. Other factors that influence the economic characteristics of the communities that PCRMC serves such as household income and poverty rates can be seen in the Table 7 below.

Most counties in the central region of the state are economically disadvantaged. As it is stated in the Table 7 below, both per capita and median household income reveals that these counties lag behind Missouri and the nation.

Table 7: Labor Market Conditions & Economic Distribution (Data 2012)

Labor Market Conditions	County							Missouri
	Crawford	Dent	Gasconade	Maries	Phelps	Pulaski	Texas	
Unemployment Rate	11.20%	9.50%	10.50%	7.90%	7.70%	7.90%	9.50%	7.30%
Household Income								
Median Household Income	$34,506	$36,118	$40,837	$40,185	$40,260	$43,155	$31,552	$47,460
Less Than $15,000/yr	16.70%	18.70%	14.50%	15.30%	18.20%	14.40%	22.50%	14.80%
Poverty Rates								
Total	13.80%	13.80%	13.80%	13.80%	13.80%	13.80%	13.80%	19.00%
Children	20.20%	26.00%	13.20%	19.90%	18.70%	15.60%	27.80%	28.00%
Older Adults (65+)	10.90%	14.60%	9.40%	11.00%	9.50%	14.10%	14.70%	9.00%

Source: (Bureau of Labor Statistics, 2012; United States Census Bureau- American Fact Finder, 2012)

Employment

Data available from US Census Bureau and the American Fact Finder website categorizes the labor force for individuals above the age of 16 by industry per county and for Missouri. Table 8 is a five year survey estimate of American communities (2006 – 2010).

Table 8: Major Employers & Industries (Data 2006-2010)

Major Employers & Industries	County														Missouri
	Crawford		Dent		Gasconade		Maries		Phelps		Pulaski		Texas		
Civilian employed population 16 yrs & over	10,007		6,307		7,230		4,132		19,555		15,187		8,800		2,791,184
	Actual #	%	Actual #	%	Actual #	%	Actual #	%	Actual #	%	Actual #	%	Actual #	%	
Agriculture, Forestry, Fishing & Hunting, Mining	231	2.31%	621	9.85%	240	3.32%	347	8.40%	286	1.46%	337	2.22%	601	6.83%	1.80%
Construction	1,113	11.12%	377	5.98%	607	8.40%	373	9.03%	1,357	6.94%	745	4.91%	624	7.09%	6.60%
Manufacturing	2,612	26.10%	641	10.16%	1,620	22.41%	688	16.65%	1,279	6.54%	785	5.17%	1,202	13.66%	11.80%
Wholesale Trade	277	2.77%	317	5.03%	240	3.32%	129	3.12%	395	2.02%	116	0.76%	95	1.08%	3.00%
Retail Trade	1,400	13.99%	969	15.36%	860	11.89%	390	9.44%	3,002	15.35%	2,031	13.37%	1,271	14.44%	12.00%
Transportation & Warehousing, & Utilities	390	3.90%	335	5.31%	366	5.06%	247	5.98%	1,029	5.26%	1,004	6.61%	660	7.50%	5.20%
Information	65	0.65%	70	1.11%	79	1.09%	58	1.40%	382	1.95%	162	1.07%	45	0.51%	2.30%
Finance & Insurance, Real Estate-Rental-Leasing	257	2.57%	241	3.82%	445	6.15%	232	5.61%	916	4.68%	497	3.27%	475	5.40%	6.90%
Professional, Scientific, & Management Services, Administrative & Waste Management	483	4.83%	231	3.66%	231	3.20%	179	4.33%	1,106	5.66%	855	5.63%	160	1.82%	9.00%
Educational Services, Healthcare & Social Assistance	1,717	17.16%	1,555	24.66%	1,371	18.96%	736	17.81%	5,874	30.04%	2,903	19.12%	1,674	19.02%	23.40%
Arts, Entertainment, Recreation, Accommodation & Food Services	613	6.13%	354	5.61%	508	7.03%	175	4.24%	1,755	8.97%	2,116	13.93%	551	6.26%	2.00%
Public Administration	455	4.55%	300	4.76%	386	5.34%	326	7.89%	1,247	6.38%	2,952	19.44%	1,116	12.68%	4.60%
Other Services	394	3.94%	296	4.69%	277	3.83%	252	6.10%	927	4.74%	684	4.50%	326	3.70%	11.40%

Source: (County Health Rankings and Roadmaps- Robert Wood Johnson Foundation, 2013)

In Figure 5 below, the major employers and industries actual population numbers have been combined for all counties in our service area. The highest percentage at 22.2% is in the area of Educational Services, Healthcare & Social Assistance and the lowest is found in the Information market.

Figure 5: All Counties Combined for Major Employers & Industries (2006-2010)

The largest employers/ industries for our total county population fall into the Educational Services, Healthcare & Social Assistance (15,830 or 22.2%).

The total for the state of Missouri in this same labor force is 23.40%.
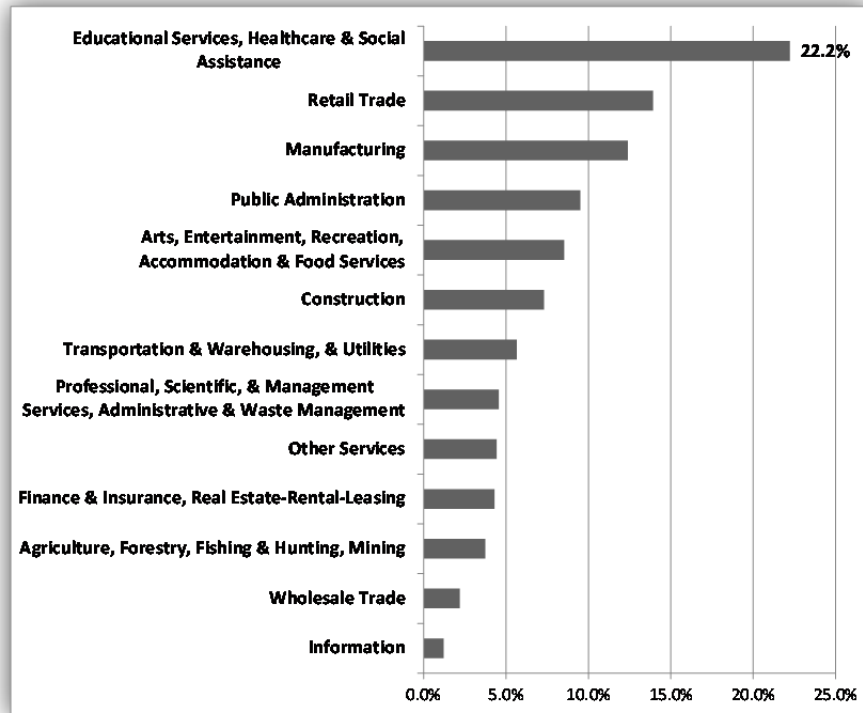
Source: (County Health Rankings and Roadmaps- Robert Wood Johnson Foundation, 2013)

Uninsured Population

Uninsured population information indicated that the percentage of uninsured Missouri residents is 15% (764,772) which is lower than in any of our seven county service areas. Texas County has the highest number of uninsured residents at 21% (4,167) and Pulaski has the lowest at 17% (7139).

Table 9: Uninsured Population

Uninsured Population	County							Missouri
	Crawford	Dent	Gasconade	Maries	Phelps	Pulaski	Texas	
2010	15.00%	15.00%	19.00%	18.00%	18.00%	20.00%	15.00%	15.00%
2011	19.00%	17.00%	19.00%	21.00%	22.00%	22.00%	21.00%	17.00%
2012	19.00%	20.00%	17.00%	19.00%	18.00%	17.00%	21.00%	15.00%

Year(s) Data Collected for reporting year 2010 was 2008, 2011 was 2009, 2012 was 2010.
Source: (County Health Rankings and Roadmaps- Robert Wood Johnson Foundation, 2013)

Health Rankings

According to county health rankings published by the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, our communities are not highly ranked when compared to Missouri's other counties. The county health rankings confirm the important role that factors such as education, jobs, income and environment play into how healthy people are. These rankings were based on areas such as: Health outcomes and Health factors. See the appendices for the data date ranges for the County Report year and the data years it reports.

County Health Outcomes

Health Outcomes represent how healthy a county is by looking at the Mortality and Morbidity of the county. The Mortality ranking looks at the length of life by number of years of potential life lost before age 75 per 100,000 population. The Morbidity ranking looks at the quality of life by evaluating the percent of adults reporting fair or poor health (age-adjusted), average number of physically unhealthy days reported in past 30 days (age-adjusted), average number of mentally unhealthy days reported in past 30 days (age-adjusted), & percent of live births with low (less than 5.5 lbs.) birth weight. When looking at the overall rankings for Mortality and Morbidity in our county service area, our ranking numbers are higher in the Morbidity when compared to the other Missouri counties.

Health Outcomes	Mortality (Length of Life) 50%	Premature Death (Before age 75) 50%
	Morbidity (Quality of Life) 50%	Poor or Fair Health 10%
		Poor Physical Health Days 10%
		Poor Mental Health Days 10%
		Low Birthweight (Less than 5.5 lbs.) 20%
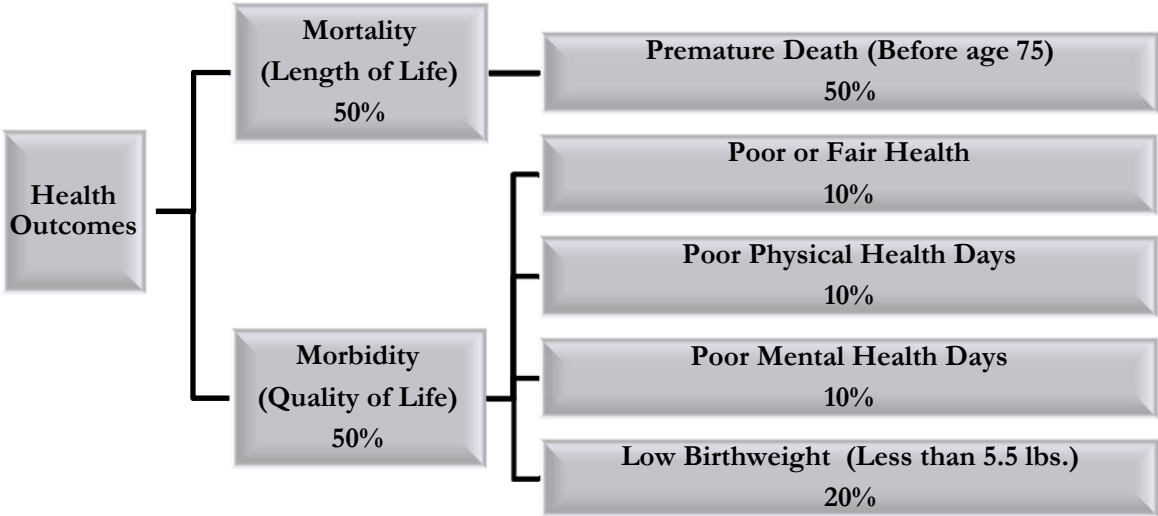
With Health Outcome's, our worst county is Dent. It has increased in its ranking by 38 ranks since data collected figures from 2010 to 2013. It is in the top 90% of worse counties

in Missouri. Maries County has seen the most improvement going from 45th to 9th, which is in the top 10% best ranking counties in Missouri. Most of our counties fall into the 75% or higher ranking with the exception of Maries and Pulaski. See Figure 6 below for all the county ranks gathered for 2010 and 2013.

Figure 6: Health Outcomes by County Ranking in Missouri
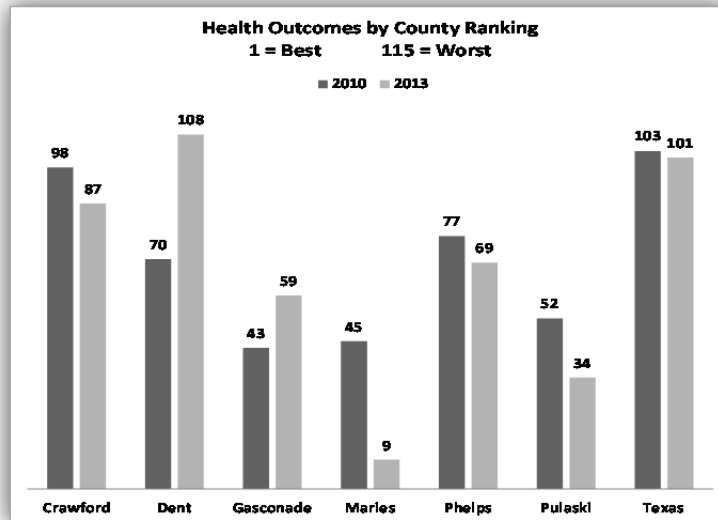
Source: (County Health Rankings and Roadmaps- Robert Wood
Johnson Foundation, 2013)

Mortality
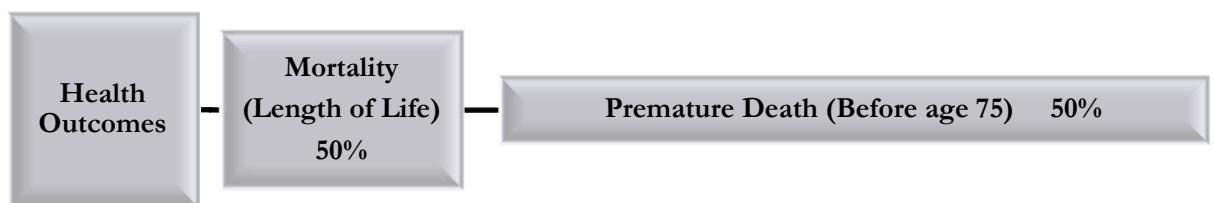
Mortality measures look at the number of premature deaths before the age of 75 (years of potential life lost before age 75 per 100,000 population). This basically means if a person dies at age of 20 then this would add 55 years of life lost. Missouri's average report in 2013 was 7,827. The mortality ranking for Maries and Pulaski rank in the top quartile (Best) with their rank below 29. The counties falling into the worse ranking for 4th quartile are Dent and Texas. Five of our counties premature deaths numbers are higher than the Missouri average of 7,827.

In our counties the worst ranking for Mortality is Dent count with an increase of 53 to 111 by 2013.

Our best county for Mortality is Maries

Health Outcomes Mortality County Ranking
1 = Best   115 = Worst
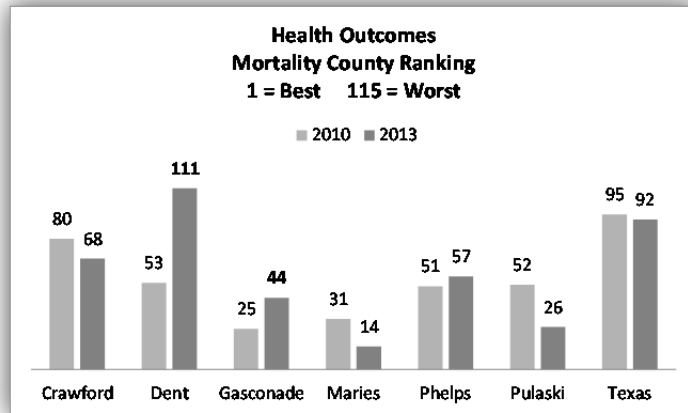
Source: (County Health Rankings and Roadmaps- Robert Wood Johnson Foundation, 2013)

Table 10: Health Outcomes Ranked Measure Sources & Years for Mortality

County Health Outcomes	County							Missouri Average	National Benchmark
	Crawford	Dent	Gasconade	Maries	Phelps	Pulaski	Texas		
Mortality									
Premature Death Potential life lost before age 75 per 100,000 population. (Years 2008-2010) *Source: Vital Statistics, National Center for Health Statistics (NCHS)*	8,722	12,647	7,905	6,413	8,089	7,292	9,647	7,827	5,466

Source: (County Health Rankings and Roadmaps- Robert Wood Johnson Foundation, 2013)

Morbidity
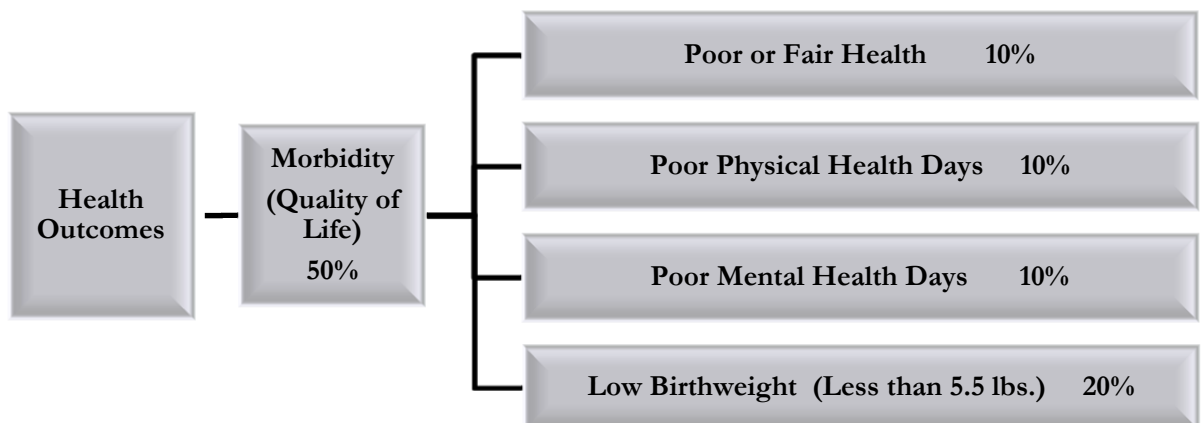
Morbidity rankings look into the counties self-perceived health by measuring the population's poor or fair health, poor physical health days, poor mental health days and low birthweight (less than 5.5lbs). Most of the counties for our service area have remained in the

lower 3rd to 4th quartile for worse ranking in Missouri. Maries County has shown the most improvement going from a rank of 59 to 11 for morbidity which puts it in the best ranking for the 1st quartile when compared to all other counties in Missouri. Figure 8 shows how the counties have changed from 2010 to 2013.

Figure 8: Health Outcomes County Rankings by Morbidity
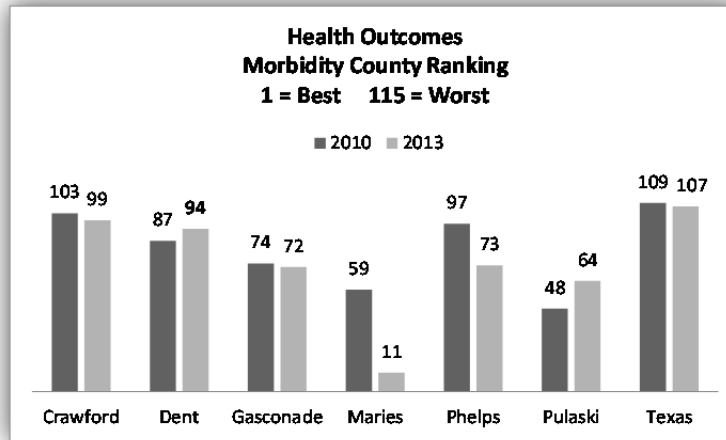
The least improved Morbidity ranking has happened in Dent County increasing from 87 to 94 and Pulaski County 48 to 64.

Our best county is Maries with a decrease from 59 to 11 in Missouri.

Source: (County Health Rankings and Roadmaps- Robert Wood Johnson Foundation, 2013)

Table 11: Health Outcomes Ranked Measure Sources & Years for Morbidity

County Health Outcomes	County							Missouri Average	National Benchmark
	Crawford	Dent	Gasconade	Maries	Phelps	Pulaski	Texas		
Morbidity									
Poor or Fair Health Percent of adults reporting fair or poor health. (Years: 2005-2011) *Source: Behavioral Risk Factor Surveillance System (BRFSS)*	18.0%	NDA	NDA	11.0%	20.0%	21.0%	31.0%	16.0%	10%
Poor Physical Health Days Average number of physically unhealthy days reported in past 30 days. (Years of Data Used: 2005-2011) *Source: BRFSS*	5.4 Days	5.8 Days	5 Days	3.4 Days	4.5 Days	3.8 Days	7 Days	3.7 Days	2.6 Days
Poor Mental Health Days Average number of mentally unhealthy days reported in past 30 days. (Years of Data Used: 2005-2011) *Source: BRFSS*	4.7 Days	4.1 Days	3.4 Days	NDA	4.1 Days	3.1 Days	4.4 Days	3.8 Days	2.3 Days
Low Birthweight Percent of live births with low birthweight (less than 2500 grams / 5.5 lbs.) (Years of Data Used: 2004-2010) *Source: Vital Statistics, NCHS*	8.6%	8.1%	7.7%	6.0%	7.3%	7.6%	7.3%	8.1%	6.0%

Source: (County Health Rankings and Roadmaps- Robert Wood Johnson Foundation, 2013)

County Health Factors

Health Behaviors 30%	Adult Smoking Adult Obesity * Physical Inactivity Excessive Drinking * Motor Vehicle Crash Death Rate Sexually Transmitted Infections * Teen Birth Rate
Clinical Care 20%	Uninsured * Primary Care Physicians * Dentists Preventable Hospital Stays * Diabetic & Mammography Screening
Social & Economic Factors 40%	High School Graduation * Some College Unemployment Children in Poverty Inadequate Social Support * Children in Single-Parent Households Violent Crime Rate
Physical Environment 10%	Daily Fine Particulate Matter * Drinking Water Safety Access to Recreational Facilities * Limited Access to Healthy Foods Fast Food Restaurants

Health Factors in the County Health Rankings represent what influences the health of a county by looking at Health Behaviors, Clinical Care, Social & Economic Factors, and Physical Environment. Each of these factors is weighted and broken down even further as seen in Figure 9 below.

Figure 9: County Ranking for Health Factors

County Ranking in Health Factor's
Compared to Missouri's 115 County's
Changes Seen 2010 to 2012
1 = Best   115 = Worst

County	2010	2012
Crawford	100	103
Dent	80	73
Gasconade	44	43
Maries	56	46
Phelps	38	27
Pulaski	89	48
Texas	96	104
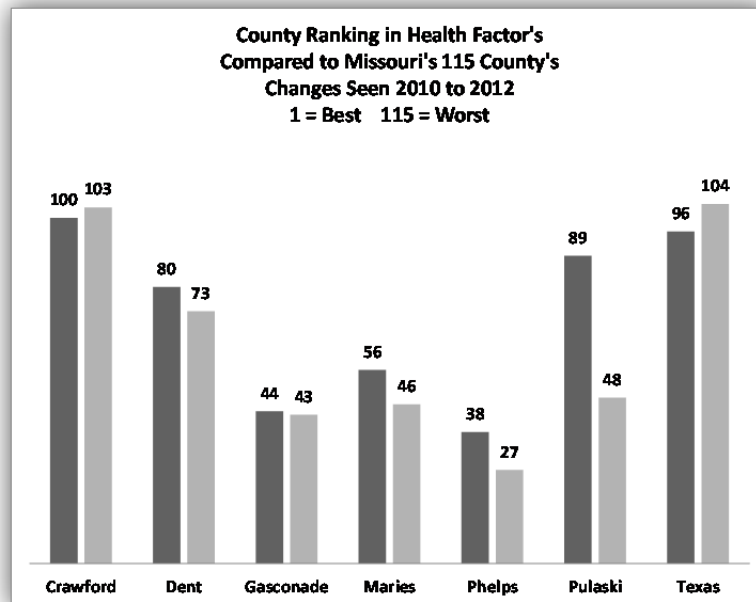
Source: (County Health Rankings and Roadmaps- Robert Wood
Johnson Foundation, 2013)

Health Factors for several of our communities have seen an improvement when comparing 2010 to 2012 as seen in Figure 9 above. The county with the current best rank is Phelps at 27 when compared to the other service area counties. Pulaski has seen the most improvement going from 89 to 49. The least improved counties are Crawford and Texas. The following information will show the Health Factors broken down into the various measure category and sub-categories.

Health Behaviors

Health Factors	Health Behaviors 30%	Adult Smoking Adult Obesity * Physical Inactivity Excessive Drinking * Motor Vehicle Crash Death Rate Sexually Transmitted Infections * Teen Birth Rate
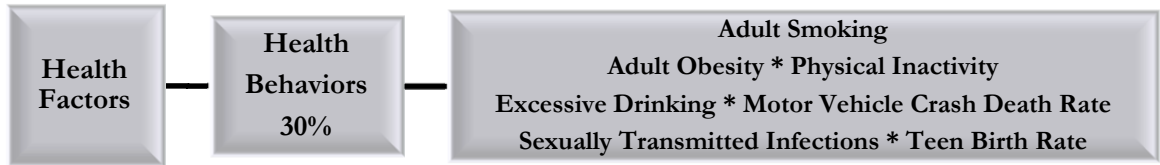
One of the measures used in determining the overall county Health Factor ranking is Health Behaviors. Health Behaviors measures the Tobacco Use, Diet & Exercise, Alcohol Use and Unsafe Sex to arrive at a county ranking. Some of these measures are further broken down into other sub-measures to come up with a total rank within the measure. In Figure 10 below only Maries and Pulaski counties have improved in the health behaviors ranking for our service area counties. Texas County's behavior health rank has increased significantly giving it a rank of 113 putting it into the 4th quartile in Missouri's worse counties for this measure.

Figure 10: County Health Behaviors Ranking in Missouri
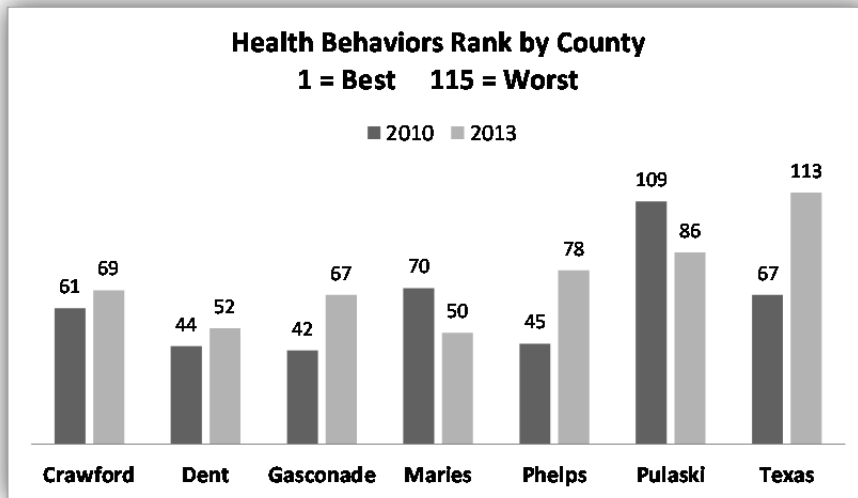
Source: (County Health Rankings and Roadmaps- Robert Wood Johnson Foundation, 2013)

In the following data, each measure for Health Behaviors will be broken down by county and its score can be compared to the Missouri average and National Benchmark.

Tobacco Use: Adult Smoking

For adult smoking, Missouri's average is 23% with a National benchmark of 14.0% from data complied 2005 to 2011. Of our three counties with data reported for adult smoking, all three have an average over Missouri's with Texas County showing 33%.

Table 12: Health Behaviors Measures Data for Adult Smoking (Data Report Year 2013)

Health Behaviors Measures	County							Missouri	National Benchmark
	Crawford	Dent	Gasconade	Maries	Phelps	Pulaski	Texas		
Adult Smoking Percent of adults that report smoking greater than or equal to 100 cigarettes and currently smoking. (Years: 2005-2011) *Source: Behavioral Risk Factor Surveillance System (BRFSS)*	NDA	NDA	NDA	NDA	28.0%	24.0%	33.0%	23.0%	14.0%

*NDA = No Data Available

Source: (County Health Rankings and Roadmaps- Robert Wood Johnson Foundation, 2013)

A study supplied in 2011 by The Missouri Department of Health & Senior Services for a County Level Study for Tobacco Use and they types of questions asked can be seen in Table 13 below. Figure 11 shows the prevalence percentage of current cigarette smoking in each county and for Missouri.

Figure 11: Missouri County Level Study on Prevalence of Current Cigarette Smoking
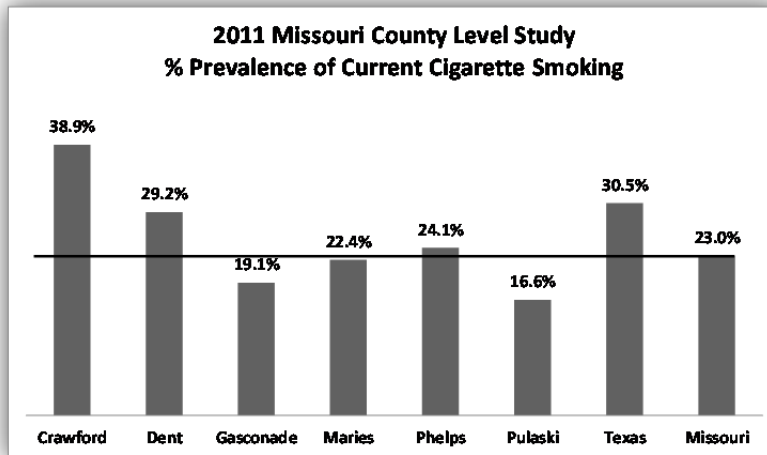
Crawford County at 38.9% is considered significantly high for Missouri at 23.0%

Gasconade, Maries, & Pulaski counties percentages are ranking better & coming in below the state average.

Source: (Missouri Department of Health and Senior Services, 2013a)

<p style="text-align: center;">Table 13: Missouri County Level Study - Tobacco Use</p>

2011 County Level Study	Crawford	Dent	Gasconade	Maries	Phelps	Pulaski	Texas
Current Cigarette Smoking	38.9%	29.2%	19.1%	22.4%	24.1%	16.6%	30.5%
Former Cigarette Smoking	19.6%	21.9%	23.5%	23.8%	23.8%	32.3%	24.9%
Current Smokeless Tobacco Use	7.3%	5.7%	5.7%	11.3%	3.0%	5.4%	5.8%
Current Use of Other Tobacco Products	4.3%	9.3%	2.6%	7.1%	4.8%	2.3%	5.1%
% Population Believes Smoking Cigarettes Causes:							
Heart Attack	77.1%	68.7%	72.6%	69.7%	77.5%	80.2%	74.4%
Colon Cancer	34.6%	36.9%	43.9%	36.2%	41.3%	38.0%	26.8%
Stroke	79.2%	66.8%	70.5%	70.8%	68.6%	72.6%	68.8%
Low-Birth Weight	83.5%	79.8%	81.3%	79.6%	85.3%	88.7%	80.8%
Impotence	51.4%	51.1%	47.1%	39.9%	58.6%	62.9%	38.7%

<p style="text-align: center;">Source: (Missouri Department of Health and Senior Services, 2013a)</p>

Diet and Exercise: Adult Obesity & Physical Inactivity

Adult Obesity and Physical Inactivity measures fall into the category of Diet and Exercise for the Health Behavior measures.   Maries and Phelps County for Adult Obesity have the percentage of 31% which is the same as the Missouri average. The remaining service area counties are higher with Texas County at 35%. All the counties in our service area percentages are higher than the National Benchmark of 25% for adult obesity. With the measure of physical inactivity, Pulaski County scored 27% which is below the Missouri's average of 28%. All the service area counties percentages were higher than the National Benchmark of 21% for physical inactivity. See Figure 12 on next page for the breakdown by county.

There hasn't been a significant change increase in the adult obesity figures since 2007 to 2009 in relation to our counties per the Centers for Disease Control & Prevention. Source: (Center for Disease Control and Prevention, 2012). Additional information for these measures; Adult Obesity looks at the percent of adults that report a Body Mass Index (BMI) greater than or equal to 30 which ranks as obese. The information was gathered in 2009 from the National Center for Chronic Disease Prevention and Health Promotion, calculated from Behavioral Risk Factor Surveillance System (BRFSS).
Source: (County Health Rankings and Roadmaps- Robert Wood Johnson Foundation, 2013)

The Physical Inactivity measure looks at the percent of adults aged 20 and over reporting no leisure time physical activity. The information was gathered in 2009 from the National Center for Chronic Disease Prevention and Health Promotion, calculated from BRFSS.
Source: (County Health Rankings and Roadmaps- Robert Wood Johnson Foundation, 2013)

Figure 12: Diet & Exercise Behavior Measures (Data Report Year 2013)

	Crawford	Dent	Gasconade	Maries	Phelps	Pulaski	Texas	Missouri	National Benchmark
■ Adult Obesity	32.0%	32.0%	32.0%	31.0%	31.0%	33.0%	35.0%	31.0%	25.0%
▪ Physical Inactivity	29.0%	31.0%	33.0%	31.0%	28.0%	27.0%	33.0%	28.0%	21.0%
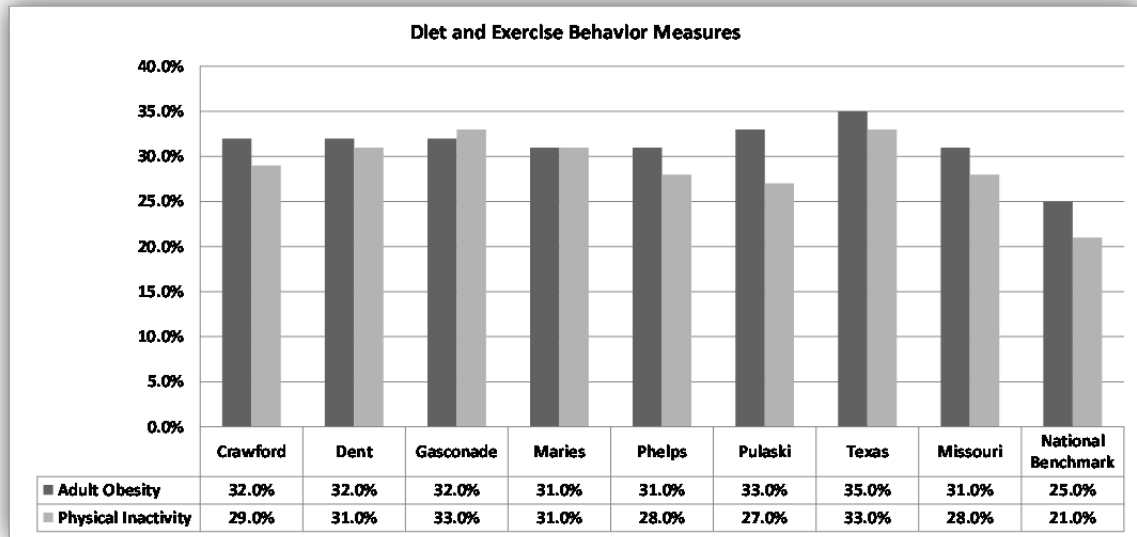
Source: (County Health Rankings and Roadmaps- Robert Wood Johnson Foundation, 2013)

Alcohol Use: Excessive Drinking & Motor Vehicle Crash Death Rate

Excessive Drinking and Motor Vehicle Crash Death Rate measurements make up the overall Alcohol Use for Behavior Measures. The excessive drinking results are not available for three of our counties (Crawford, Gasconade, or Maries). The results for the remaining counties are shown in Table 14 on next page along with the results for Motor Vehicle Crash Death Rates in Figure 13 shown below.

Table 14: County Health Behavior Scores for Excessive Drinking & Motor Vehicle Crash Death Rate (Data Report Year 2013)

Health Behaviors Measures	County							Missouri	National Benchmark
	Crawford	Dent	Gasconade	Maries	Phelps	Pulaski	Texas		
Excessive Drinking Binge plus heavy drinking. (Years: 2005-2011) *Source: BRFSS*	NDA	7.0%	NDA	NDA	16.0%	22.0%	12.0%	17.0%	8.0%
Motor vehicle crash death rate Motor vehicle crash deaths per 100,000 population. (Years: 2004-2010) *Source: Vital Statistics, NCHS.*	22	32	23	28	20	21	36	17	12

NDA = No Data Available

Source: (County Health Rankings and Roadmaps- Robert Wood Johnson Foundation, 2013)

Most of our service area counties reporting Excessive Drinking show scores below the Missouri average of 17%, with the exception of Pulaski at 22%. Dent County at 7% is the only county below the National Benchmark of 8%.
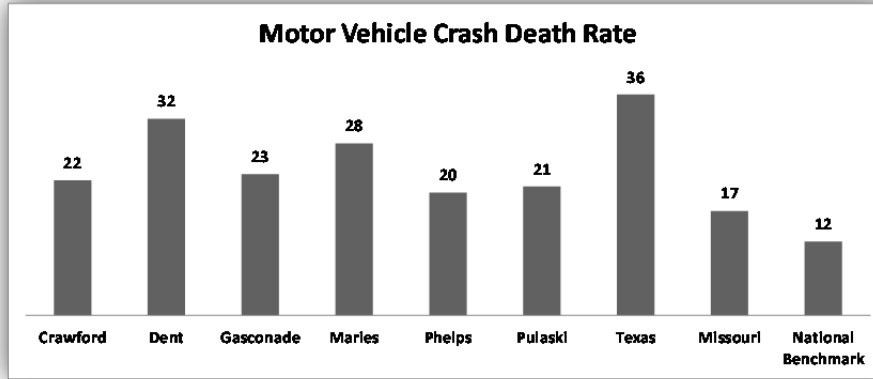
The results show our service area to be above the Missouri average and the National Benchmark. The highest county is Texas with a rate of 36 per 100,000 populations.

Source: (County Health Rankings and Roadmaps- Robert Wood Johnson Foundation, 2013)

Unsafe Sex: Sexually Transmitted Infections & Teen Birth Rate

Sexually Transmitted Infections and Teen Birth Rate measures make up the Unsafe Sex measure for Health Behaviors. The sexually transmitted infections are tracked by counties looking at the rate of Chlamydia per 100,000 populations. In this measure, Pulaski County is ranked at 111 which places it as one of our top worse counties for Missouri. Chlamydia is one of the most common sexually transmitted diseases in the U.S. The infection can be spread easily among men and women due to the fact if often cause no symptoms.

Table 15: Sexually Transmitted Infections (Data Report Year 2013)

Health Behaviors Measures	County							Missouri	National Benchmark
	Crawford	Dent	Gasconade	Maries	Phelps	Pulaski	Texas		
Sexually transmitted infections Chlamydia rate per 100,000 population (Years of Data Used: 2010) *Source: CDC, National Center for Hepatitis, HIV, STD, and TB Prevention.*	158	58	131	109	248	735	215	435	84

Source: (County Health Rankings and Roadmaps- Robert Wood Johnson Foundation, 2013)

County Rank in Missouri
Sexual Activity
1 = Best   115 = Worse

All but 2 of our counties fall into the 50 % or higher percentile ranking of worse counties for Sexually Transmitted Infections in Missouri.

Source: (County Health Rankings and Roadmaps- Robert Wood Johnson Foundation, 2013)

The National Benchmark is set at 84 for Sexually Transmitted Infections. All the counties with exception of one for 2013 are above the National Benchmark. An increase can be seen from 2010 to 2013 for the counties of Crawford, Gasconade, Maries, and Pulaski. Pulaski has a significant number of sexually transmitted infections, see Figure 15.

Figure 15: Sexually Transmitted Infection Changes (Data Report Years 2010-2013)
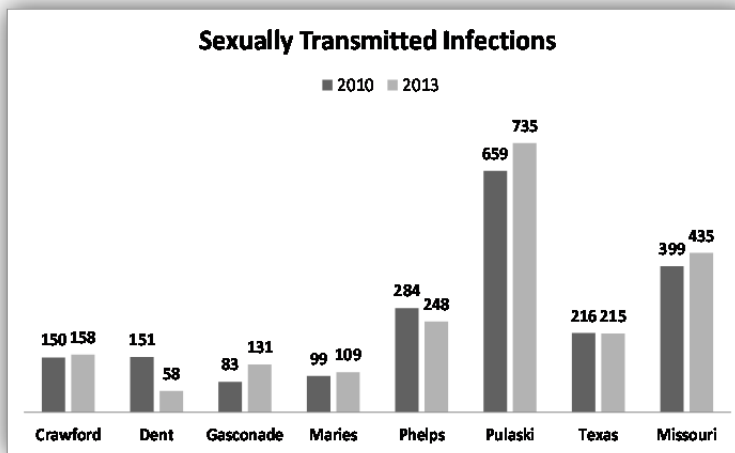
Dent County is the only county meeting the national benchmark of 84 by coming in at 58 for 2013.

It is a significant drop from the 2010 score of 151 for Dent.

Sexually Transmitted Infections
■ 2010 ■ 2013

Source: (County Health Rankings and Roadmaps- Robert Wood Johnson Foundation, 2013)

The other measure looked at for Unsafe Sex is the Teen Birth Rate. The measure looks at the teen birth rate per 1,000 female populations with age range of 15-19. The National Benchmark for Teen Birth Rate is 22.

Source: (CDC/National Center for Health Statistics, 2012).

There has been a gradual decrease in the number of teen births seen from 2010 to 2013.

All the counties are above the National Benchmark and only two are within the
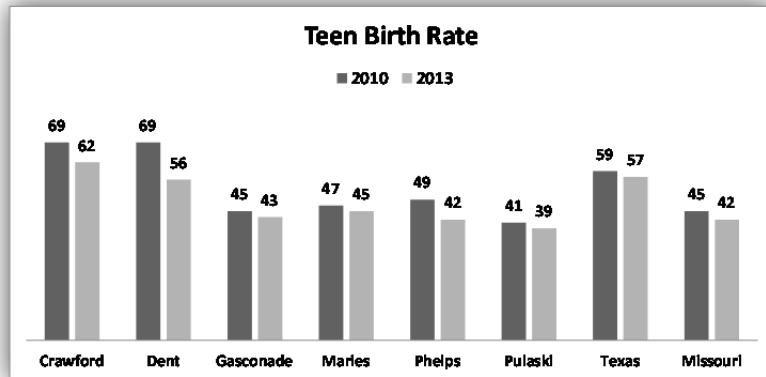
Source: (County Health Rankings and Roadmaps- Robert Wood Johnson Foundation, 2013)

Clinical Care

| Health Factors | Clinical Care 20% | Uninsured * Primary Care Physicians * Dentists Preventable Hospital Stays * Diabetic & Mammography Screening |
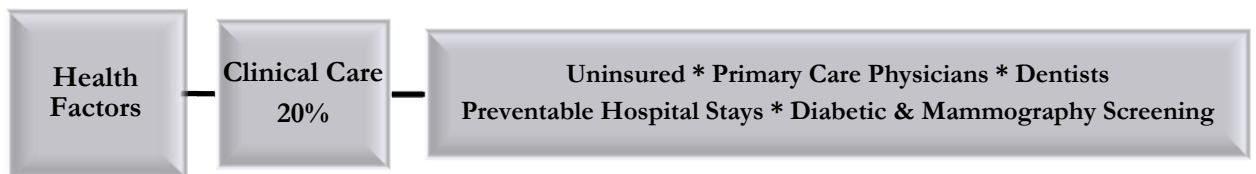
Clinical Care focuses on the population's access to care and the quality of care. These measures are broken down by looking at the uninsured, ratio of population to primary care providers, preventable hospital stays, diabetic screening and mammography screening. Crawford and Texas rank in the 3rd quartile of worse counties with Dent and Maries ranking in the 4th quartile of worse counties for our service area. In our service area, Maries County has the highest ranking of 94 compared to all Missouri counties. See Figure 17 below for Clinical Care county ranking scores from 2010 to 2013.

Figure 17: Clinical Care Rank by County (Data Report Years 2010-2013)

Clinical Care Rank by County
1 = Best   115 = Worst

■ 2010 ■ 2013

County	2010	2013
Crawford	46	73
Dent	53	89
Gasconade	41	35
Maries	71	94
Phelps	34	31
Pulaski	75	39
Texas	91	71
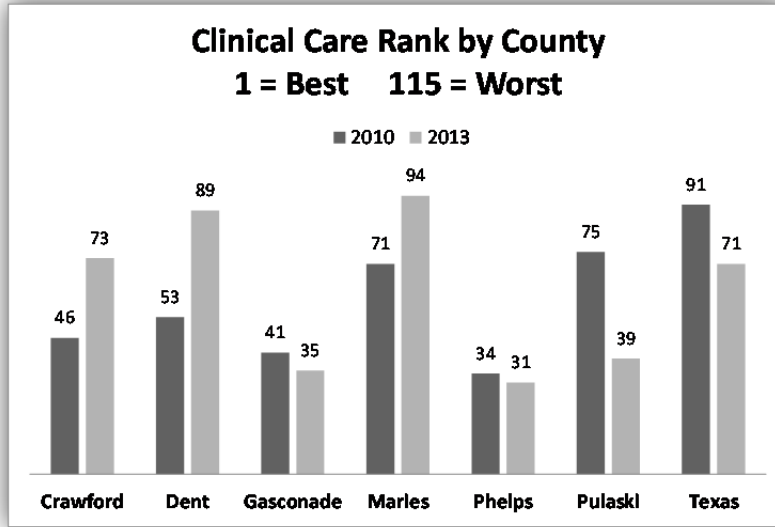
Pulaski has seen the most overall improvement from 2010 – 2013 dropping from 75 to 39 ranking score for Clinical Care in our service area.

Source: (County Health Rankings and Roadmaps- Robert Wood Johnson Foundation, 2013)

Access to Care: Uninsured & Ratio of Population to Primary Care Providers

The uninsured measurements are calculated as 5% of the Clinical Care measure. It looks at the percent of population less than age 65 without health insurance. The 2009 National Benchmark was 11% for uninsured. The source of this data comes from the Census American Community Survey (ACS) and the Small Area Health Insurance Estimates (SAHIE).

Figure 18: Access to Care County Rank in Missouri (Data Report Year 2013)

County Rank in Missouri
Access to Care
1 = Best   115 = Worse

County	Rank
Crawford	96
Dent	93
Gasconade	51
Maries	98
Phelps	23
Pulaski	56
Texas	101
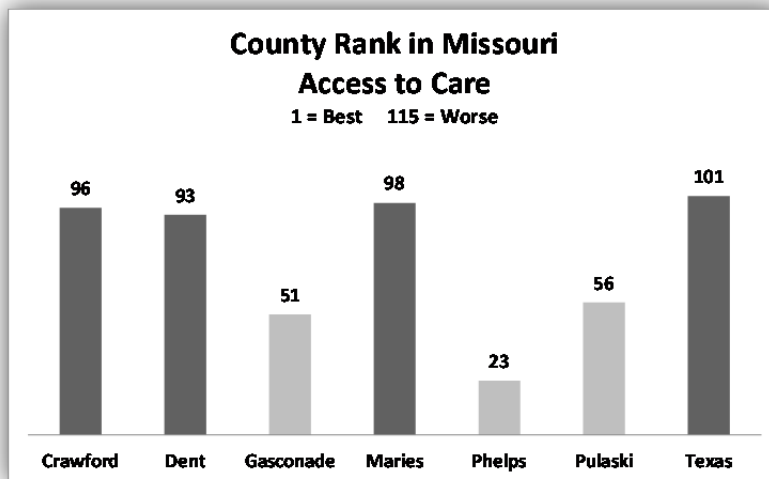
Crawford, Dent, Maries, & Texas Counties rank among the 4th quartile in worse counties for access to care in Missouri.

Phelps County is in the 1st quartile rank for best counties in Missouri.

Source: (County Health Rankings and Roadmaps- Robert Wood Johnson Foundation, 2013)

Little change has been seen in our service areas with uninsured.

Pulaski County is the only county below the Missouri average of 15%.
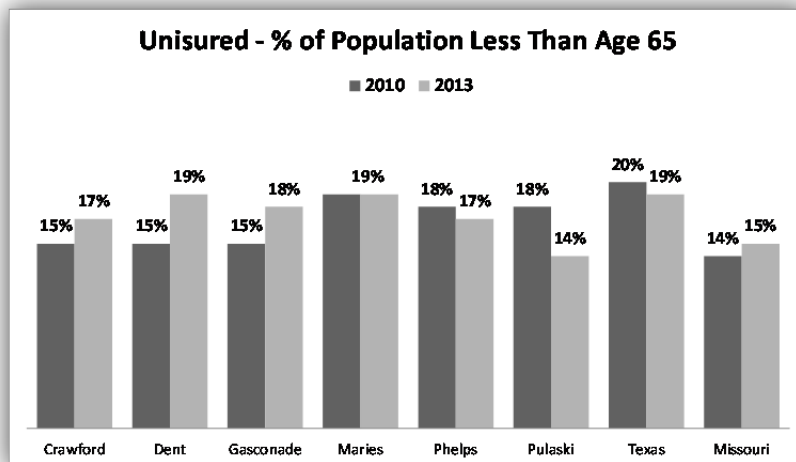
Source: (County Health Rankings and Roadmaps- Robert Wood Johnson Foundation, 2013)

Primary care provider physician's figures represent providers per 100,000 populations. They include practicing MD's who specialize in general, family, internal, pediatrics, obstetrics and gynecology medicine. When looking at access to care, it is important to include the population's access to providers in their area and not only the financial coverage. In Table 16 below, the figures represent the current ratio in our counties.

Table 16: Primary Care Physicians & Dentists per County (Data Report Year 2013)

Clinical Care Measures (Acces to Care)	County							Missouri
	Crawford	Dent	Gasconade	Maries	Phelps	Pulaski	Texas	
Primary care physicians Ratio of population to primary care physicians (Years of Data Used: 2011-2012)	6,159 : 1	2,615 : 1	2,177 : 1	9,194 : 1	1,104 : 1	2,934 : 1	2,368 : 1	1,495 : 1
Dentists Ratio of population to dentists (Years of Data Used: 2011-2012)	8,323 : 1	2,649 : 1	5,163 : 1	4,631 : 1	2,682 : 1	1,427 : 1	5,590 : 1	2,168 : 1

Source: (County Health Rankings and Roadmaps- Robert Wood Johnson Foundation, 2013)

Table 16 reflects the large ratio of patients to dentist in our service area counties. Crawford is the highest. Good oral health contributes to overall health. It is important to understand how these numbers reflect on our pediatric and adult patients. Good oral hygiene includes brushing with fluoride toothpaste, flossing, and professional treatment. In addition, contributing to poor oral health is smoking, excessive alcohol use, substance abuse, and poor dietary choices. Individual county data numbers are not available at this time for pediatric, child or adult oral health
Source: (Health People.Gov, 2013)

Additional information in regards to Dental is the data shown in the next Table 17 is from children participating in the Preventive Services Program (PSP). In Phelps County only 90

children were enrolled in this program for school year 2009-2009 and 95 children for school year 2009-2010.

Table 17: Pediatric Oral Health (Data Report Years 2006-2009)

Missouri Preventive Services Program (PSP) Pediatric Oral Health Indicators	2006 - 2007	2007 - 2008	2008 - 2009
Treated Tooth Decay	26.5% (n=8,198)	29.6% (n=18,535)	32% (n=34,798)
Untreated Tooth Decay	33.3% (n=8,230)	31.3% (n=18,590)	29% (n=34,820)
History of Rampant Tooth Decay (7 or more areas of treated / untreated decay)	10% (n=8,191)	10.5% (n=18,554)	9% (n=34,534)
Dental Sealants Present	8% (n-8,195)	15% (n=18,521)	15% (n=34,550)

Data Source: (Missouri Department of Health and Senior Services, 2013a)

Table 18: Adult Oral Health (Data Report Years 2006, 2008)

Missouri Adult Oral Health	2006		2008	
	Yes	No	Yes	No
Adults 18> who have visited a dentist or dental clinic in the last year	60.10	39.90	61.10	38.90
Adults 18> Who have had their teeth cleaned in the past year amoung those who visited a dentist or dental clinic	61.00	39.00	61.60	38.40
Adults 65 Who have lost all of their natural teeth due to tooth decay	24.10	75.90	26.20	73.80
Adults 65 Who have lost six or more teeth due to tooth decay or gum disease	53.80	46.20	53.50	46.50

Source – (Chronic Disease Comparisions Profile for Missouri Residents, 2012)

When looking at our service counties rating for access to care it is important to see that according to the Health Resources and Service Administration; Phelps, Pulaski, Texas, Maries and Gasconade counties are all classified as federally designated medically underserved areas while Dent County contains a medically underserved population. See Table 19 below.

Table 19: Medically Underserved Area – Population

	County						
	Crawford	Dent	Gasconade	Maries	Phelps	Pulaski	Texas
	Service Area	Low Income	Boulware Service Area MCD (07462) Boulware Township	Service Area	St. James Service Area MCD (64442) St. James Township	Service Area	Service Area
Federally Designated Type of Medically Underserved by Area or Population	Area	Population	Area	Area	Area	Area	Area
Designation Date	11/1/1978	3/26/2012	5/12/1994	11/1/1978	5/12/1994	2/17/1982	11/1/1978
ID #	1851	7855	1933	1868	1937	1877	1890
Score	50.80	53.70	47.60	54.80	53.50	58.10	49.30

Source – (Health Resources and Services Administration, 2012)

Quality of Care: Preventable Hospital Stays, Diabetic & Mammography Screen

The measures used for quality of care under clinical care look at the preventable hospital stays rate per 1,000 Medicare enrollees, diabetic screening by percent of diabetics that receive HbA1c screening, and mammography screening. HbA1c is a blood test which shows the average level of blood glucose (sugar) over the past 3 months. It shows how well a diabetic

is controlling their diabetes. The ranking by county for quality of care can be seen in Figure 20 below.

Figure 20: Quality of Care County Rank (Data Report Year 2013)
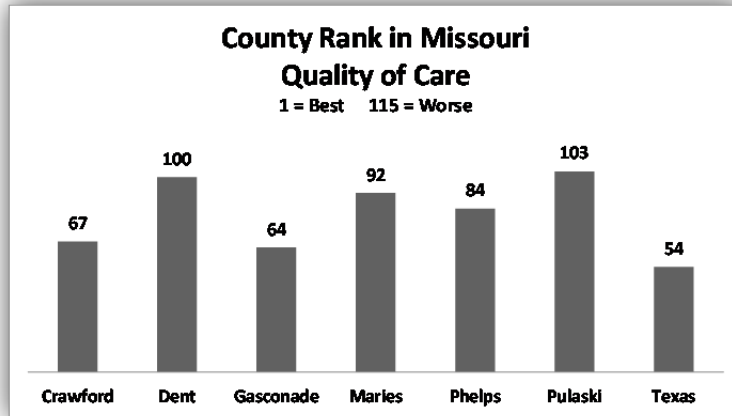
In Quality of Care, Pulaski County has the worse rank of all our service counties at 103.

None of the counties are in the 1st quartile ranking towards best.

Source: (County Health Rankings and Roadmaps- Robert Wood Johnson Foundation, 2013)

Preventable hospital stays are measured as the hospitalization rate for ambulatory care sensitive conditions per 1,000 Medicare enrollees. The ambulatory care sensitive conditions for patients are usually addressed in an outpatient setting and usually do not lead to hospitalization if the patients condition is well managed.

Figure 21: Preventable Hospital Stays by County

Gasconade & Pulaski County are the only counties to score under the Missouri average of 73 for data collected in 2013 report.
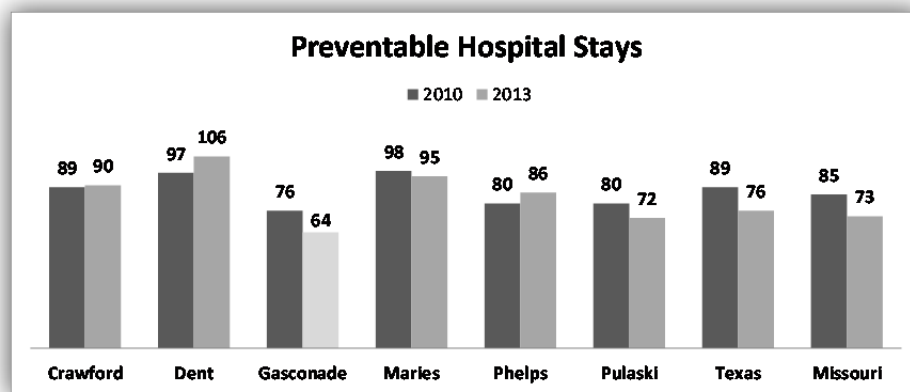
Source: (County Health Rankings and Roadmaps- Robert Wood Johnson Foundation, 2013)

Diabetic screening looks at how well the percent of diabetic Medicare patients are doing to control their diabetes in the past year by looking at the results of their HbA1c levels.

Regular testing is considered a standard of care for providers to help assess the management of diabetes over the long term. By monitoring for high blood sugar results, providers can address and help patients to control their diabetes better which helps in the prevention or delay of complications from diabetes. The national benchmark for 2013 is 90%. The following Figure 22 represents the results compiled for the 2010 and 2013 reports for each county.

Figure 22: Diabetic Screening County Results
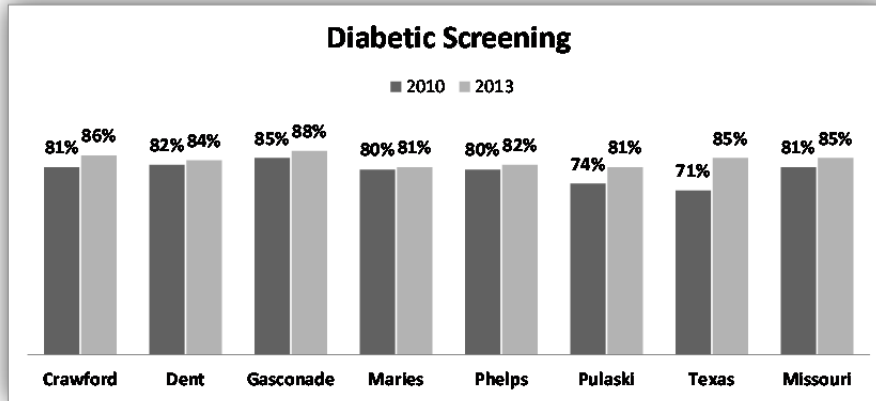
The counties have made a few small improvements in their percentages.

Texas County has seen the most improvement going from 71% to 85% which is the Missouri average for 2013.

Source: (County Health Rankings and Roadmaps- Robert Wood Johnson Foundation, 2013)

Figure 23: Mammography Screening Results

Most counties have seen an improvement in Mammography screening. Maries & Crawford are the only counties at the state average of 64%. No counties met the national benchmark of 73%.
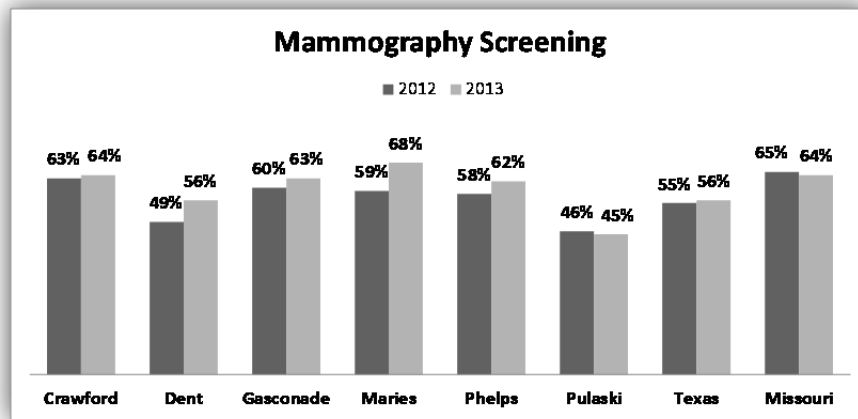
Source: (County Health Rankings and Roadmaps- Robert Wood Johnson Foundation, 2013)

Social & Economic Factors

Health Factors	Social & Economic Factors 40%	High School Graduation * Some College Unemployment Children in Poverty Inadequate Social Support * Children in Single-Parent Households Violent Crime Rate
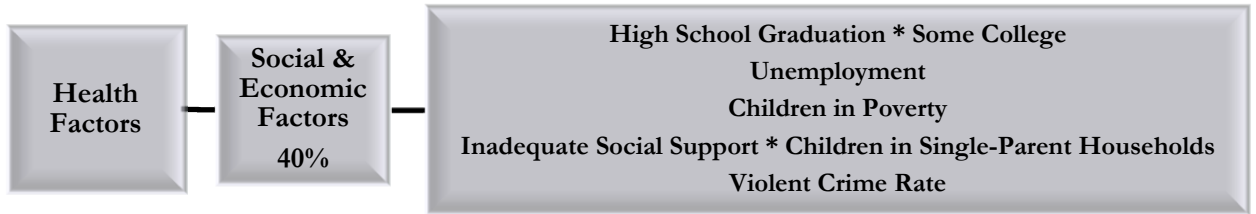
The Social and Economic Factors for Health Factors measure focuses on the areas of education, employment, income, family & social support, and community safety. Each of these measures are weighted differently to make up the 40% total. Each county's rank for our service area is reflected in the Figure 24 below.

Figure 24: Social & Economic Factors County Rank in Missouri (Data Report Year 2013)
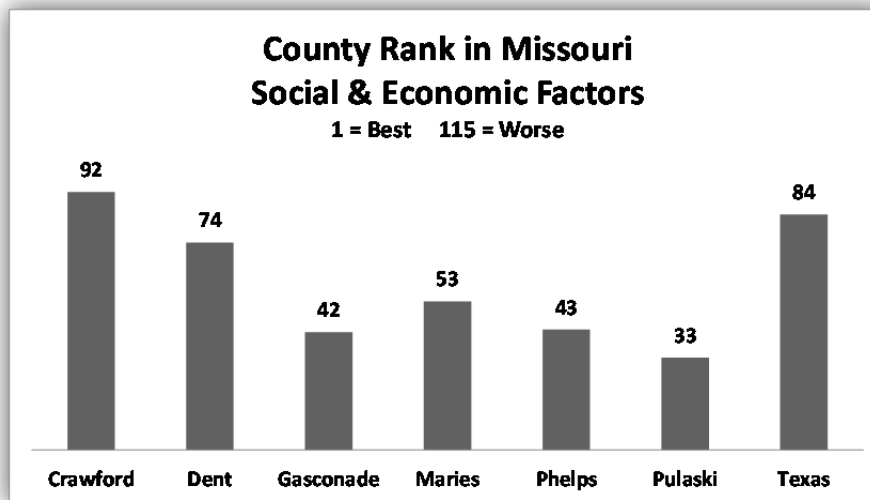
Crawford County has the worse rank at 92 in our area.

However, all counties have seen improvement in their rank since 2010.

Source: (County Health Rankings and Roadmaps- Robert Wood Johnson Foundation, 2013)

Education: High School Graduation and Some College

The sources for measuring for High School Graduation is obtained from Missouri sources and National Center for Education Statistics. They are reported as the percent of county's ninth grade cohort in public schools that graduate from high school in four years. The measure for Some College looks at the percent of adults aged 25-44 years with some post-secondary education.

The High School Graduation % has remained unchanged in the last reports compared for 2010 & 2013.
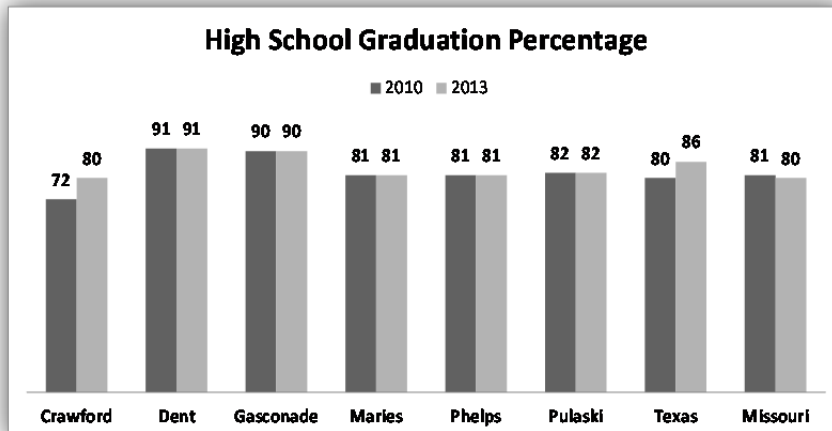
All counties are at the Missouri average of 80% or above.

Source: (County Health Rankings and Roadmaps- Robert Wood Johnson Foundation, 2013)

Education level can affect a persons health and it can also have a multigenerational implication toward the health of future generations. Increase in the educational level has a positive influence in factors such as social and psychological. Self percepton of one's sense of personal control and social standing has shown to predict higher self reported health statuses. The National Benchmark for "Some College" is 70%
Source: (County Health Rankings and Roadmaps- Robert Wood Johnson Foundation, 2013)

Table 20: Some College Percentage by County (Data Report Year 2013)

Some College	County							Missouri
	Crawford	Dent	Gasconade	Maries	Phelps	Pulaski	Texas	
Percent of adults aged 25-44 years with some post-secondary education (Years of Data Used: 2007-2011)	45.0%	46.0%	52.0%	48.0%	64.0%	64.0%	41.0%	62.0%

Source: (County Health Rankings and Roadmaps- Robert Wood Johnson Foundation, 2013)

Employment: Unemployment Rate

Local area unemployment statistics and the Bureau of Labor Statistics is utilized for data in the measurment of the Unemployment Rate by looking at the percent of the civilian labor force, age 16 and older, that is unemployed but seeking work. Individuals in the unemployment population experience worse health and higher mortality rates. This is related to the unhealthy behaviors related to alcohol & tobacco intake, diet, exercise and other health related behaviors which increase with unemployment. Access to health care insurance can cause issues for some unemployed when they previous received employer sponsored health insurance. The overall unemployment percentage in Missouri is 8.6% with the National Benchmark set at 5.0%. Maries County has the lowest rate at 7.3%.

Table 21: Unemployment Percentage per County (Data Report Year 2013)

Unemployment	County						
	Crawford	Dent	Gasconade	Maries	Phelps	Pulaski	Texas
# Unemployed	1,184	629	679	349	1,680	1,830	983
Labor Force	11,813	6,669	7,381	4,738	21,855	20,984	11,168
% Unemployed	10.0%	9.4%	9.2%	7.3%	7.7%	8.7%	8.8%

Source: (County Health Rankings and Roadmaps- Robert Wood Johnson Foundation, 2013)

Income: Children in Poverty

Children in poverty is respresented by the percent of children under the age of 18 living below the Federal Poverty Line. The information for this measure is from the Small Area Income and Poverty Estimates (SAIPE) program. The programs objective is to provide estimates of income and poverty statistics for the administration of federal programs and in the allocation of federal funds to local jurisdictions.

Figure 26: Children in Poverty (Data Report Years 2010, 2013)
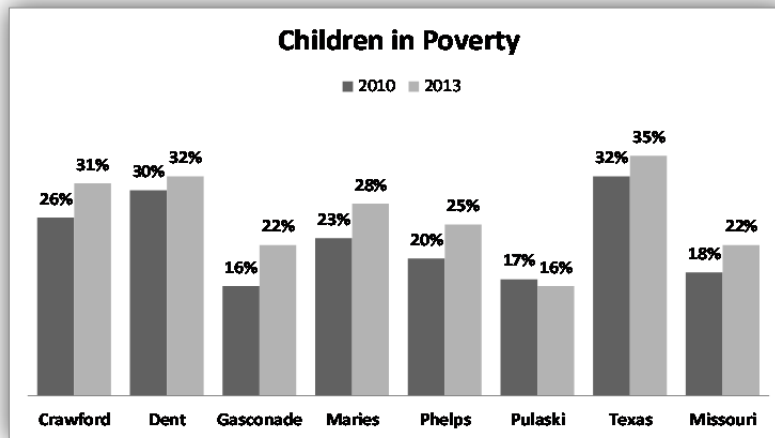
In 2013 report the percent of children in poverty has risen in all our counties with the exception of Pulaski County. It has seen a 1% decrease & is below the Missouri average of 22%.

Source: (County Health Rankings and Roadmaps- Robert Wood Johnson Foundation, 2013)

Increased risk of mortality, occurrence of medical conditions and disease incidence, depression, intimate partner violence, and poor health behaviors can all be a result from poverty. Children in poverty experience greater morbidity and mortality than adults. This is related to the increased risk of accidental injury and lack of health care access. If poverty were considered a cause of death in the United States, it would rank among the top 10 causes; per a 1990 study conducted by Dr. Krieger Williams. Source: (N.Krieger, 1997)

Family & Social Support: Inadequate Social Support & Single Parent Homes

Social and Ecomonic Environment looks at Family and Social Support as one of their focuses. This is broken down into two measures; Inadequate social support and percent of children living in single parent homes.

Only four of the service area counties have data available.

The results show most of our counties are at the Missouri average of 19% or lower.

Inadequate Social & Emotional Support for Adults by County

■ 2005 - 2010

NDA	NDA	16%	NDA	18%	19%	19%	19%
Crawford	Dent	Gasconade	Maries	Phelps	Pulaski	Texas	Missouri
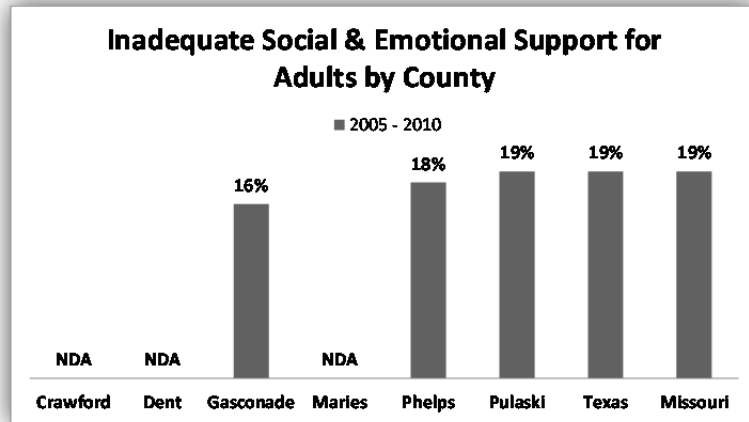
(County Health Rankings and Roadmaps- Robert Wood Johnson Foundation, 2013)

Figure 28: **Children in Single Parent Households (Data Report Years, 2012, 2013)**

Children in Single Parent Households

■ 2012   ■ 2013

	Crawford	Dent	Gasconade	Maries	Phelps	Pulaski	Texas	Missouri
2012	33%	21%	25%	31%	27%	24%	31%	32%
2013	35%	29%	28%	34%	30%	27%	33%	33%
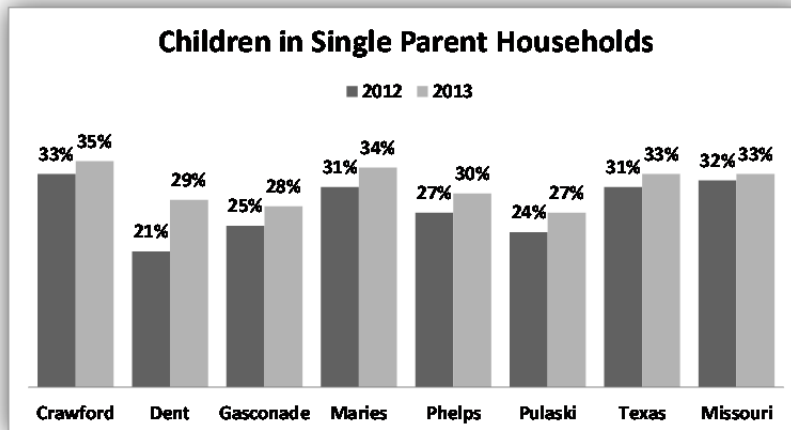
There was a 3% increase in the percentage of children living in single parent homes for most counties. The most significant increase was in Dent County with 8% increase.

(County Health Rankings and Roadmaps- Robert Wood Johnson Foundation, 2013)

Community Safety: Violent Crime Rate

The violent crimes are offenses which involved face-to-face confrontations between the victim and the perpertrator, homicide, forcible rape, robbery, and aggravated assult. The measurement is an annual rate per 100,000 population. Violent crime is reflected in physical safety and psychological well being. In Figure 29 below for the reporting period 2013 is compiled from data years 2008-2010. The overall average in Missouri is 484 with a National Benchmark of 66.

Figure 29: Violent Crime Rate by County

Crime Rate in all the counties has seen a decrease over the last 3 report periods.

All counties are below the Missouri average of 484.
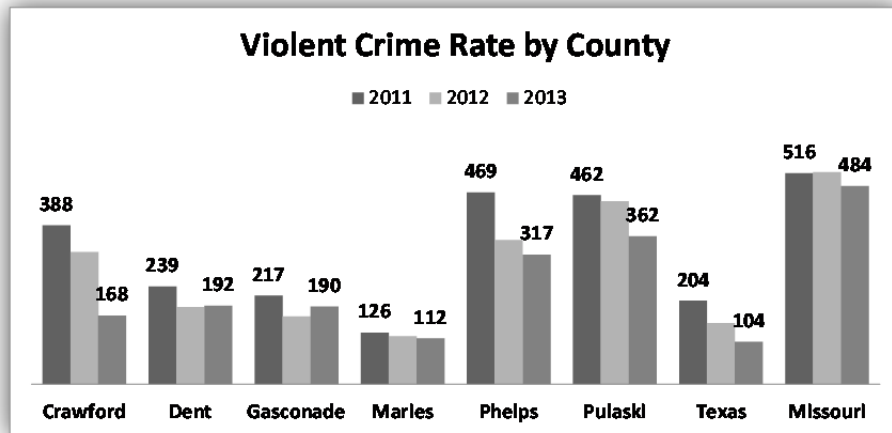
Source: (County Health Rankings and Roadmaps- Robert Wood Johnson Foundation, 2013)

Physical Environment

Health Factors	Physical Environment 10%	Daily Fine Particulate Matter * Drinking Water Safety Access to Recreational Facilities * Limited Access to Healthy Foods Fast Food Restaurants

Physical Environment is the last area looked at in Health Factors. The focus is on environmental quality and built environment. These focus areas are broken down into further measurements. The environmental quality looks at the air pollution particulate matter days which averages the number of unhealthy air quality days. Enviromental quality also looks at the percentage of population exposed to water exceeding a violation limit during the past year for safe drinking water. The measurements for built environment look at limited access to healthy foods, access to recreational facilities, and fast food restaurants.

Figure 30: Physical Environment County Rank for Missouri

County Rank in Missouri
Physical Environment
1 = Best   115 = Worse
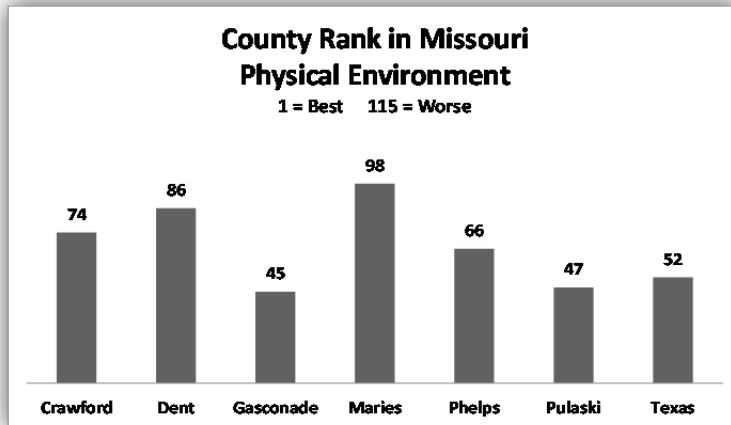
The worse county in our service area is Maries County with a ranking of 98 when compared to all the counties in Missouri.

Source: (County Health Rankings and Roadmaps- Robert Wood Johnson Foundation, 2013)

Environmental Quality: Air Pollution & Safe Drinking Water

The daily fine particulate matter measures the average daily amount of fine particulate matter in micrograms per cubic meter in a county. These particulates are defined as air pollutants with an aerodynamic diameter less than 2.5 micrometers. Forest fires can be one source that would emit these types of air pollutant particles. Gases emitted from power plants, industries and automobiles can form these types of particulates when reacting with the air. The Missouri average is 10.6 and the county with the highest in our service area is Gasconade County at 11.4.

Table 22: Daily Fine Particulate Matter (Data Report Year 2013)

Environmental Quality	County							Missouri
	Crawford	Dent	Gasconade	Maries	Phelps	Pulaski	Texas	
Daily fine particulate matter The average daily measure of fine particulate matter in micrograms per cubic meter (PM2.5) in a county (Year of Data Used: 2008)	11.2	10.9	11.4	10.9	10.8	10.5	10.7	10.6

Source: (County Health Rankings and Roadmaps- Robert Wood Johnson Foundation, 2013)

Safe drinking water is important in the prevention of illness, birth defects and deaths from individuals with compromised immune systems. Other types of health issues seen are nausea, lung and skin irritation, cancer, kidney damage, liver damage, and nervous system damage. This measurement looks at the percentage of the population getting water from public water systems with at least one health based violoation during the reporting period. The violoations include maxium contaminant level, maximum residual disinfectant level and treatment technique violations.

The most significant county with a high population getting water from a public water system with health-based

Drinking Water Safety by County for 2013

County	Percent
Crawford	40%
Dent	0%
Gasconade	0%
Maries	74%
Phelps	15%
Pulaski	4%
Texas	3%
Missouri	5%
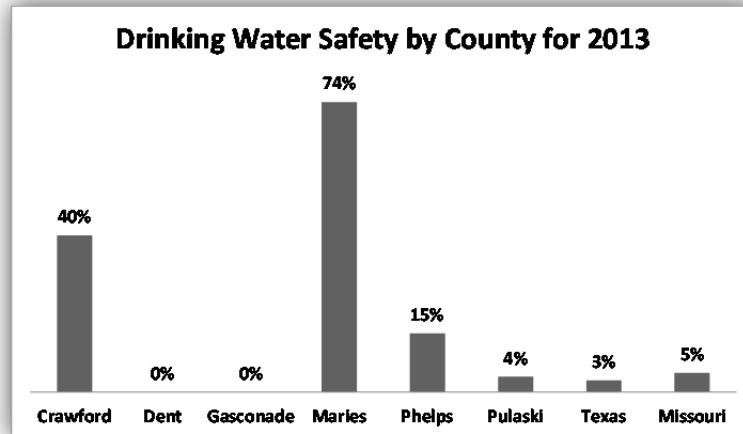
Source: (County Health Rankings and Roadmaps- Robert Wood Johnson Foundation, 2013)

The Build Environment of the Physical Environment of Health Factors results for report year 2013 can be viewed in Table 23 below. The build environment focus looks at the populations access to recreational facilities by evaluating the number of recreational facilities per 100,000 population in a county. Having the availability of these facilities, can influence the population to engage in physical activity and aid in the lowering of health problems associated to inactivity such as obesity.

The percent of population who are low income and do not live close to a grocery store are measured in the limited access to healthy foods measurement. Proximity to a grocery store is evaluated by defining where the population lives in rural and nonrural areas. Rural is living less than 10 miles from a grocery store and non rural it means less than 1 mile. Low income definition is a annual family income less than or equal to 200% of the federal poverty threshold for the family size.

Fast food restaurants are the last measure in the build environment focus for the physical environment measurement. It looks at the proportion of restaurants in a county that are fast food restaurants. Various studies have shown a correlation with access to fast food restaurants and high prevalance of overweight, obesity, and premature death

Table 23: Physical Environment: Built Environment (Data Report Year 2013)

Built Environment	County							Missouri
	Crawford	Dent	Gasconade	Maries	Phelps	Pulaski	Texas	
Access to recreational facilities Rate of recreational facilities per 100,000 population (Year of Data Used: 2010)	8	0	0	0	9	6	4	10
Limited access to healthy foods Percent of population who are low-income and do not live close to a grocery store (Year of Data Used: 2012)	2.0%	6.0%	2.0%	2.0%	6.0%	6.0%	6.0%	6.0%
Fast food restaurants Percent of all restaurants that are fast-food establishments (Year of Data Used: 2010)	36.0%	50.0%	29.0%	22.0%	44.0%	38.0%	39.0%	47.0%

Source: (County Health Rankings and Roadmaps- Robert Wood Johnson Foundation, 2013)

Pediatric Health

The table below reflects a number of Pediatric Health Indicators that are tracked. These include lead testing and lead levels in children under the age of 6, asthma related hospitalizations and visits to the ER, injury, hospitalizations, ER visits, motor vehicle deaths, cancer deaths and deaths due to unintentional injuries for two age groups; ages 1 – 14 and 15 – 19.

Table 24: Pediatric Health Indicator

2009	County							Missouri
	Crawford	Dent	Gasconade	Maries	Phelps	Pulaski	Texas	
Under Age 18 (per 1,000) Asthma ER Visits	6.10	6.90	*3.70	*1.50	4.50	2.80	*3.50	9.20
Under Age 18 (per 10,000) Asthma Hospitalizations	*5.00	*8.60	*9.20	*14.70	23.70	*12.50	*3.60	20.20
2010								
Under Age of 6 - Lead Testing	15.90	22.70	14.00	12.20	22.80	9.70	14.60	20.40
Under Age of 6 Tested - Blood Lead Elevations Greater Than=10ug/dL	*2.20	*1.90	*0.00	*0.00	*0.00	*0.20	*1.10	1.00
Age 1–14 (per 100,000) Injury ER Visits	12678.70	19826.60	12964.50	8074.90	12873.00	6523.20	14786.40	11308.20
Age 15-19 (per 100,000) Injury ER Visits	16169.90	22557.20	16059.10	10391.80	12254.00	4765.30	19381.30	13204.10
Age 1–14 (per 100,000) Injury Hospitalizations	*189.20	*301.60	*323.10	*64.60	281.00	*205.50	*264.00	179.80
Age 15-19 (per 100,000) Injury Hospitalizations	*697.50	*519.80	*591.10	*0.00	720.80	*317.70	*757.60	542.10
1999 - 2009								
Age 1-14 (per 100,000) Total Unintentional Injury Deaths	*15.80	*23.20	*13.30	*5.50	*16.20	*9.20	*15.10	8.70
Age 15-19 (per 100,000) Total Unintentional Injury Deaths	*105.60	*79.40	*76.20	*116.30	*44.60	42.70	*76.00	44.10
Age 1-14 (per 100,000) Motor Vehicle Deaths	*4.00	*13.20	*0.00	*5.50	*8.70	*2.00	*13.00	4.30
Age 15-19 (per 100,000) Motor Vehicle Deaths	*83.30	*79.40	*76.20	*101.80	*34.70	34.20	*54.30	35.80
Age 1-14 (per 100,000) All Cancers Deaths	*2.00	*3.30	*3.30	*5.50	*0.00	*2.00	*2.20	2.20
Age 15-19 (per 100,000) All Cancers Deaths	*0.00	*0.00	*8.50	*0.00	*0.00	*3.40	*0.00	3.40

* Fewer than 20 events in numerator; rate is unstable. Population estimates rates are the percent of total estimated resident population per year. Lead Testing rates are the percent of resident children under age 6 using population estimates for noted year. Injury ER Visits/Hospitalizations rates are per year per 100,000 specified age population. Asthma ER Visit rates are per year per 1,000 specified age population. Asthma Hospitalization rates are per year per 10,000 specified age population. Death rates are per year per 100,000 specified age population.
Source: (Missouri Department of Health and Senior Services, 2013a)

Infant Health Indicators

In the data shown below, all our service area counties fall below the state average for preterm births. The statistics for low birth weight shows higher in Crawford, Dent, and Gasconade counties, but lower in the other four counties when compared to Missouri 8.1 average. Texas County has the highest score for "Very Low Birth Weight" at 2.9 when compared to the Missouri 1.5 average score.

The county scores for infants enrolled in the Women, Infants, and Children –Food & Nutrition Service Program (WIC), WIC infants ever breastfed and infants on Medicaid tend to be close or above the Missouri average. See Table 25 below for break down.

Table 25: Infant Health Indicators

2005 - 2009	County							Missouri
	Crawford	Dent	Gasconade	Maries	Phelps	Pulaski	Texas	
Preterm Births Less Than 37 weeks Gestation	12.9	12.0	12.6	9.2	12.5	11.8	11.7	13.0
Low Birth Weight	8.2	9.0	8.6	4.5	7.2	7.5	6.4	8.1
Very Low Birth Weight	2.1	*1.0	*1.5	*0.0	0.9	1.7	2.9	1.5
2008								
Infants Participating in WIC	66.3	71.7	55.8	47.3	72.9	75.6	70.2	58.2
WIC Infants Ever Breastfed	60.7	48.4	48.5	47.7	53.8	66.7	63.4	56.0
2009								
Infants on Medicaid	75.9	68.7	50.7	50.5	62.5	31.7	66.4	52.3

*Fewer than 20 events in numerator; rate is unstable
Source – (United States Census Bureau- & nited States , 2012)

Maternal Health

Table 26 below provides an overview of the prenatal health indicators for the state and our seven county service area. A correlation can be seen between timely prenatal care and support service for pregnant women and a lower rate of infants born with low, or very low, birth rates. Of other interest is the indicator for mothers who smoked during pregnancy, with all seven counties showing a higher state rate (16.80) ranging from a high in Crawford County of 35.9 to a low of 19.6 in Pulaski County.

Table 26: Prenatal Care Utilization

Prenatal Health Indicators 2009	County							Missouri
	Crawford	Dent	Gasconade	Maries	Phelps	Pulaski	Texas	
Care Began 1st Trimester	91.2	90.3	82.1	88.4	93.0	88.6	89.9	86.3
Late Care 2nd & 3rd Trimester	8.5	*8.7	16.6	*11.6	6.8	10.5	9.4	12.9
No Prenatal Care	*0.3	*1.0	*1.4	0.0	*0.2	*0.9	*0.7	0.8
Inadequate Prenatal Care	10.6	10.8	49.4	*7.6	5.9	12.3	*6.9	11.5
Prenatal Medicaid	69.2	69.7	49.3	51.6	57.7	30.1	63.2	48.4
Prenatal WIC	61.4	67.2	53.4	47.4	57.5	49.8	64.2	43.8
Prenatal Food Stamps	44.8	44.1	29.5	27.4	35.9	20.4	38.1	29.4
Mother Smoked During Pregnancy	35.9	32.3	24.0	29.5	19.7	19.6	26.4	16.8

*Fewer than 20 events in numerator; rate is unstable
Source: (Missouri Department of Health and Senior Services, 2013a)

Low Birth Rate

Birth rates have not change much from 2010 to 2012 for the counties in our service area. Overall, the number of births is slightly less, with only Crawford and Phelps showing a slightly higher rate.

Table 27: Low Birth Rate

Year	County							Missouri
	Crawford	Dent	Gasconade	Maries	Phelps	Pulaski	Texas	
2010	8.70	7.20	7.30	NDA	8.70	7.20	7.90	8.00
2011	8.60	7.50	7.80	NDA	8.10	7.30	7.50	8.00
2012	8.70	8.40	7.80	6.20	7.90	7.40	7.60	8.10

*NDA – Indicates no data available

Source – (County Health Rankings.org, 2012)

Maternal Child Health Indicators

Table 28: Minority Health Profile

Minority Health Profile Maternal Child Health Indicators 2005 - 2009	County														Missouri Rate
	Crawford		Dent		Gasconade		Maries		Phelps		Pulaski		Texas		
	# of Events	County Rate	# of Events	County Rate	# of Events	County Rate	# of Events	County Rate	# of Events	County Rate	# of Events	County Rate	# of Events	County Rate	
Inadequate Prenatal Care															
White	148.00	9.60	70.00	8.40	73.00	9.10	43.00	9.70	203.00	8.10	339.00	11.40	123.00	8.90	9.10
African American	3.00	33.30	0.00	0.00	0.00	0.00	0.00	0.00	9.00	17.30	60.00	14.70	1.00	20.00	21.8
Low Birth Weight															
White	132.00	8.30	80.00	9.00	73.00	8.60	21.00	4.40	184.00	7.00	228.00	7.30	94.00	6.30	7.00
African American	2.00	22.20	0.00	0.00	0.00	0.00	0.00	0.00	8.00	14.60	47.00	10.60	1.00	14.30	13.80
1999 - 2009															
Infant Deaths per 1000															
White	16.00	4.60	14.00	7.00	16.00	8.60	2.00	1.80	37.00	6.40	50.00	6.60	34.00	10.70	5.00
African American	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.00	0.70	16.00	2.10	1.00	5.00	2.30
Sudden Infant Death Syndrome (SIDS) per 1000															
White	0.00	0.00	0.00	0.00	1.00	0.50	0.00	0.00	2.00	0.30	3.00	0.40	6.00	1.90	0.50
African American	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.30	0.00	0.00	0.20

Source: (Health.mo.gov, 2012b)

Community Health Improvement Resources or CHIR

The Missouri Department of Health and Senior Services provides information on Community Health Improvement Resources (CHIR), which is an interactive planning system designed for use by public health practitioners and community stakeholders to improve the health of a community. CHIR utilizes data driven, evidence based public health process to provide guidance with the priority setting, decision making, and intervention planning. Communities have different needs and each may be different places in addressing health issues; the CHIR process keeps this in mind. Some communities may need to start with creating or strengthening partnerships, while others may be at the intervention point to address a priority health issue. Communities should complete a thorough needs assessment to identify priority health issues.

One of the resources utilized by CHIR is the Missouri Information for Community Assessment (MICA). Data MICA is an interactive data query system for use in conducting a need assessment.   Priorities MICA is an interactive tool to assist with prioritizing diseases and risk factors, and Intervention MICA provides information, tools and resources for planning evidence based interventions to address health conditions or risk factors. Community Profiles is another resource which looks at the state, regional, and local data for selected health issues for use in assessment and evaluation. Source: (Missouri Department of Health and Senior Services, 2013b)

When investigating the status of adult health in the community, the two main disease processes that come to mind are diabetes and cardiovascular disease. It is important to keep in mind, the risk factors and indicators for both disease processes contain many areas of overlap.

Diabetes and Risk Factors

Available data shows that the number of people diagnosed with diabetes in our communities is increasing. A significant difference can be seen between the communities we serve and the diabetes diagnosis for the state. The following tables offer insights into this problem by identifying the various risk factors that are closely associated with diabetes.

Table 29: Percentage of Adults Diagnosed With Diabetes

% Adults Diagnosed with Diabetes	County							Missouri
	Crawford	Dent	Gasconade	Maries	Phelps	Pulaski	Texas	
2007	8.40%	9.30%	9.30%	8.90%	8.80%	8.00%	9.70%	8.20%
2008	9.00%	9.60%	10.00%	9.50%	8.70%	8.20%	9.70%	8.40%
2009	9.10%	10.30%	10.40%	10.70%	9.20%	8.40%	9.70%	9.00%

Source: (Centre for Disease Control and Prevention , 2012)

Figure 32 below shows that the number of people that do not engage in physical activity is increasing and Texas County has the highest number of residents in this category.

Figure 32: Percentage of Adults Classified as Having "No Leisure Time or Physical Activity"

Percentage of Adults Not Engaged in Physical Activity

	Crawford	Dent	Gasconade	Marles	Phelps	Pulaski	Texas	Missouri
2007	28.8%	29.9%	29.3%	29.2%	28.7%	26.1%	30.3%	28.0%
2008	29.3%	29.2%	29.3%	30.4%	27.3%	26.5%	29.9%	28.4%
2009	29.4%	31.3%	33.1%	30.8%	28.1%	26.6%	33.4%	29.3%
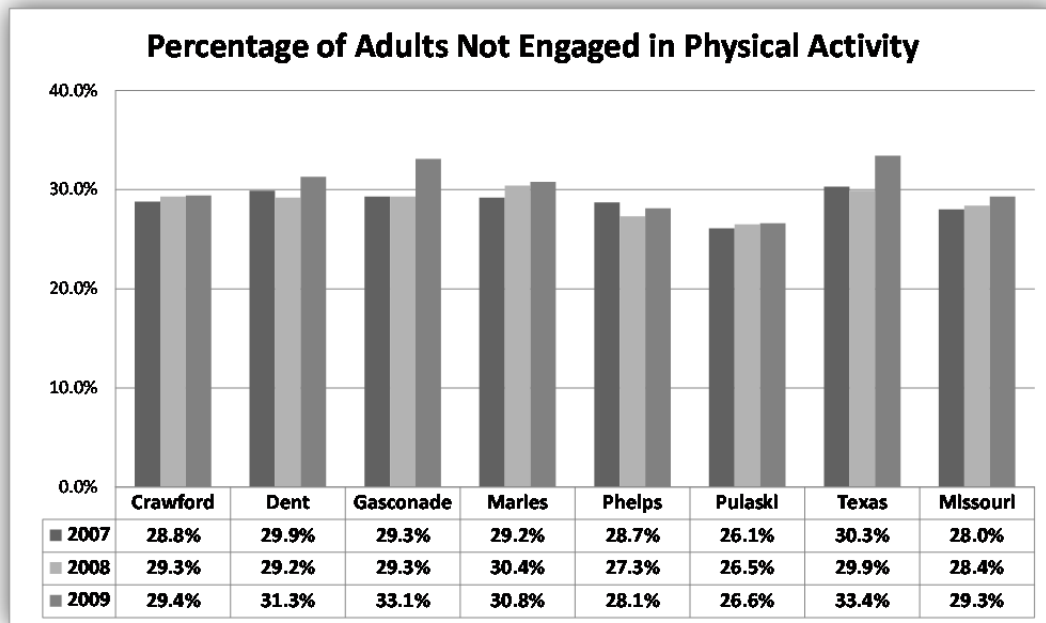
Source - (Center for Disease Control and Prevention, 2012)

Figure 33: Percentage of Adults That Are Obese

Percentage of Obese Adults

	Crawford	Dent	Gasconade	Marles	Phelps	Pulaski	Texas	Missouri
2007	29.6%	29.5%	29.5%	30.1%	29.3%	31.9%	29.1%	29.9%
2008	30.4%	29.6%	29.7%	30.6%	29.4%	32.7%	30.3%	30.1%
2009	32.4%	31.5%	32.3%	31.2%	31.3%	32.5%	35.4%	31.6%
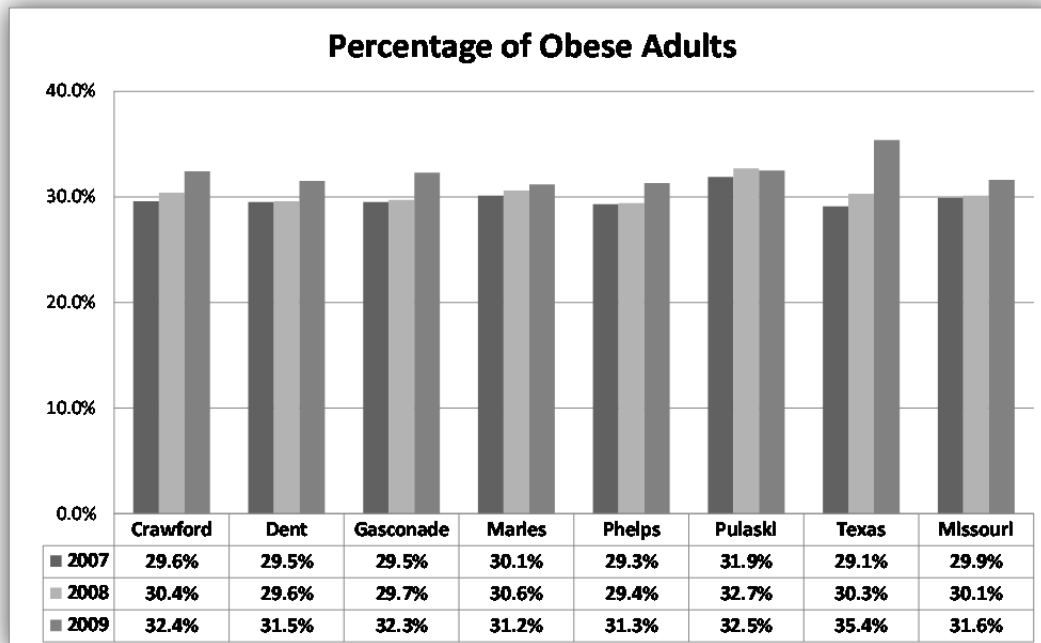
Source: (Center for Disease Control and Prevention, 2012)

Another contributing factor of diabetes is the physical environment that our population lives in. Is there a limited access to healthy foods and also comparing the easy access to, and an abundance of, fast food restaurants? Contributing to these factors is many people feel that they do not have the time to prepare healthy, nutritional foods and state these foods are often more costly to purchase.

Cardiovascular Risk Factors

There are many factors and lifestyles which are associated with cardiovascular diseases. Some of these include cigarette smoking, high cholesterol, high blood pressure and insufficient fruit and vegetable intake. As stated earlier, there is an overlap with risk factors associated with diabetes such as being overweight, obesity, inactivity and poor nutrition.

In Table 30 are the estimated percent of adult population that currently smoke every day, or "most days" and have smoked at least 100 cigarettes in their lifetime.

Table 30: Percentage of Adult Smokers

% of Adult Smokers	County							Missouri
	Crawford	Dent	Gasconade	Maries	Phelps	Pulaski	Texas	
2010	NDA	NDA	NDA	NDA	24.00%	30.00%	31.00%	21.10%
2011	NDA	NDA	NDA	NDA	21.00%	28.00%	31.00%	
2012	NDA	NDA	NDA	20.00%	22.00%	25.00%	31.00%	

Source: National Center for Health Statistics using data from the Center for Disease Control and Prevention's Behavioral Risk Factor Surveillance System (BRFSS). BRFSS data are representative of the total non-institutionalized population over 18 years of age living in a household with a land-line telephone.
Source: (Center for Disease Control and Prevention, 2012)

Table 31: Hypertension

% Hypertension (per 100,000)	County							Missouri 2008-2009
	Crawford	Dent	Gasconade	Maries	Phelps	Pulaski	Texas	
2007	29.80%	93.60%	47.10%	38.70%	39.60%	73.20%	50.70%	NDA
2008	29.50%	121.00%	79.90%	38.30%	39.10%	20.20%	68.40%	64.60%
2009	29.30%	63.60%	66.10%	25.30%	50.50%	56.00%	18.10%	

All rates are presented as per 100,000. Tables based on HIDA Discharge Data
Source: (Missouri Hospital Association, 2012)

Table 32: High Cholesterol Percentage 2007 & Prior Heart Attack Percentage 2008

Year - Indicator	County							Missouri
	Crawford	Dent	Gasconade	Maries	Phelps	Pulaski	Texas	
2007								
% High Cholesterol	26.5%	21.7%	20.7%	21.1%	21.7%	20.4%	22.6%	20.2%
2008								
% Previous Heart Attack	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	8.2%	5.3%

All rates are presented as per 100,000. Tables based on HIDA Discharge Data
Source: (Missouri Hospital Association, 2012)

Table 33: Risk Factors for Heart Disease among Adults 18 Years of Age or Older

Risk Factors for Heart Disease Adults 18 years of Age or Older 2007	County							Missouri
	Crawford	Dent	Gasconade	Maries	Phelps	Pulaski	Texas	
Current Hypertension	26.8	20.1	18.0	7.1	15.9	21.0	20.6	19.7
Low Fruit & Vegetable Intake	83.2	78.6	81.0	76.6	78.8	78.6	77.1	76.1
Diabetes	9.2	8.4	8.8	11.0	9.9	10.3	9.0	9.3
Physical Inactivity	31.2	30.5	25.0	29.6	25.7	25.8	28.0	25.3
Obese	33.8	27.0	25.2	31.7	30.6	29.9	23.8	29.1
Overweight	35.4	38.4	37.5	34.3	39.0	44.7	41.0	35.7
Current High Cholesterol	21.6	23.3	18.1	22.7	19.6	20.7	22.9	20.0
Current Smoking	28.4	28.3	25.7	22.4	20.4	28.3	30.4	23.2
Secondhand Smoke at Home	20.1	21.6	16.3	19.3	15.7	26.5	22.5	16.5
Secondhand Smoke at Work	7.0	24.6	18.0	12.5	12.0	14.5	20.3	11.5

Source - (Missouri Department of Health and Senior Services, 2013b)

Chronic diseases

The table below shows the comparison of the statistics of chronic diseases in our communities as they relate to deaths, hospitalizations, and ER visits. The table covers heart disease, ischemic heart disease, stroke and other cerebrovascular accidents, cancers and Chronic Obstructive Pulmonary Disease (COPD). There is also a table that breaks down cancers by categories.

Table 34: Chronic Disease Comparisons Profile

Chronic Disease Comparisons	County							Missouri
	Crawford	Dent	Gasconade	Maries	Phelps	Pulaski	Texas	
1999 - 2009 Deaths								
Heart Disease	309.20	254.20	262.10	320.30	251.90	226.90	272.50	245.60
Ischemi Heart Disease	239.70	189.10	187.10	156.70	171.60	138.70	199.10	170.32
Stroke/Other Cerebrovascular Disease	58.00	78.70	74.20	41.80	72.20	54.50	58.40	54392.00
All Cancers	214.20	215.00	192.60	210.50	192.20	210.30	195.60	197.70
2005 - 2009 Hospitalizations								
Heart Disease	161.90	208.50	192.90	138.70	178.60	186.30	136.90	152.95
Ischemi Heart Disease	70.00	87.70	81.10	58.00	73.10	77.10	61.00	55.25
Stroke/Other Cerebrovascular Disease	23.50	37.20	31.60	25.10	29.50	31.50	25.70	30.37
All Cancers	38.60	42.20	44.90	29.90	37.60	42.20	32.80	39.07
2005 - 2009 ER Visits								
Heart Disease	18.00	27.40	16.80	6.60	14.20	11.00	17.20	12.95
Ischemi Heart Disease	2.20	6.30	1.90	0.70	1.90	0.90	1.80	0.82
Stroke/Other Cerebrovascular Disease	1.50	3.50	1.10	0.50	1.40	0.80	1.40	0.79

Source - (Health.mo.gov, 2012a)

Death rates are per year per 100,000 populations and are age-adjusted to the U.S. 2000 standard population.
Hospitalization rates are per year per 10,000 populations and are age-adjusted to the U.S. 2000 standard population.
ER Visit rates are per year per 1000 population and are age-adjusted to the U.S. 2000 standard population.

Table 35: All Cancer Deaths

All Cancer Deaths	County						
	Crawford	Dent	Gasconade	Maries	Phelps	Pulaski	Texas
2007	216.10	215.80	194.90	264.50	170.30	195.00	228.00
2008	259.30	163.60	196.20	201.70	227.90	212.60	185.00
2009	250.20	268.40	216.90	142.50	194.50	174.60	129.50

Rates are per 100,000. Age adjustment uses 2000 standard population. @ Rate is unstable; numerator is less than 20

Source – (Missouri Department of Health and Senior Services, 2012)

Table 36: Cancer Deaths by Site & Hospitalization

Chronic Disease Comparisons	County							Missouri
	Crawford	Dent	Gasconade	Maries	Phelps	Pulaski	Texas	
1999 - 2009 Deaths								
Colorectal Cancer	19.80	25.90	18.30	20.40	17.00	19.00	21.80	19.39
Colon & Rectum Cancer (SEER)	19.40	25.90	18.30	21.60	17.10	18.80	22.00	19.25
Lung Cancer (SEER)	73.80	68.90	52.60	59.10	60.70	74.20	63.60	61.41
Breast Cancer	13.40	16.60	19.20	24.60	12.10	14.80	14.60	14.55
Cervical Cancer	*3.70	*1.20	*0.60	*1.00	*1.60	*1.00	*1.30	1.41
Prostate Cancer	12.10	*8.10	7.80	*8.90	8.60	9.30	10.50	9.10
2005 - 2009 Hospitalizations								
Colorectal Cancer	5.90	5.20	6.30	*3.10	4.50	5.20	5.10	4.89
Lung Cancer (SEER)	6.60	6.60	5.70	4.60	5.20	6.40	4.30	5.18
Breast Cancer	1.90	2.40	3.00	*1.90	1.90	2.70	3.00	2.20
Cervical Cancer	*039	*0.00	*0.10	*0.60	1.00	*0.20	*0.30	0.79
Prostate Cancer	2.20	2.80	2.60	*2.50	2.50	2.20	2.40	2.78

Death rates are per year per 100,000 populations and are age-adjusted to the U.S. 2000 standard population. Hospitalization rates are per year per 10,000 populations and are age-adjusted to the U.S. 2000 standard population.   ER Visit rates are per year per 1000 population and are age-adjusted to the U.S. 2000 standard population.

*Fewer than 20 events in numerator; rate is unstable

Source - (Missouri Department of Health and Senior Services, 2012)

Table 37: COPD Health Indicators

COPD Health Indicators	County														Missouri Rate
	Crawford		Dent		Gasconade		Maries		Phelps		Pulaski		Texas		
1999 - 2009	# of Events	County Rate	# of Events	County Rate	# of Events	County Rate	# of Events	County Rate	# of Events	County Rate	# of Events	County Rate	# of Events	County Rate	
Deaths	147	47.60	132	57.80	105	41.70	55	45.40	267	53.20	163	55.30	176	48.70	47.38
2005 - 2009															
Hospitalizations	237	16.50	329	33.80	315	29.90	88	15.40	572	24.60	436	29.40	356	21.90	23.22
ER Visits	1,194	9.60	1,052	12.40	486	6.10	153	3.40	1,739	8.40	863	4.40	1,130	8.50	5.41

Source - (Chronic Disease Comparisions Profile for Missouri Residents, 2012)

Unintentional Injuries and Substance Abuse

The next three tables give an overview of the number and rate by county, compared to state numbers for deaths, hospitalizations, and ER visits for unintentional injuries of a general nature, unintentional injuries due to motor vehicle accidents and substance abuse.

Table 38: Unintentional Injuries (General)

Unintentional Injuries 1999 - 2009	County														Missouri Rate
	Crawford		Dent		Gasconade		Maries		Phelps		Pulaski		Texas		
	# of Events	County Rate	# of Events	County Rate	# of Events	County Rate	# of Events	County Rate	# of Events	County Rate	# of Events	County Rate	# of Events	County Rate	
Deaths	148	57.00	116	69.70	116	59.80	67	69.50	244	53.60	209	49.10	178	63.30	44.97
Hospitalizations	1,687	61.90	1,189	64.00	1,534	77.70	589	57.50	2,826	59.40	1,970	52.50	1,677	56.30	55.57
ER Visits	26,133	105.10	23,585	151.20	14,709	92.70	5,222	56.10	43,278	98.40	21,894	46.40	28,481	113.00	92.19

Source: (Health.mo.gov, 2012b)

Table 39: Unintentional Injuries (Motor Vehicle)

Unintentional Injuries Motor Vehicle 1999 - 2009	County														Missouri Rate
	Crawford		Dent		Gasconade		Maries		Phelps		Pulaski		Texas		
	# of Events	County Rate	# of Events	County Rate	# of Events	County Rate	# of Events	County Rate	# of Events	County Rate	# of Events	County Rate	# of Events	County Rate	
Deaths	61	24.30	53	34.30	50	28.50	32	34.60	113	24.40	102	22.00	95	36.10	18.16
Hospitalizations	330	13.30	250	15.80	315	19.60	124	13.30	498	10.60	530	11.20	403	15.40	11.04
ER Visits	2,413	10.00	2,212	14.70	1,681	10.90	546	6.00	3,423	7.50	2,538	4.90	2,773	11.20	10.64

Source: (Health.mo.gov, 2012b)

Table 40: Unintentional Injuries (Substance Abuse)

Substance Abuse Unintentional Injuries	County						
	Crawford	Dent	Gasconade	Maries	Phelps	Pulaski	Texas
Alcohol Related ER Visits							
2007	161	171	115	39	425	240	165
2008	161	120	99	37	357	270	168
2009	173	121	110	46	357	238	140
Alcohol Involved Motor Vehicle Accidents (MVA)							
2007	47	27	20	17	74	76	47
2008	31	21	17	12	69	68	38
2009	51	23	21	13	74	78	33
Driving While Intoxicated (DWI) / Driving Under Influence (DUI) Arrests							
2007	189	109	85	25	329	288	137
2008	160	121	87	33	365	243	109
2009	135	97	112	24	387	340	97
Drug Related ER Visits							
2007	212	155	68	28	361	253	132
2008	159	127	75	27	336	235	126
2009	181	132	66	37	399	295	104
Drug Involved Motor Vehicle Accidents (MVA)							
2007	1	4	1	2	10	7	5
2008	5	6	1	5	20	8	4
2009	4	9	2	1	22	10	7
Drug Arrests							
2007	397	180	36	29	359	137	135
2008	295	117	27	16	262	163	89
2009	328	91	44	77	243	180	74

Source: (Health.mo.gov, 2012b)

Phelps County Regional Medical Center was very fortunate in partnering with the following groups to assist with the development of this needs assessment. Much of the community input provided in this document was provided through the collaboration of these groups to conduct surveys, focus groups and research to help determine the needs of the community from sources that represent the community as a whole. The following is a quick description of each of these partners that PCRMC will continue to work with in addressing the identified needs of the community.

The Community Partnership

Since 1997, the Community Partnership has been working with citizens and organizations to match public and private funding, resources, and programs to meet the needs of the communities in Phelps County and the region. The Community Partnership's mission is to promote awareness of community needs and to work together with citizens and organizations to achieve better results for children, families, and communities.

With the help of the Community Partnership, a physically challenged child takes his first steps, teens find mentoring programs to help them meet the challenges of parenthood or learn employment skills to help them succeed. Young girls are empowered to make good decisions regarding themselves and raise their own self-esteem, community's band together to keep their streams clean and childcare providers are enabled to find support and training. Through the Community Partnership, the community decides how to best use funds to fit the needs of our community: we work to eliminate duplication of services, to coordinate grants and services across organizations, to stretch state monies as far as possible on needed services. The Community Partnership provides support for dozens of programs that once operated independently or did not exist before the Community Partnership was created. Source: (The Community Partnership, 2013)

Community Care Clinic (CCC)

The Community Care Clinic provides primary care and is supported by the Phelps and Maries County Health Department, Phelps County Regional Medical Center, and several volunteer health care professionals. The clinic is located in Rolla, is open weekday mornings, and is staffed by physicians, family nurse practitioners, nurses, social workers and other volunteers. The service is available to those individuals without health insurance as well as those receiving Medicaid benefits. All patients pay a nominal fee based on income.

The clinic provides primary medical care for diagnosis & treatment of illness, management of chronic & stable medical conditions, the treatment of injuries, routine examinations, and screening for health problems. Lab and radiology services are provided PCRMC. In addition, mental health services are available to help manage their illness through consistent

medication management and re-evaluation. Source: (Phelps Maries County Health Department, 2012a)

Pathways Community Behavioral Healthcare Inc

Pathways Community Behavioral Healthcare provides mental health and substance abuse treatment and prevention services that include; crisis intervention, psychiatric services for adults and children, substance abuse treatment and service for the developmentally disabled. Source: (Pathways Online.org, 2013)

Focus Group Summary

Issue:
There is inappropriate use of the Emergency Room (ER) for primary care and/or mental health care by public.
Solutions:
Work with ER leaders to design Fast-track referrals from ER to Community Health Clinic (CHC) for those who could or should be seen next day. Build on utilizing the existing care managers now in the ER. Look at a community wide education on appropriate use of ER. Communicate about work being done by Women's Shelter on educating women on utilization of primary care verses ER.

Issue:
Need for Healthy Lifestyle for health promotion education that goes beyond the clinic and the individual patient and takes a community perspective. There is a need for education to take place in a variety of locations including community wide strategies for health promotion; e.g. smoking, nutrition, obesity.
Solutions:
Have an approach that educates kids and parents about healthy lifestyles. Look in to Mercy's Health Teacher program. It's a service Mercy has bought for the schools; can it be built upon?

Issue:
Patient educated on self-help for chronic disease.
Solutions:
Look at the involvement of Behavioral Health and nursing educational programs in the area.

Issue:
There is a need for dental preventive care, dental education, and dental care for kids and adults.
Solutions:
Look at exploring these groups as potential partners and dental education for prevention. The "Forum Dental" has free dental exams and x-ray for 1 day. The Rolla Dental Clinic is helpful for those with Medicaid.

Issue:
Mental health is an important component and needs to be integrated with physical health in the design of the Community Health Clinic and shortage of providers.   Especially with Medicaid patients, many have to go out of county for mental health which has an impact of mental health patients in ER.
Solutions:
Look at utilizing Pathways as partner.

Issue:
Drug seeking behavior was mentioned as an issue throughout the community meetings and how it weakens the current system.
Solution:
Proceed with regard for local needs and providers and continue to involve providers in planning discussions both as a way to hear their concerns, build them into the design of the Community Health Clinic as appropriate, and learn more about what services they provide. Perhaps reactivate the Rolla Area Info Network (RAIN) to accomplish this.

Issue:
Need to get a better idea of availability of local resources.
Solutions:
A health resources guide could be created. Question whether this could be a Graduate Student project? Could the Rolla Area Info Network (RAIN) be reactivated? Envision the Community Health Clinic that serves as a clearinghouse for health care resources or a catalyst to make a clearinghouse happen.

Issue:
There is an overarching theme of shared responsibility for health care.
Solution:
Suggest having a social worker on site at Community Health Clinic who assists people to help themselves; like a coach. Phelps can be a community that has a vision of sharing responsibility for health. Explore having community care coordination. Look into what's being done in Albert Lea, MN.

Issue:
Education is needed in 3 realms: What are Community Health Clinic's; what are the needs and how do they addresses the needs? Education regarding what is available for local resources. Where folks can go for care? Look at education with focus on the prevention and health promotion.
Solutions:
Get education and information to the places where people go. Don't expect them to come to you at specified time & place, esp. if transportation is issue. Form a marketing team as part of the Community Health Clinic planning efforts such as head of radio could help. Develop frequently asked questions (FAQ) about Community Health Clinic. Review communication plan based on town hall discussions; assure sustainability issues and resource utilization is in the talking points.

Issue:
There is a need for afterhours care.
Solution:
Include expanded hours in design of Community Health Clinic.

Issue:
Transportation

Overarching vision for the Community Health Clinic:
Ideas such as the Community Health Clinic as a catalyst or coalesce of integrated community care.
Community Health Center as partner with schools, workplace, nursing homes, Head Start; AAA, etc...

Community Survey #1 " Point-In-Time" Conducted

The Phelps County Community Health Center Planning Committee conducted a "Point-In-Time" survey, a nonscientific study used to gain information regarding consumer perception of the need for a Federally Qualified Community Health Center (FQHC) in Phelps County, Missouri. This survey is part of a year-long effort to determine feasible approaches to addressing access to health care for those in Phelps County with limited financial or health insurance resources, and to decide if pursuing status as an FQHC is a viable option. This Point-in-Time survey brings the important voice of the consumer to the planning efforts.

The Point-In-Time survey was conducted in late February to early March 2012 and was broadly distributed across Phelps County at a variety of locations frequented by potential patients of a community health center. Distribution sites included health and social service organizations, the Health Department, school systems, community centers, a retirement community, daycare providers, a vocational rehabilitation office and a behavioral health office. An on-line survey option was also available using Survey Monkey. The survey was generally available to the public, in hard copy or on line, for a three day period at each distribution location.

A total of 389 surveys were completed. Of those, 255 (65.6%) were completed using hard copy paper surveys and 134 (34.4%) were completed in Survey Monkey. The following section summarizes information gleaned from the survey results.

Demographic Summary of Respondents

Residence by Zip Code:
Survey respondents reside in various locations in Phelps County and the surrounding area, with a total of 23 zip codes represented. Of the survey participants, 89.9% came from Phelps County, with 10% of respondents from seven other counties (Maries, Crawford, Pulaski, Morgan, Texas, Franklin and Dent counties). Within Phelps County, the majority of responses (52%) are from the Rolla zip code 65401, followed by the St. James zip code (65559) at 25% and Edgar Springs zip code (65462) at 15.8%.

Age:
The age of respondents varied widely, representing newborns to age 84. The largest percent of respondents (38.1%) are adults between 45 and 64 years of age. The next highest group (34.8%) is adults between the ages of 25 and 44 years of age. Taken together, 72.9% of respondents are adults between 25 and 64 years old.

Gender:
Females represented 74.7% of the survey respondents, with men equaling 25.2%. While the number of female respondents is unequal to the number of females in Phelps County, it is

suggestive of the fact that women are more likely to seek health care services for themselves and their families, and are traditionally considered the health care decision maker.

Household Size:
The size of respondents' households ranged from one to nine, with households of two members being the most common household size (25.4%). The next highest group (21.3%) is those with four-member households. In total, 78.3% of the respondents live in households with up to four members; 21.4% have households with more than four members.

Results of Community Survey #1

1) **What prompts respondents to seek medical care?** I go to the doctor…

388 Responded	Results
for health checkups and when I am sick or hurt	60.8%
only when I am extremely sick or hurt	36.9%
I never go to the doctor	2.3%

2) **What prompts respondents to seek dental care?** I go to the dentist…

389 Responded	Results
for dental checkups and when I have dental problems	52.1%
only when I have dental problems	35.2%
I never go to the dentist	12.5%

Responses to question 1 and 2 suggest that those surveyed are less likely to receive dental care than medical care. While 52% of respondents indicate they receive preventative dental care as well as treatment when needed, 35% only seek dental care when problems occur and 12% say they never receive dental care; compared to 2.3% of respondents who say they never receive medical care.

3) **Where do respondents regularly go when they are sick or need a health checkup?**
Where do you regularly go when you are sick or need a health checkup?

353 Responded	Results
Missouri Science & Technology Student Health	0.0%
Health Department	5.9%
Tri-Rivers Family Planning	0.6%
Hospital Emergency Room	12.1%
Community Care Clinic	13.5%
Doctor's Office	62.8%
Other	5.0%

The Community Care Clinic, a medical clinic offering discounted fees for services, was second to "Doctor's Office" as the most frequently selected response (13.5%) to where respondents regularly receive care. Notably, 12.1% of respondents selected the Emergency Room as the place where they seek regular care.

4) **If Doctor's Office was selected, indicate which doctor's office.** If you selected Doctor's Office in question above, please indicate which doctor's office.

211 Responsed	Results
St. John's Mercy	25.1%
St. James Mercy	4.2%
Dixon	0.4%
Bond Clinic	8.0%
Forest City Medical	9.0%
Cuba Medical Clinic	1.4%
Paulsen	0.4%
PCRMC Medical Group	11.3%
Ft. Leonard Wood	0.9%
Rolla Family Clinic	14.7%
Mercy After Hours Clinic	24.1%

5) **How frequently do respondents visit the emergency room?** Number of times you or your family member visited the emergency room in the last year?

389 Responsed	Results
Not at all	41.3%
1 Time	26.7%
2 - 3 Times	19.8%
More than 3 times	12.0%

6) **What prevents respondents from getting health care?** Have you been unable to visit a doctor or clinic for any of the following reasons? (Check all that apply)

354 Responsed	Results
They wouldn't take my insurance	9.0%
I couldn't afford to pay	31.3%
I didn't have transportation	5.0%
I have needed care after work or on the weekend	16.1%
I owed them money	5.6%
Office was not taking new patients	14.9%
It takes too long to get an appointment	16.9%
Other	0.8%

7) **What prevents respondents from getting dental care?** Have you been unable to visit a dentist for any of the following reasons? (Check all that apply)

204 Responded	Results
They wouldn't take my insurance	11.8%
I couldn't afford to pay	61.8%
I didn't have transportation	4.9%
I have needed care after work or on the weekend	4.9%
I owed them money	2.9%
Office was not taking new patients	4.9%
It takes too long to get an appointment	4.4%
Other	4.4%

Respondents were provided with a list of seven possible reasons (plus "other") for being unable to visit a dentist and were invited to select all applicable reasons. Respondents (61.8%) overwhelmingly state that the cost of care is the barrier to getting dental care. When this response is coupled with "They won't take my insurance" (11.8%) and "I owed them money" (2.9%), over 76% of responses are related to financial barriers to receiving dental care.

8) **Does the respondent have health insurance?** Do you have health insurance?

383 Responded	Results
Yes	73.1%
No	26.9%

More than 25% of respondents do not have health insurance. This figure correlates with recent U.S. Census data that indicates 28.6% of Phelps County's population with incomes below 200% of the Federal Poverty Level is uninsured. Source: (United States Census Bureau- & nited States , 2012)

9) **What type of insurance do respondents have?** If you have insurance, what type?

290 Responded	Results
Private	50.0%
Medicaid	24.4%
Medicare	9.6%
Other	15.9%

Note: If respondents indicated in the previous question they have health insurance, they were asked to list the type. While 280 responded in the prior question that they do have insurance, 290 responses were listed for type of insurance, perhaps an indication that some respondents have more than one type of insurance for their family. While 50% of the responses indicate they have "private insurance", 24.4% of respondents are insured by Medicaid. For other, 15.9% of respondents selected this

choice; many of those respondents who defined their "Other" response specified governmental sources of insurance such as "Temporary Medicaid", Medishare, Tricare, and Mail Handlers (for government employees). Medicaid, Medicare and Other total up to 50% of the insurance type given, indicates a large percentage of governmental sources of insurance. Also, keep in mind the 26.9% which listed they had no insurance.

10) **Would respondents use a community health center?** If the Community Care Clinic was closed and a community health center was available, would you use it?

378 Responded	Results
Yes	54.2%
No	11.4%
Not Sure	34.4%

Respondents were asked if they would use a community health center in Phelps County, if the Community Care Clinic were closed. The question explained that a community health center charges fees based on ability to pay and has some evening and weekend hours of operation. Respondents expressed strong interest in using a community health center:

11) **What types of services are most important to respondents at an affordable rate?** What types of services are most important to you to have at an affordable rate?

821 Responded	Results
Primary Medical Care	41.4%
Dental Care	27.8%
Mental Health Services	6.9%
Lab Services	10.6%
X-Ray	6.4%
Specialty Care	6.9%

Respondents were invited to pick the two services that are most important to them to have available at an affordable rate. Some respondents did not limit themselves to two selections, perhaps an indication of the importance of many services to them. Respondents overwhelmingly view access to primary medical care and dental care as most important. Results indicate that respondents prioritize access to primary medical and dental care above access to lab, x-ray or specialty medical services.

Survey Summary and Implications

This Point-in-Time survey provides a snapshot of impressions held by Phelps County residents who are assumed to be representative of the patient population community health centers are designed to serve. When coupled with the Phelps County Needs Assessment,

the results from this Point-in-Time consumer survey help present the picture of health care needs in Phelps County.

The Point-in-Time survey results provide valuable information when designing a model for health care delivery for economically challenged individuals in Phelps County. The results indicate a strong need for affordable care and a willingness by potential patients to seek care at a community health center. The availability of a sliding fee scale at a federally qualified community health center may significantly reduce the percent of Phelps County residents who state in the survey they only seek medical care when extremely sick or hurt or those who hesitate to seek care due to cost.

A significant number of respondents seek the emergency room as their source of regular care. The availability of a community health center with extended evening and weekend hours may reduce this apparent inappropriate use of the hospital emergency room as a site for primary medical care.

Results indicate that respondents place the highest priority on having basic medical and dental needs met. Being able to affordably obtain primary care appears to be of higher importance than receiving more specialized services. Results also indicate the importance of assuring that any health care model proposed for Phelps County provides access to oral health care as well as primary medical care.

Results indicate that the majority of respondents would seek care at a community health center if one were available in Phelps County. The fact that 34% of respondents expressed uncertainty about using a health center indicates the need for continued community education about who health centers serve, how care is priced, and what services are traditionally provided.

Community Survey #2

The following information provides a summary of the second community survey that was put together to provide more information for the needs assessment. The template used from this survey was obtained from The Missouri Hospital Association and was developed specifically for use in developing a CHNA.

Gender: What is your gender?

Male
22% - 43

Female
78% - 153

196 out of 198 Returned Answer
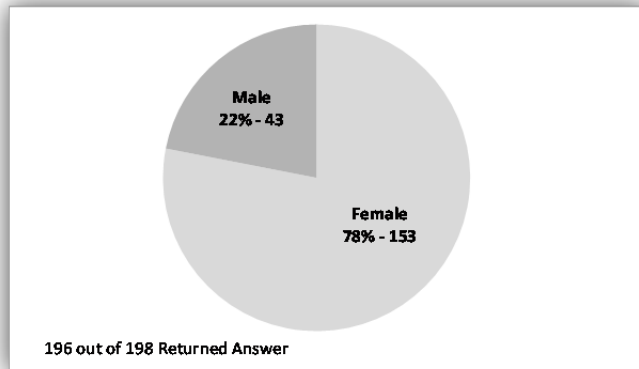
Zip Codes: What is your zip code?

Surveys came from 37 different zip codes, with 152 coming from 65401 (Rolla), 17 from 65565 (Steeleville), 15 from 65453 (Cuba) and 12 from 65559 (St. James). The remaining 33 zip codes represented had between 1 and 4 survey responses.

Race: What is your race?

American
Indian or
Alaskan Native
3 - 1.5%

White
194 - 98.5%

- White
- Black or African-American
- American Indian or Alaskan Native
- Asian
- Hispanic or Latino
- Native Hawaiian or other Pacific Islander
- From multiple races
- Other (please specify)

197 out of 198 Returned Answer
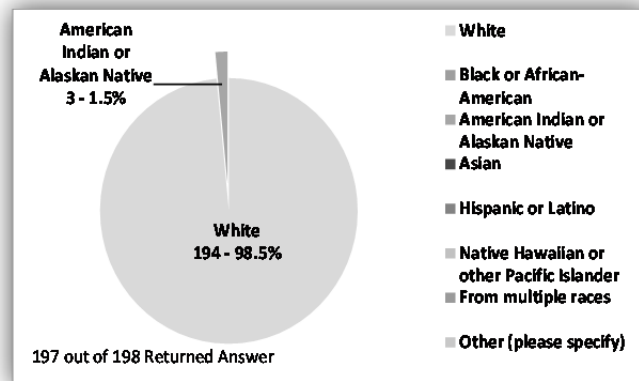
Age: What are the ages of the people who live in your household?

194 out of 198 Returned Answer
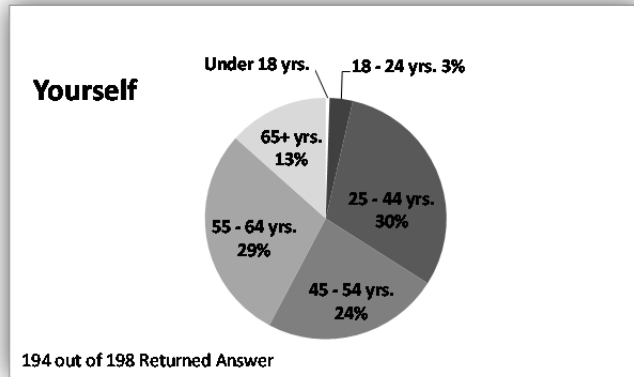
Age Group	Person 2	Person 3	Person 4	Person 5	Person 6	Person 7
0 - 35 mths	3	2	6	3	0	0
3 - 5 yrs	1	9	6	5	1	2
6 - 12 yrs	3	22	17	10	3	0
13 - 17 yrs	6	22	12	3	2	1
18 - 24 yrs	7	24	12	3	0	0
25 - 44 yrs	46	5	3	4	0	0
45 - 54 yrs	32	0	2	1	0	0
55 - 64 yrs	38	0	0	1	0	0
65+ yrs	18	1	1	1	1	1

Length of Time in the Community: About how long have you lived in the area?

195 out of 198 Returned Answer
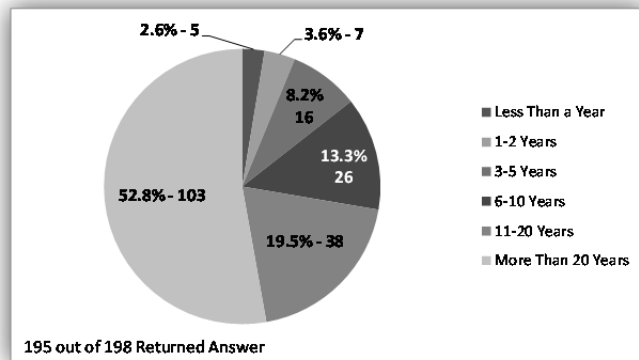
Seatbelt Use: How often do you use seat belts when you drive or ride in a car?
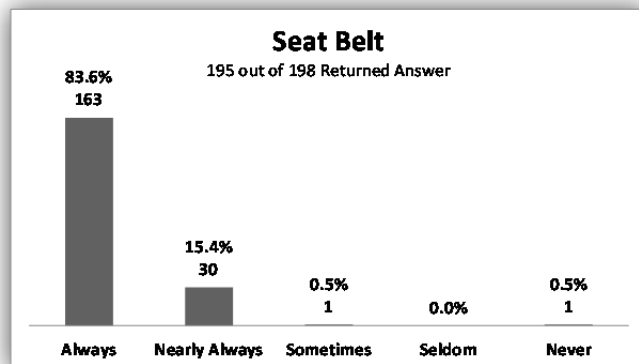
Flu Shot Usage: During the past 12 months, have you received a flu shot?

No
29.1%
57

Yes
70.9%
139

196 out of 198 Returned Answer
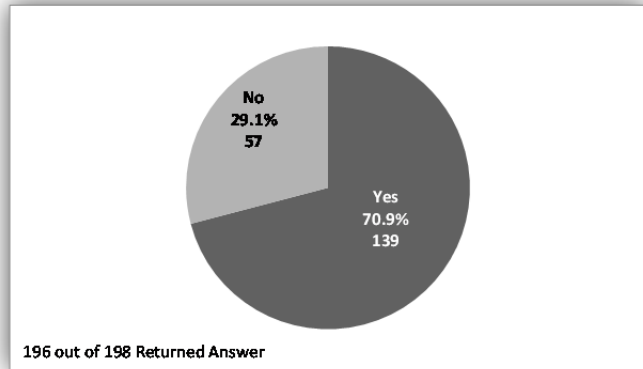
High Blood Pressure: Have you ever been told by a doctor you had high blood pressure?

No
52.6%
102

Yes
47.4%
92

194 out of 198 Returned Answer
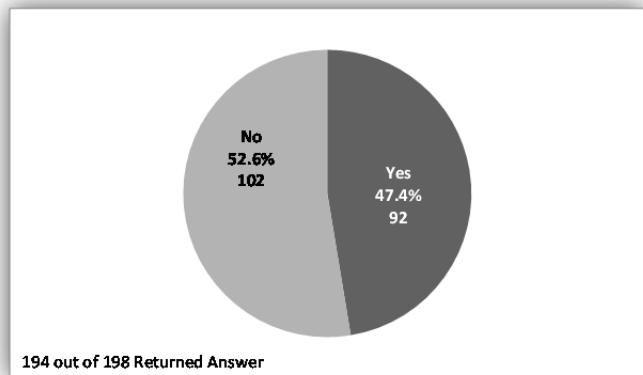
High Blood Pressure Medication: Is any medication currently prescribed for your high blood pressure?

No
31.0%
29

Yes
69.0%
63

92 out of 92 who answered Yes to Question # 8
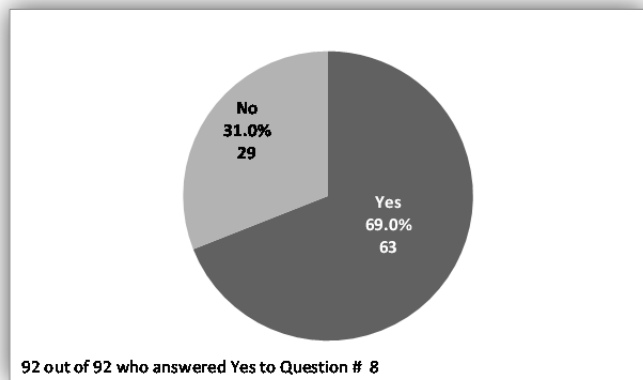
Lose Weight: Have you ever been told by a doctor you should lose weight for health reason?

195 out of 198 Returned Answer
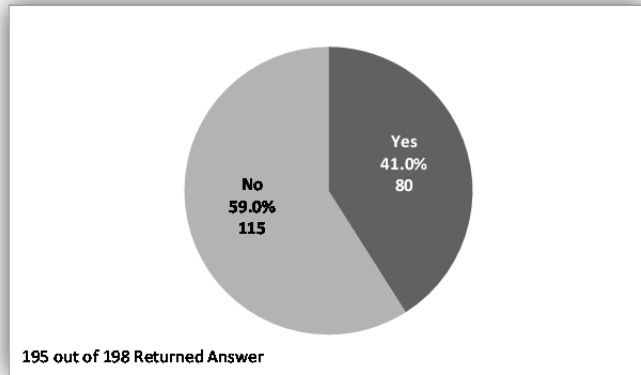
Participation in Exercise or Activity: During the past month have you participated in any physical activities or exercise, such as running, walking, golf, etc.?

193 out of 198 Returned Answer
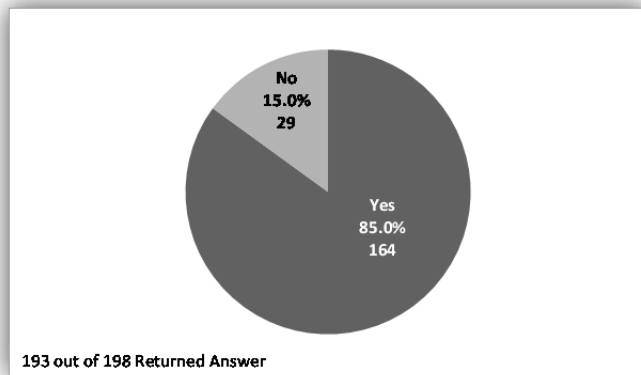
Participation in Exercise or Activity: How many times a week do you take part in this activity?

171 out of 198 Returned Answer
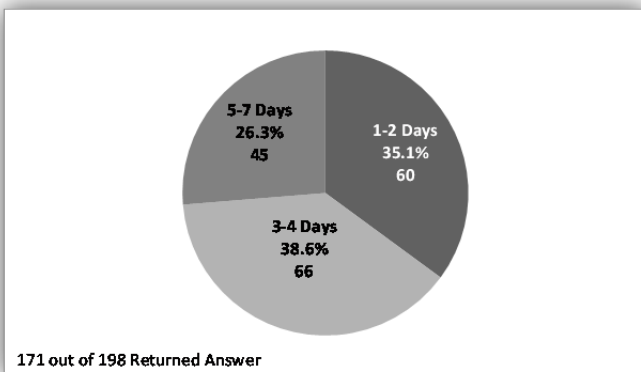
Length of Time Spent in Activity: How many minutes or hours do you usually keep at this activity?

Between 1-2 hours 27.1% 51

More than 2 hours 4.8% 9

Less than 1 hour 68.1% 128

188 out of 198 Returned Answer
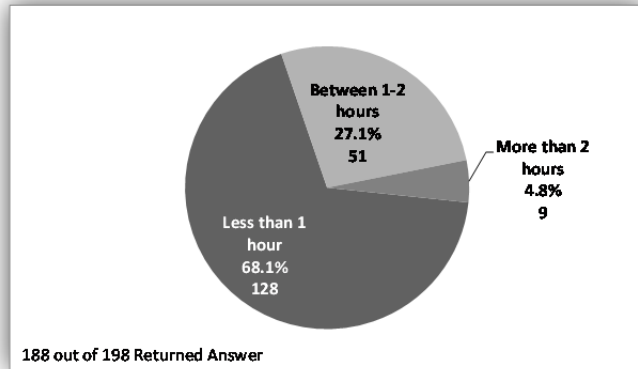
Weight Loss: Are you currently trying to lose weight?

No 30.8% 60

Yes 69.2% 135

195 out of 198 Returned Answer
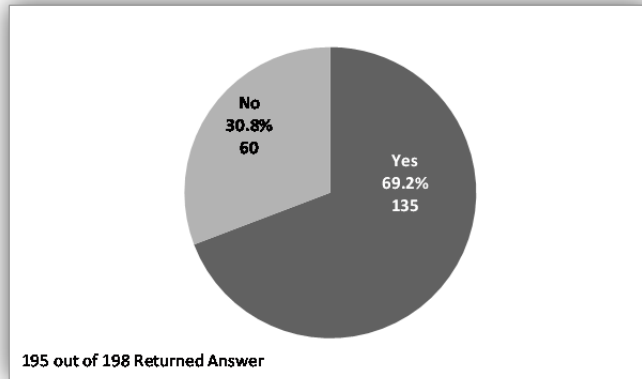
Weight Loss: How are you trying to lose weight? (Check all that apply)

139 out of 198 Returned Answer

72.4%

29.9%

18.1%

3.9%

Eating fewer calories | Increasing physical activity | Both | Other
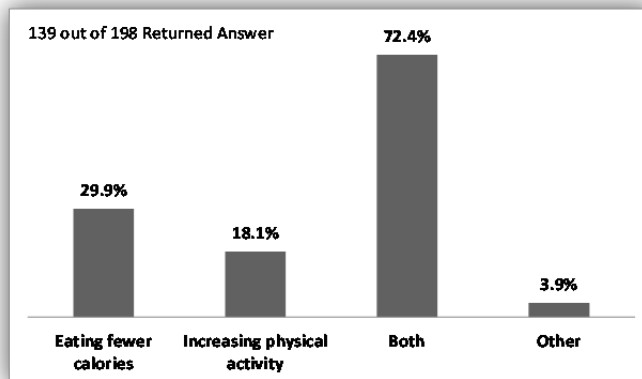
Smoking: Have you smoked at least 100 cigarettes in your life?

Yes
37.8%
73

No
62.2%
120

193 out of 198 Returned Answer

Smoking: Do you smoke now?

Yes
7.7%
15

No
92.3%
179

194 out of 198 Returned Answer
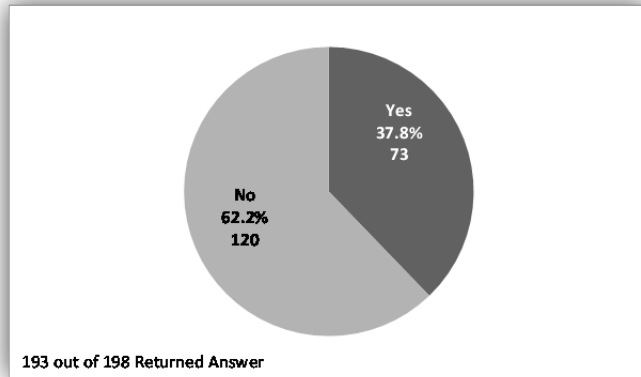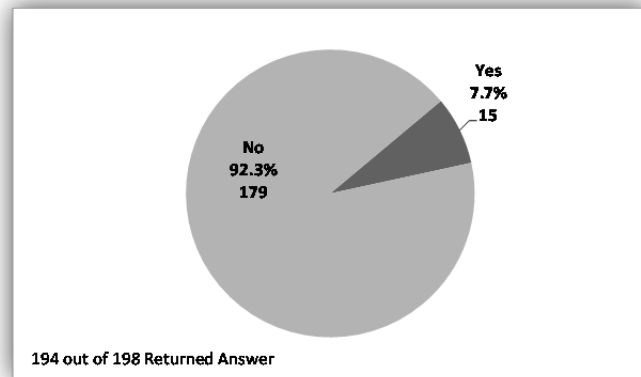
Conditions: Have you ever been told by a doctor that you have one of the following conditions? (Check all that apply)

Condition	Percent
None	37.6%
Hypertension (High Blood Pressure)	31.7%
High Cholesterol	28.8%
Diabetes or High Blood Sugar	14.1%
Adult Asthma	9.4%
Cancer If yes, (Please specify type)	7.1%
Angina or Coronary Artery Disease	4.7%
Bacterial Pneumonia	4.1%
Congestive Heart Failure	2.9%
Heart Attack	2.9%
Chronic Obstructive Pulmonary Disease	2.4%
Stroke	0.0%

184 out of 198 Returned Answer
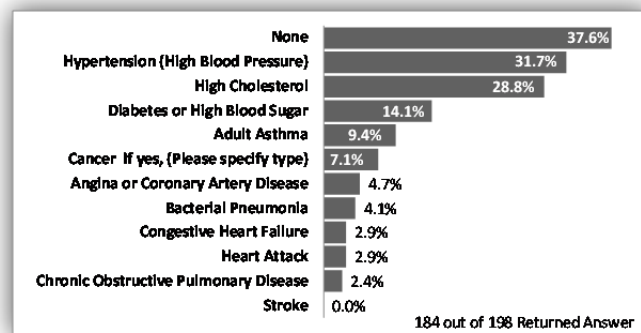
Child in Household: Has a child in your household (age 17 or younger) been told by a doctor that they have one of the following conditions? (Check all that apply.)
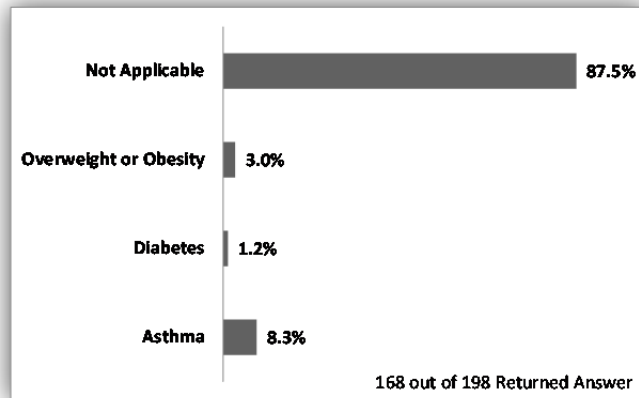
Child in Household with Asthma: If a child in your household has asthma, how many times during the past 12 months did you visit an emergency room because of the asthma?
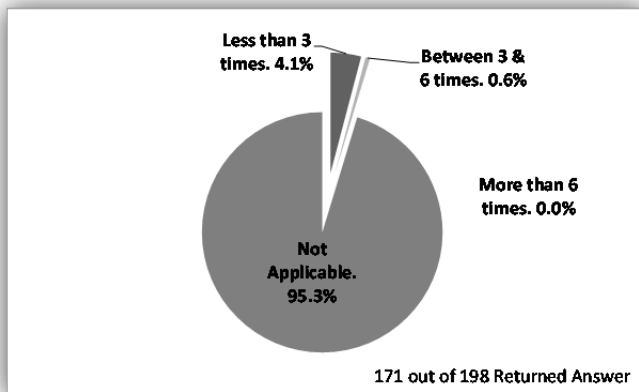
Child in Household: Has a child in your household (age 17 or younger) used the following? (Check all that apply)
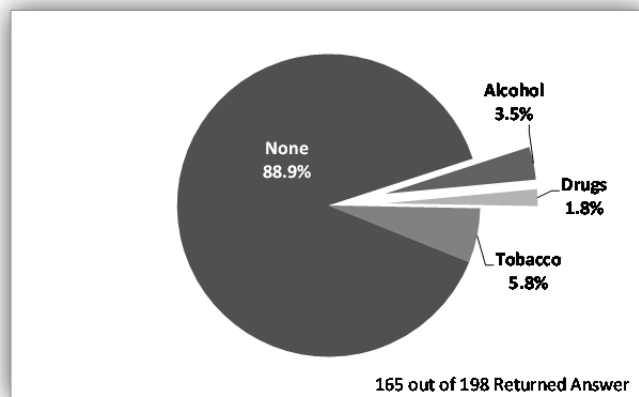
Child in Household: Has a child in your household (age 17 or younger) become pregnant?

Yes
0.6%

No
99.4%

161 out of 198 Returned Answer
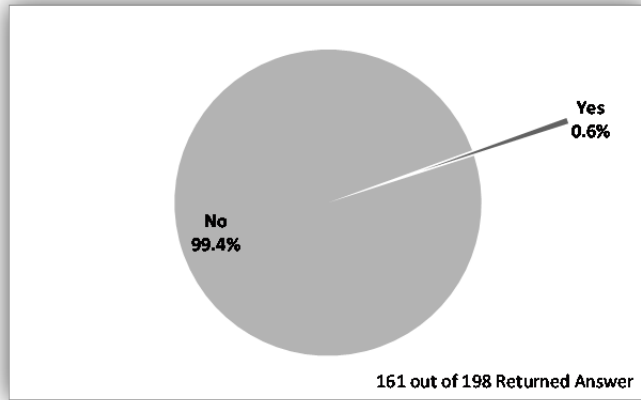
Child in Household: Is any child (age 17 or younger) in your household in fair-to-poor health?

Yes, 1
0.6%

No
98.8%

Yes, 2 or more
0.6%

162 out of 198 Returned Answer
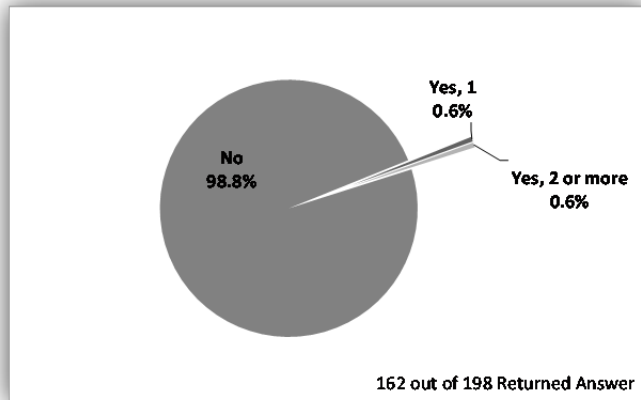
Household: Including yourself, how many members of your household are disabled? How many adults (age 18 or older) are in fair-to-poor health?

Reply	No One	1 Person	2 Persons	3 or more	Prefer not to answer
Disabled?	159	22	5	0	1
How many adults (age 18 or older) are in fair to poor health?	147	22	7	1	3

190 out of 198 Retuned Answer

Primary Caregiver: Are you or any household member a Primary Caregiver for an aged, disabled or chronically ill person? (Including a parent, spouse or other relative)

Yes
9.8%

No
90.2%

194 out of 198 Returned Answer
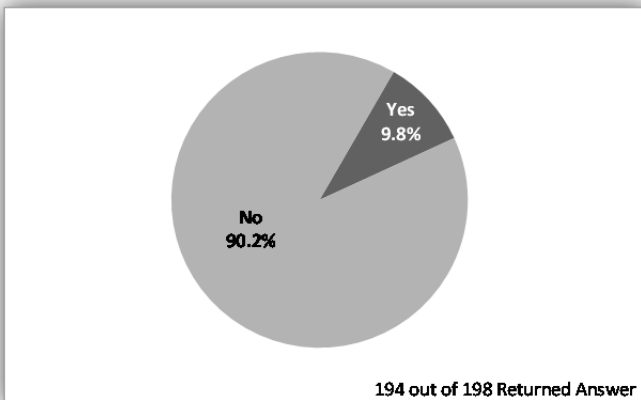
Frequency of Routine Checkups: How long has it been since you last visited a doctor for a routine checkup? A routine checkup is a general visit, not a visit for a specific injury, illness or condition. Has it been within the past....

Year 73.8%
2 Years 12.8%
5 Years 6.7%
5 or More Years 3.6%
Never 3.1%

195 out of 198 Returned Answer
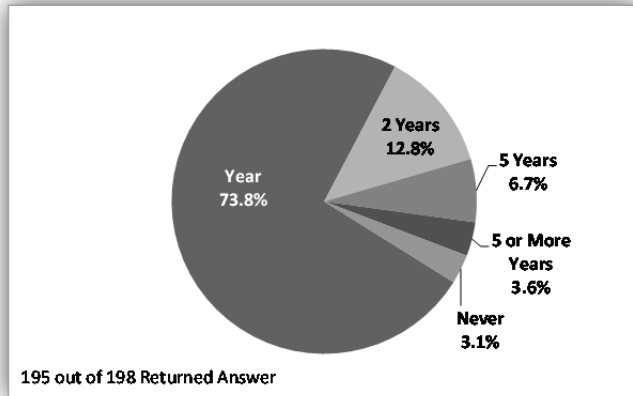
Physician Visit: If your last visit was more than two years ago, is it because you....? (See choices)

28 out of 198 Returned Answer

Could not arrange transportation — 0.0%
Count not schedule due to work or personal conflicts — 3.6%
Do not have a medical condition that requires any care — 17.9%
Count not afford the payments due, regardless of insurance status — 25.0%
Do not routinely receive any health screenings — 53.6%
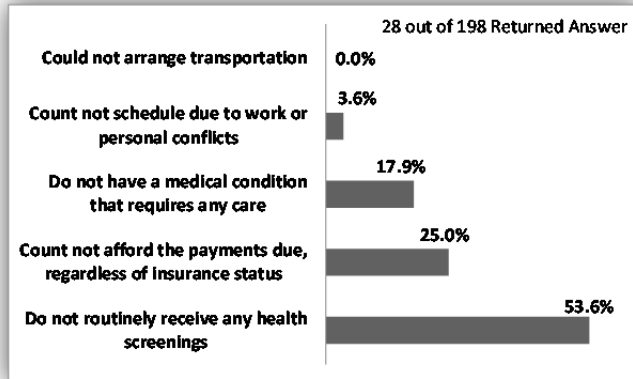
Physician: If you or a household member have a health care need: (See choices)

Do you have a doctor you can go to? — Yes 94.0% / No 6.0%
Do you have a dentist you can go to? — Yes 88.0% / No 12.0%
Do you have a mental health specialist you can go to? — Yes 42.0% / No 58.0%
Do you have a substance abuse counselor you can go to? — Yes 28.0% / No 72.0%

192 out of 198 Returned Answer
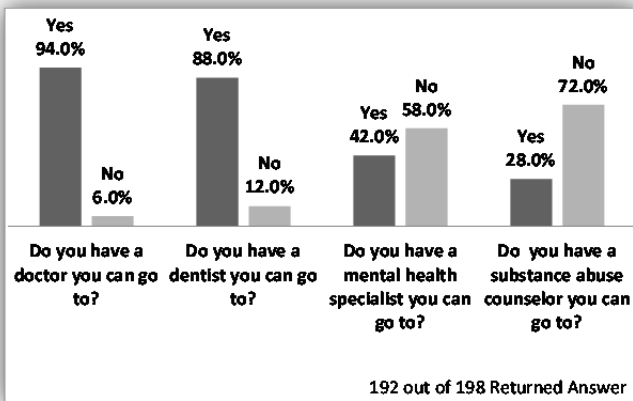
Emergency Room Use: How many times during the past 12 months have you or any household member used a hospital emergency room?
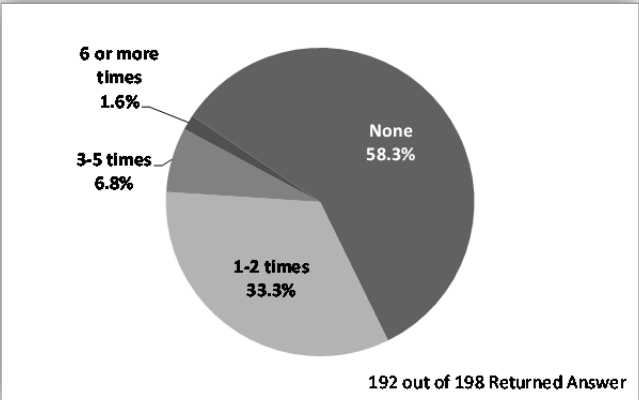
Emergency Room Use: If you or a household member used a hospital emergency room in the past 12 months, was it due to:
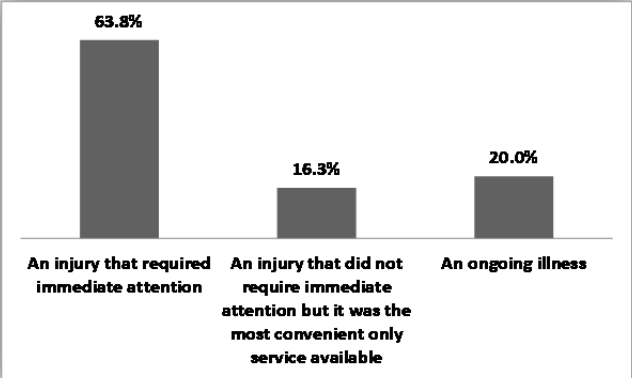
Finding Physician: Have you or anyone in your household had any difficulty finding a doctor within the past two years?
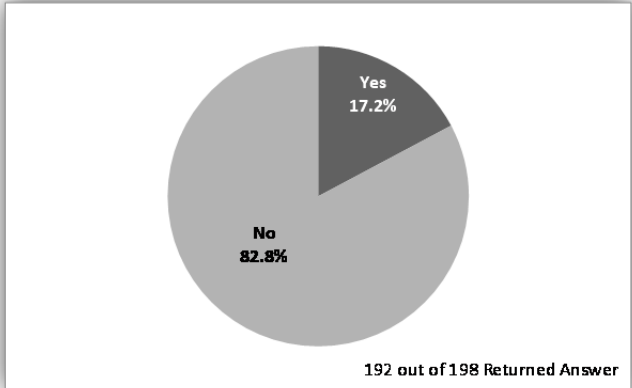
Issue Finding Physician: If yes, briefly, why would you say you had trouble finding a doctor?
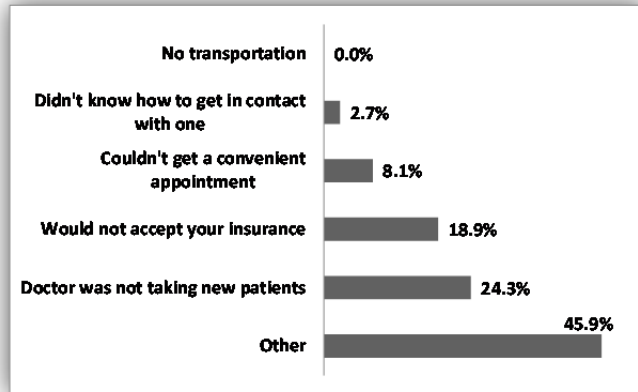
Issue Finding Physician: Have you or anyone in your household had any difficulty finding a doctor that treats specific illnesses or conditions in your area within the past 2 years?
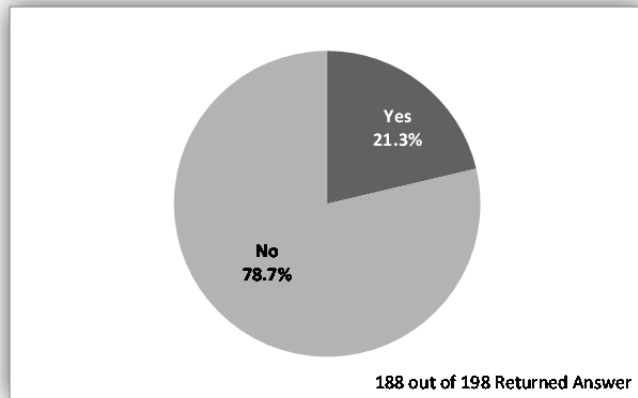
Issue Finding Physician: If yes, what kind of specialist did you look for?
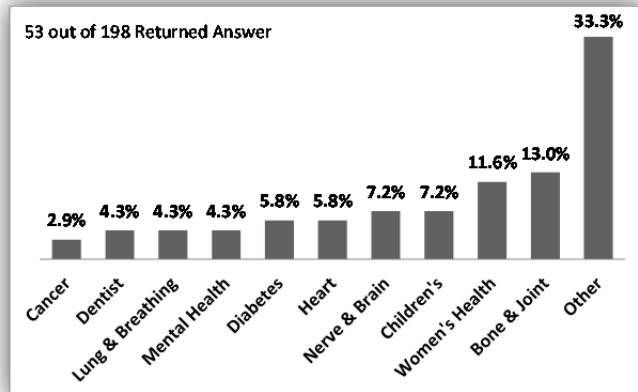
Issue Finding Physician: Why were you unable to visit the specialist when you
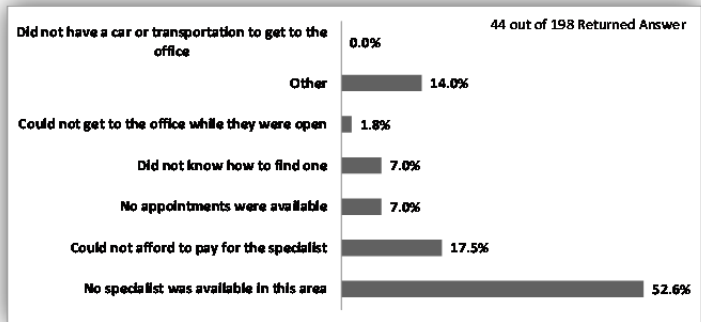
Cholesterol: About how long has it been since you had your blood cholesterol level checked? Within the...
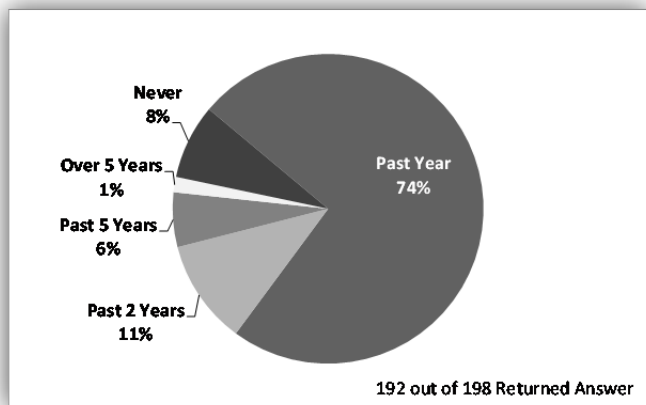
Cholesterol: Have you ever been told by a doctor or other health care professional that your blood cholesterol level is too high?
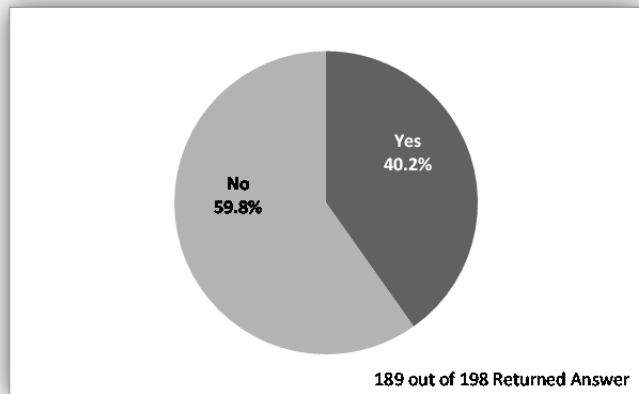
Diabetes: About how long has it been since your blood was checked for diabetes?

Over 5 Years 5%
Never 11%
Past 5 Years 6%
Past 2 Years 10%
Past Year 68%
191 out of 198 Returned Answer
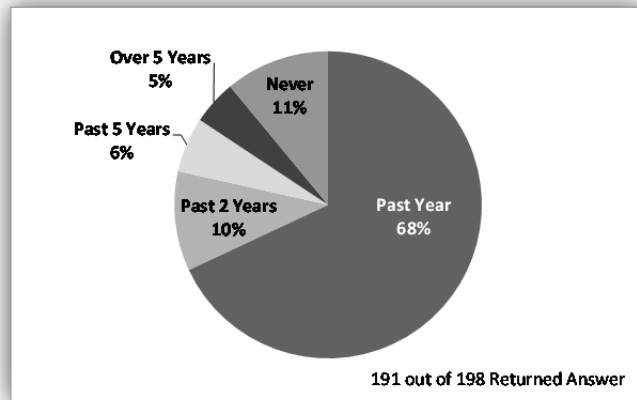
Diabetes: Have you ever been told by a doctor or health care professional you have high blood sugar or diabetes?

Yes 18%
No 82%
192 out of 198 Returned Answer
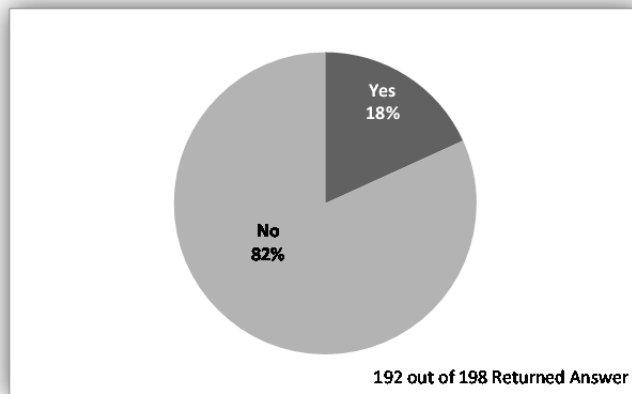
Colon Cancer: How long has it been since you had an exam or screening for colon cancer?

192 out of 198 Returned Answer
Past Year 13%
Past 2 Years 10%
Never 55%
Past 5 Years 14%
Over 5 Years 8%
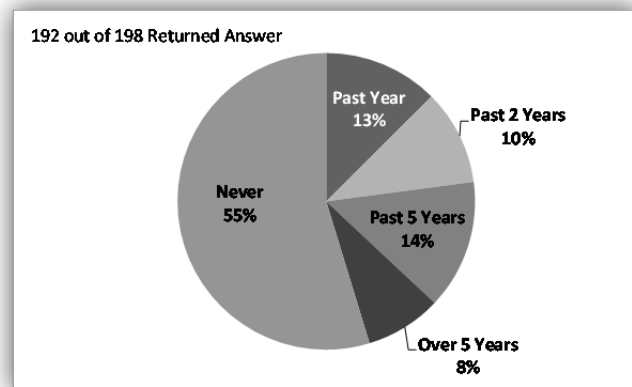
Mammogram: How long has it been since your last mammogram for breast cancer?

Past 2 Years 12%
Past 5 Years 7%
6 Years or more 2%
Past Year 40%
Never 16%
Not Applicable 23%

191 out of 198 Returned Answer
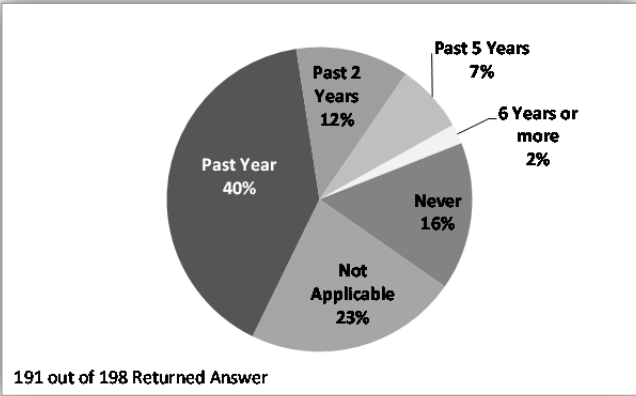
Breast Exam: How long has it been since your last breast exam by a doctor or nurse?

Never 6%
6 Years or more 5%
Past 5 Years 7%
Past Year 63%
Past 2 Years 19%

138 out of 198 Returned Answer
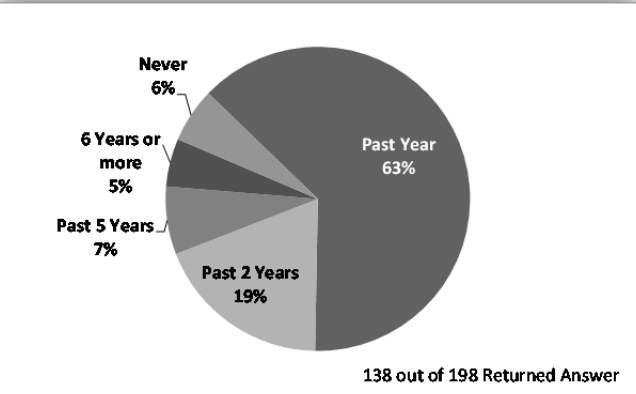
Pap Smear Exam: How long has it been since your last Pap Smear for female related cancers?

Never 4%
6 Years or more 10%
Past 5 Years 11%
Past Year 49%
Past 2 Years 26%

137 out of 198 Returned Answer
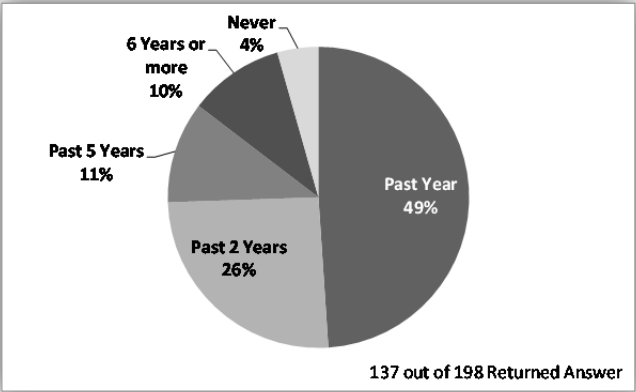
Community Health Problems: What do you think are the most pressing health problems in the community? (Circle all that apply)

	181 out of 198 Returned Answer
Other	3.9%
Lack of prenatal care	9.4%
Child Abuse	15.5%
Domestic violence	17.7%
Teen preganancy	21.5%
Lack of transportation to health care services	21.5%
Alcohol - underage binge or abuse	26.0%
Mental health	27.1%
Lack of dental care	30.4%
Cancer	30.4%
Alcohol - dependency or abuse	31.5%
Prescription medication too expensive	31.5%
Tobacco use - smoking among teenagers	40.9%
Drug Abuse - prescription medications	43.6%
Tobacco use - smoking among adults	45.9%
Obesity in children & teenagers	51.9%
Cost of health care	54.7%
Lack of health insurance	55.8%
Drug Abuse - illegal substances	60.2%
Ability to pay for care	63.0%
Obesity in adults	64.6%

Medical Services Needed: What medical services are most needed in your community? (Circle all that apply)

	164 out of 198 Returned Answer
Orthopedic care (bone & joint)	11.0%
Other	11.6%
Pediatric services	16.5%
Emergency-trauma care	18.9%
Cancer treatment	19.5%
Heart care services	20.1%
Women's services, such as obstetrics-...	22.0%
Diabetes care	23.2%
Alcohol & drug abuse treatment	37.2%
Counseling-mental health services	37.8%
Adult primary care service	43.3%
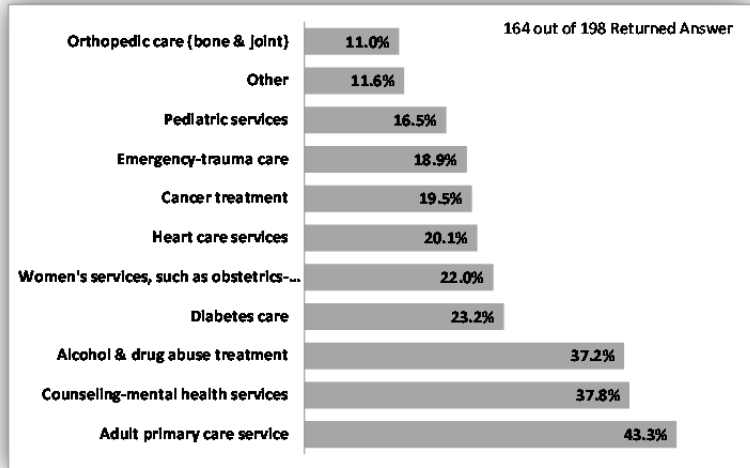
Health Education Services: Please select the types of health education services most needed in your community?

	158 out of 198 Returned Answer
Other	4.4%
HIV - AIDS	6.3%
Asthma	9.5%
Alzheimer's disease	25.3%
Sexually transmitted diseases	25.3%
Diabetes	32.3%
Child abuse-family violence	33.5%
Cancer screening	36.1%
Alcohol Abuse	42.4%
Drug abuse	45.6%
Stress management	48.1%
Smoking cessation &/or prevention	50.6%
Diet &/or exercise	63.3%
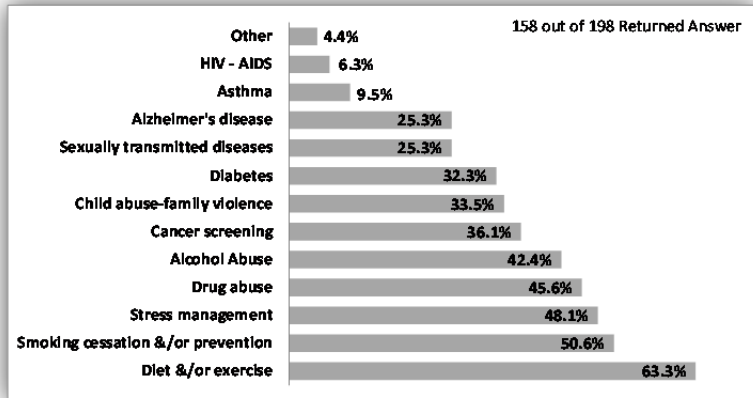
Health Insurance: How many household members are currently covered by health insurance?

Health Insurance - Answer Options	Response Avg	Response Total
How many adult household members are currently covered by health insurance?	1.92	308
How many children household members are currently covered by health insurance?	1.08	131
How many household members are currently "not covered" by health insurance?	0.15	7
169 out of 198 Returned Answer		

Health Insurance: If you or members of your household have health insurance coverage, how is it obtained? (Check all that apply)

174 out of 198 Returned Answer

Category	Percent
Veterans' Administration	4.6%
Medicaid	5.7%
Privately purchased	14.4%
Medicare B	16.1%
Through a retirement insurance plan	17.2%
Medicare A	17.2%
Through a employer's health insurance plan	68.4%
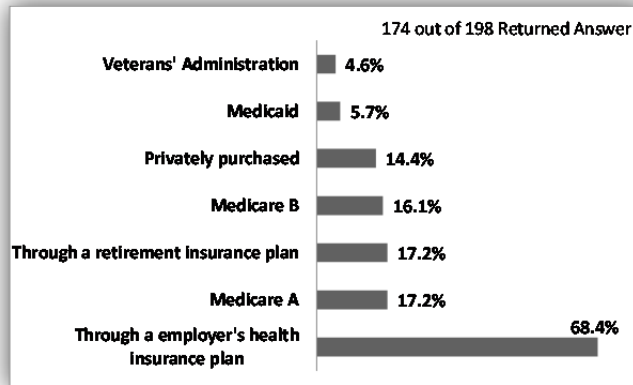
Health Insurance: Do any of these insurance policies provide dental coverage?

176 out of 198 Returned Answer

No 25%

Yes 75%
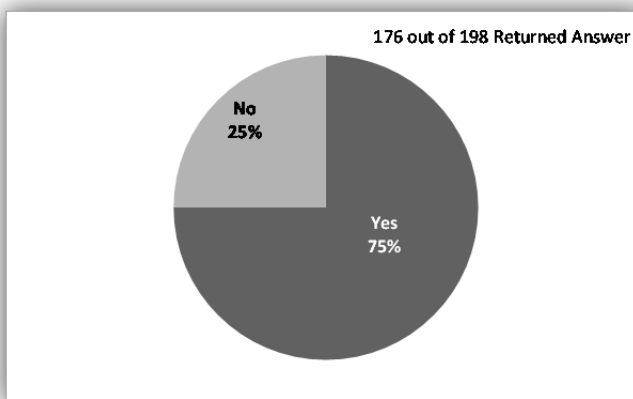
Health Insurance: Are medical, dental or prescription co-pays a large enough problem that you postpone or go without services or prescriptions?
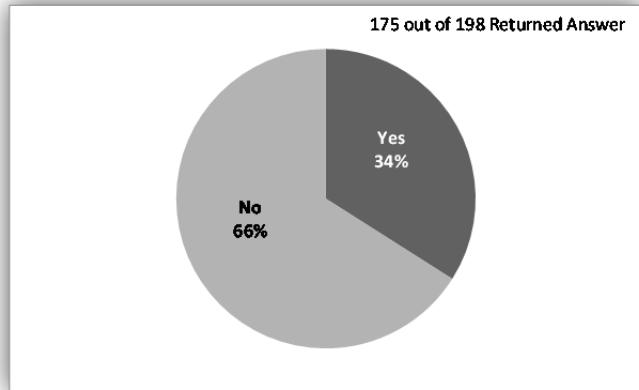
Health Insurance: Do any of these insurances pay for prescriptions?
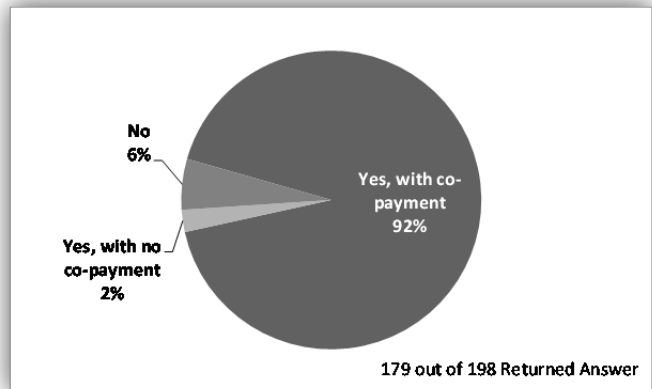
Miles Traveled: How many miles do you travel, one way to:

	1-5	6-10	11-20	21-30	> 30	Response's
See a doctor	40.8%	22.9%	12.8%	8.4%	15.1%	179
Hospital	35.6%	17.5%	14.7%	13.6%	18.6%	177
School or job training	52.9%	8.8%	16.7%	9.8%	11.8%	102
Child care	68.3%	7.9%	19.0%	3.2%	1.6%	63
Job	45.3%	16.5%	17.3%	10.1%	10.8%	139
					180 out of 198 Returned Answer	

Education Level: What is your highest level of education?
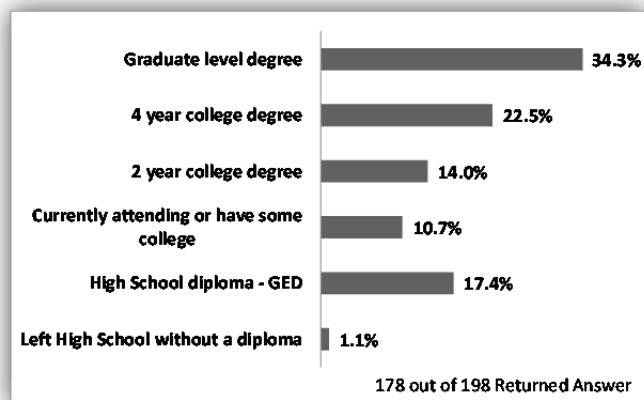
Retired Adults in Household:
Including yourself, how many
adults in your household are
retired?
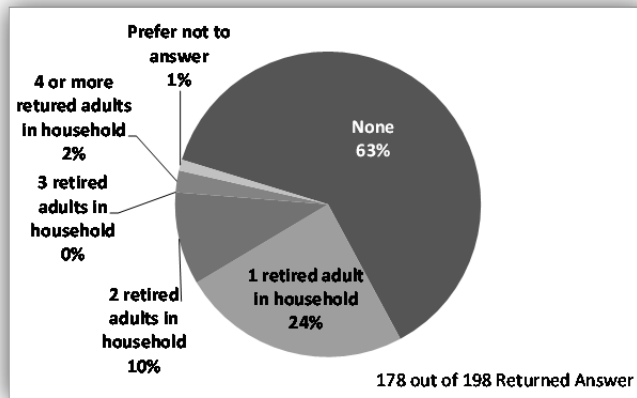
**Employed Fulltime Adults in
Household:** Including yourself,
how many adults in your
household (18+) are employed
fulltime, year round?
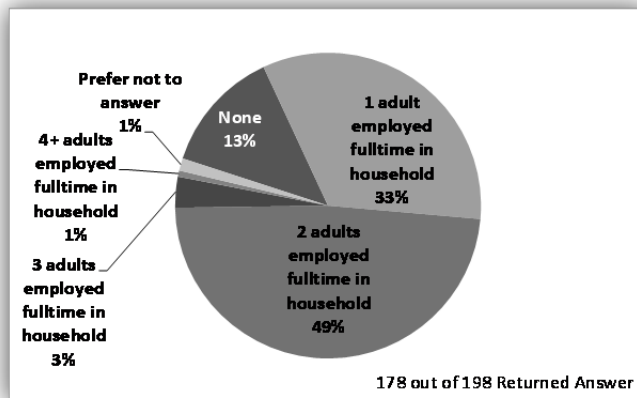
Income: Counting all income
sources from everyone in your
household, what was the
combined household income last
year?
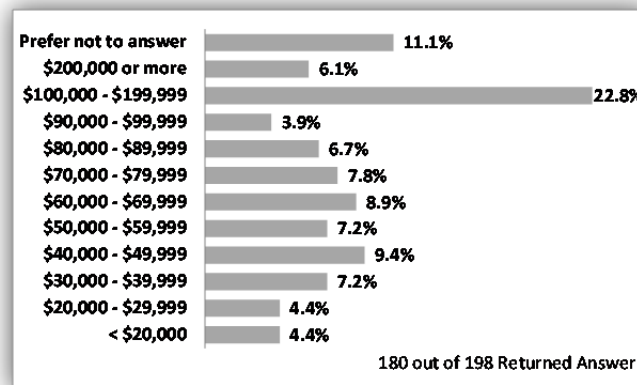
Housing Situation: How would you describe your housing situation?

Living in group home — 0.0%
Living in a motel — 0.0%
Living in a shelter — 0.0%
Multiple households sharing an house or apartment — 0.6%
Living temporarily with relative or friend — 0.6%
Living in senior housing or assisted living — 1.1%
Other — 1.7%
Rent house, apartment, or room — 11.6%
Own house or condo — 84.5%

181 out of 198 Returned Answer
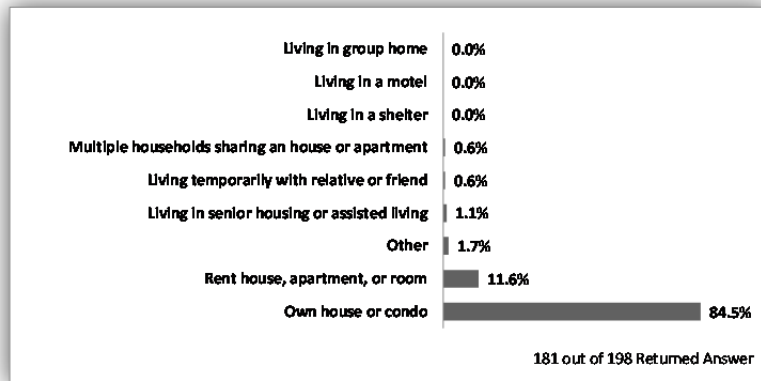
Household Issues: Some of the following may have been a problem for you or someone in your household. If it has been a problem in the past 12 months, please tell us how much of a problem it has been?

	Not a Problem	Minor Problem	Major Problem	Don't Know
Adult substance abuse (alcohol or legal medications)	146	7	2	0
Adult substance abuse (illegal drugs)	152	1	2	0
Caring for an adult with disabilities	135	14	4	0
Youth substance abuse (alcohol, drugs, etc.)	149	4	2	0
Caring for a child with disabilities	152	2	1	0
Child abuse	153	0	0	0
Physical violence against adults	154	0	1	0
Depression	106	39	10	0
Not having enough money for food	148	6	1	0
Not able to afford nutritious food (fresh vegetables & fruits)	136	12	6	0
Not able to afford transportation	144	5	3	0
Not having enough money to pay for housing	146	4	2	0
Not having enough money to pay the doctor, dentist or pharmacy	124	23	9	0
Not having enough money to pay for the mental health counselor	142	8	3	2
Use of tobacco products	129	13	10	0
Not being able to find or afford afterschool child care	147	1	2	2
Sexual abuse	152	0	0	0
Teen pregnancy	150	0	0	0
Other	1	0	0	0
		173 out of 198 Returned Answer		

PCRMC Strategies For Addressing Identified Needs

- Review the MICA prioritization for counties (see tables below)
- Determine areas to focus & develop interventions
- Oral Health Intervention

Prioritization of Selected Diseases and Conditions

Sex: Both Sexes, Race: All Races, Age Group: All Ages

Crawford County

Disease/Condition	Rank	Total Weight
Chronic Obstructive Pulmonary Disease (COPD)	1	324.5
Heart Disease	2	322.5
Motor Vehicle Accidents	3	294.5
Alcohol- and Substance-Related	4	291
Lung Cancer	5	269

Dent County

Disease/Condition	Rank	Total Weight
Chronic Obstructive Pulmonary Disease (COPD)	1	310
Heart Disease	2	302.5
Alcohol- and Substance-Related	3	295
Motor Vehicle Accidents	4	291
Diabetes	5	285.5

Gasconade County

Disease/Condition	Rank	Total Weight
Chronic Obstructive Pulmonary Disease (COPD)	1	310.5
Heart Disease	2	302.5
Motor Vehicle Accidents	3	278.5
Diabetes	4	276.5
Stroke/Other Cerebrovascular Diseases	5	270

Maries County

Disease/Condition	Rank	Total Weight
Heart Disease	1	323
Motor Vehicle Accidents	2	299
Chronic Obstructive Pulmonary Disease (COPD)	3	292
Pneumonia and Influenza	4	268
Arthritis/Lupus	5	259

Phelps County

Disease/Condition	Rank	Total Weight
Chronic Obstructive Pulmonary Disease (COPD)	1	313.5
Heart Disease	2	301.5
Alcohol- and Substance-Related	3	298
Motor Vehicle Accidents	4	290.5
Diabetes	5	284.5

Pulaski County

Disease/Condition	Rank	Total Weight
Chronic Obstructive Pulmonary Disease (COPD)	1	328.5
Heart Disease	2	301.5
Diabetes	3	288
Alcohol- and Substance-Related	4	280
Stroke/Other Cerebrovascular Diseases	5	279.5

Texas County

Disease/Condition	Rank	Total Weight
Chronic Obstructive Pulmonary Disease (COPD)	1	330.5
Heart Disease	2	302.5
Motor Vehicle Accidents	3	298.5
Diabetes	4	291
Stroke/Other Cerebrovascular Diseases	5	282.5

Prioritization of Selected Risk Factors

Sex: Both Sexes, Race: All Races, Age Group: All Ages

Crawford County

Risk Factor	Rank	Total Weight
Mother Overweight	1	56.5
Smoking	2	56.5
No Exercise	3	55.5
Obese (>30 BMI)	4	54.5
No Mammography age 40 and older	5	52.5

Dent County

Risk Factor	Rank	Total Weight
Mother Overweight	1	58.5
No Exercise	2	56.5
Obese (>30 BMI)	3	55.5
Smoking	4	54.5
No Cervical Cancer Screening age 18 and older	5	52.5

Gascondade County

Risk Factor	Rank	Total Weight
Mother Overweight	1	58.5
Obese (>30 BMI)	2	55.5
No Exercise	3	53.5
Smoking	4	52.5
No Cervical Cancer Screening age 18 and older	5	50.5

Maries County

Risk Factor	Rank	Total Weight
Mother Overweight	1	58.5
Obese (>30 BMI)	2	55
No Exercise	3	54
Smoking	4	53
No Mammography age 40 and older	5	52

Phelps County

Risk Factor	Rank	Total Weight
Obese (>30 BMI)	1	57.5
Mother Overweight	2	56.5
Smoking	3	55.5
No Exercise	4	54.5
No Cervical Cancer Screening age 18 and older	5	52.5

Pulaski County

Risk Factor	Rank	Total Weight
Mother Overweight	1	58.5
Obese (>30 BMI)	2	56.5
No Exercise	3	54.5
Smoking	4	53.5
No Cervical Cancer Screening age 18 and older	5	51.5

Texas County

Risk Factor	Rank	Total Weight
Mother Overweight	1	58.5
Obese (>30 BMI)	2	58
Smoking	3	56
No Exercise	4	55
No Mammography age 40 and older	5	53

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Sources

Zip Codes of City's and Counties in Service Area					
Primary Market		**Secondary Market**			
Phelps County		**Gasconade County**		**Texas County**	
City	**Zip Code**	**City**	**Zip Code**	**City**	**Zip Code**
Beulah	65436	Bem	65066	Bendavis	65444
Big Piney	65550	Bland	65014	Bucyrus	65444
Duke	65461	Brush Creek	65066	Cabool	65689
Edgar Springs	65462	Canaan	65014	Clara	65483
High Gate	65559	Case	65041	Elk Creek	65464
Jerome	65529	Cleavesville	65014	Ellis Prairie	65444
Lecoma	65401	Cooper Hill	65014	Eunice	65468
Newburg	65550	Drake	65066	Evening Shade	65552
Rolla	65401	Fredericksburg	65061	Grogan	65464
Rolla	65402	Gasconade	65036	Hartshorn	65479
Rolla	65409	Hermann	65041	Houston	65483
Rosati	65559	Hope	65061	Huggins	65484
Safe	65559	McKittrick	65041	Licking	65542
Saint James	65559	Morrison	65036	Palace	65552
		Mount Sterling	65062	Plato	65552
		Old Woolam	65014	Raymondville	65555
		Owensville	65066	Roby	65557
		Pershing	65061	Simmons	65483
		Red Bird	65014	Solo	65564
		Rosebud	63091	Success	65570
		Swiss	65041	Summersville	65571
		Pulaski County		Tyrone	65464
		Buckhorn	65583	Tyrone	65483
		Crocker	65452	Yukon	65589
		Devil's Elbow	65457	**Dent County**	
		Dixon	65459	Boss	65440
		Fort Leonard Wood	65473	Doss	65560
		Hayden	65459	Gladden	65560
		Laquey	65534	Jadwin	65501
		Richland	65556	Lake Spring	65532
		St. Robert	65584	Lenox	65541
		Swedeborg	65556	Maples	65560
		Waynesville	65583	Salem	65560
		Crawford County		Shannondale	65560
		Berryman	65565	Sligo	65560
		Bourbon	65441	Timber	65560
		Cherryville	65446	**Maries County**	
		Cook Station	65449	Belle	65013
		Courtois	65565	Brinktown	65443
		Cuba	65453	Byron	65013
		Davisville	65456	Koening	65013
		Leasburg	65535	Lanes Prairie	65013
		Steelville	65565	Paydown	65013
		Wesco	65586	Summerfield	65013
				Vichy	65580
				Vienna	65582

2010 County Rank Report Data Tables - http://www.countyhealthrankings.org

HEALTH OUTCOMES					
Focus Area	**Measure**	**Source**	**Year(s)**	**Counties Covered (%)**	**Population Covered (%)**
Mortality (50%)	Premature death —Years of potential life lost before age 75 (YPLL-75) rate	Vital Statistics, National Center for Health Statistics (NCHS)	2004–2006	96.80%	99.90%
Morbidity (50%)	Self-reported health—Percent of adults reporting fair or poor health **– 10%**	Behavioral Risk Factor Surveillance System (BRFSS)	2002-2008	86.30%	98.30%
	Mean physically unhealthy days/month for adults **– 10%**	BRFSS	2002-2008	92.50%	99.50%
	Mean mentally unhealthy days/month for adults **– 10%**	BRFSS	2002-2008	92.50%	99.50%
	Percent of live births with low birthweight (< 2500 grams) **– 20%**	Vital Statistics, NCHS	2000–2006	92.80%	99.80%
HEALTH FACTORS: HEALTH BEHAVIORS (30%)					
Focus Area	**Measure**	**Source**	**Year(s)**	**Counties Covered (%)**	**Population Covered (%)**
Tobacco Use (10%)	Percent of adults that report smoking at least 100 cigarettes and that they currently smoke – **10%**	BRFSS	2002-2008	78%	96.90%
Diet and Exercise (10%)	Percent of adults that report a BMI ≥ 30 – **10%**	Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Diabetes Translation	2006-2008	100%	100%
Alcohol Use (5%)	MV deaths per 100K population (crude rate) – **2.5%**	Vital Statistics, NCHS	2000–2006	100%	100%
	Percent of adults that report binge drinking in the past 30 days – **2.5%**	BRFSS	2002-2008	83%	97.80%
Sexual Behavior (5%)	Chlamydia rate per100K population – **2.5%**	Centers for Disease Control and Prevention (CDC), National Center for Hepatitis, HIV, STD, and TB Prevention	2007	99.90%	99.90%
	Teen birth rate per 1,000 female population, ages 15–19 – **2.5%**	Vital Statistics, NCHS	2000–2006	94.50%	99.88%

2010 County Rank Report Data Tables Cont....

HEALTH FACTORS: CLINICAL CARE (20%)					
Focus Area	**Measure**	**Source**	**Year(s)**	**Counties Covered (%)**	**Population Covered (%)**
Access to Care (10%)	Percent of population < age 65 without health insurance – **5%**	Census/Current Population Survey (CPS)—Small Area Health Insurance Estimates (SAHIE)	2005	99.90%	99.90%
	Primary care provider rate per 100K – **5%**	Health Resources and Services Administration, Area Resource File (ARF)	2006	100%	100%
		ARF elements from AMA Master File and Census Population Estimates			
Quality of Care (10%)	Hospitalization rate for ambulatory-care sensitive conditions per 1,000 Medicare enrollees – **5%**	Medicare claims/Dartmouth Atlas	2005–06	97.70%	99.90%
	Percent of diabetic Medicare enrollees that receive HbA1c screening – **2.5%**	Medicare claims/Dartmouth Atlas	2003-06	96.70%	99.80%
	Percent of chronically ill Medicare enrollees in hospice care in last 6 months of life – **2.5%**	Medicare claims/Dartmouth Atlas	2001–05	81.70%	98.70%

HEALTH FACTORS: SOCIAL & ECONOMIC FACTORS (40%)					
Focus Area	**Measure**	**Source**	**Year(s)**	**Counties Covered (%)**	**Population Covered (%)**
Education (10%)	Averaged freshman graduation rate—Percent of ninth grade cohort that graduates in 4 years – **5%**	National Center for Education Statistics	2005–06	97.70%	96.80%
		State data sources for Kentucky, New Hampshire, North Carolina, Pennsylvania, South Carolina, Utah	2007–08		
	Percent of population age 25+ with 4-year college degree or higher – **5%**	Decennial Census	2000	100%	100%
		American Community Survey (ACS)	2005–2007		
Employment (10%)	Percent of population age 16+ unemployed but seeking work– **10%**	Local Area Unemployment Statistics, Bureau of Labor Statistics	2008	99.90%	99.99
Income (10%)	Percent of children in poverty – **7.5%**	Census/CPS—Small Area Income and Poverty Estimates (SAIPE)	2007	99.90%	99.90%
	Gini coefficient of income inequality	Decennial Census	2000	100%	100%
	Based on household, not individual, income–**2.5%**	ACS	2005–2007		
Family and Social Support (5%)	Percent of adults without social/emotional support*– **2.5%**	BRFSS	2005–2008	66.70%	94.10%
	Percent of all households that are single-parent households – **2.5%**	Decennial Census	2000	100%	100%
		ACS	2005–2007		
Community Safety (5%)	Violent crime rate per 100K population	Uniform Crime Reporting, Federal Bureau of Investigation –*State data sources for Illinois and Kentucky*	2005–2007	93.50%	98.50%
	OR	Vital Statistics, NCHS	2000–2006	100%	100%
	Homicide death rate per 100K population (age-adjusted)				

2010 County Rank Report Data Tables Cont.….

HEALTH FACTORS: ENVIRONMENT (10%)					
Focus Area	**Measure**	**Source**	**Year(s)**	**Counties Covered** (%)	**Population Covered** (%)
Environmental Quality (5%)	(1) Annual number of unhealthy air quality days due to ozone – **2.5%**	CDC-Environmental Protection Agency (EPA) Collaboration	2005	99%	99.30%
	(2) Annual number of unhealthy air quality days due to fine particulate matter – **2.5%**				
	Data not available for Alaska and Hawaii				
Built Environment (5%)	Percent of zip codes in county with healthy food outlets – **2.5%** *Healthy food outlets include grocery stores (NAICS 445110) with > 4 employees and produce stands/farmers' markets (NAICS 445230)*	Census Zip Code Business Patterns	2006	100%	100%
	Liquor store density: Number of liquor stores (NAICS 445310) per 10K population – **2.5%**	Census County Business Patterns and Census 2006 Population Estimates	2006	100%	100%

2011 County Rank Report Data Tables - http://www.countyhealthrankings.org

HEALTH OUTCOMES			
Focus Area	**Measure**	**Source**	**Year(s)**
Mortality (50%)	Premature death —Years of potential life lost before age 75 (YPLL-75) rate	National Center for Health Statistics (NCHS)	2005–2007
Morbidity (50%)	Self-reported health—Percent of adults reporting fair or poor health – **10%**	Behavioral Risk Factor Surveillance System (BRFSS)	2003-2009
	Mean physically unhealthy days/month for adults – **10%**	BRFSS	2003-2009
	Mean mentally unhealthy days/month for adults – **10%**	BRFSS	2003-2009
	Percent of live births with low birthweight (< 2500 grams) – **20%**	NCHS	2001–2007

2011 County Rank Report Data Tables Cont.…

HEALTH FACTORS: HEALTH BEHAVIORS (30%)			
Focus Area	**Measure**	**Source**	**Year(s)**
Tobacco Use (10%)	Percent of adults that report smoking at least 100 cigarettes and that they currently smoke – **10%**	BRFSS	2003-2009
Diet and Exercise (10%)	Percent of adults that report a BMI ≥ 30 – **10%**	National Center for Chronic Disease Prevention and Health Promotion	2008
Alcohol Use (5%)	Percent of adults that report excessive drinking in the past 30 days – **2.5%**	BRFSS	2003-2009
	MV deaths per 100K population (crude rate) – **2.5%**	NCHS	2001–2007
Sexual Behavior (5%)	Sexually transmitted infections – Chlamydia rate per 100K population – **2.5%**	National Center for Hepatitis, HIV, STD, and TB Prevention	2008
	Teen birth rate per 1,000 female population, ages 15–19 – **2.5%**	NCHS	2001–2007

HEALTH FACTORS: CLINICAL CARE (20%)			
Focus Area	**Measure**	**Source**	**Year(s)**
Access to Care (10%)	Percent of population < age 65 without health insurance – **5%**	Census/Current Population Survey (CPS)—Small Area Health Insurance Estimates (SAHIE)	2007
	Primary care physicians – **5%**	Health Resources and Services Administration, Area Resource File (ARF) *ARF elements from AMA Master File and Census Population Estimates*	2008
Quality of Care (10%)	Hospitalization rate for ambulatory-care sensitive conditions per 1,000 Medicare enrollees – **5%**	Medicare claims/Dartmouth Atlas	2006–07
	Percent of diabetic Medicare enrollees that receive HbA1c screening – **2.5%**	Medicare claims/Dartmouth Atlas	2006-07
	Percent of female Medicare enrollees that receive mammography screening – **2.5%**	Medicare claims/Dartmouth Atlas	2006–07

HEALTH FACTORS: SOCIAL & ECONOMIC FACTORS (40%)			
Focus Area	**Measure**	**Source**	**Year(s)**
Education (10%)	Averaged freshman graduation rate—Percent of ninth grade cohort that graduates in 4 years – **5%**	National Center for Education Statistics	2006–07
		State data sources for Kentucky, New Hampshire, North Carolina, Pennsylvania, South Carolina, Utah	2008–09
	Percent of adults aged 25-44 years with some post-secondary education – **5%**	American Community Survey (ACS)	2005–2009
Employment (10%)	Percent of population age 16+ unemployed but seeking work– **10%**	Local Area Unemployment Statistics, Bureau of Labor Statistics	2009
Income (10%)	Percent of children in poverty – **10%**	Census/CPS—Small Area Income and Poverty Estimates (SAIPE)	2008
Family and Social Support (5%)	Percent of adults without social/emotional support*– **2.5%**	BRFSS	2005–2009
	Percent of all households that are single-parent households – **2.5%**	American Community Survey (ACS)	2005–2009
Community Safety (5%)	Violent crime rate per 100K population	Uniform Crime Reporting, Federal Bureau of Investigation –*State data source for Illinois*	2006–2008
	OR		
	Homicide death rate per 100K population (age-adjusted)	NCHS	2001–2007

HEALTH FACTORS: ENVIRONMENT (10%)			
Focus Area	**Measure**	**Source**	**Year(s)**
Environmental Quality (5%)	(1) Annual number of unhealthy air quality days due to ozone – **2.5%**	CDC-Environmental Protection Agency (EPA) Collaboration	2006
	(2) Annual number of unhealthy air quality days due to fine particulate matter – **2.5%**		
	Data not available for Alaska and Hawaii		
Built Environment (5%)	Percent of zip codes in county with healthy food outlets – **2.5%**	Census Zip Code Business Patterns	2008
	Healthy food outlets include grocery stores (NAICS 445110) with >4 employees and produce stands/farmers' markets (NAICS 445230)		
	Access to recreational facilities – **2.5%**	Census County Business Patterns	2008

Health Outcomes				
Focus Area	**Measure**	**Weight**	**Source**	**Year(s)**
Mortality (50%)	Premature death (years of potential life lost before age 75 per 100,000 pop)	50%	Vital Statistics, National Center for Health Statistics (NCHS)	2006-2008
Morbidity (50%)	Poor or fair health (percent of adults reporting fair or poor health)	10%	Behavioral Risk Factor Surveillance System (BRFSS)	2004-2010
	Poor physical health days (average number in past 30 days)	10%	BRFSS	2004-2010
	Poor mental health days (average number in past 30 days)	10%	BRFSS	2004-2010
	Low birthweight (percent of live births with weight < 2500 grams)	20%	Vital Statistics, NCHS	2002-2008

Health Behaviors (30%)				
Focus Area	**Measure**	**Weight**	**Source**	**Year(s)**
Tobacco use (10%)	Adult smoking (percent of adults that smoke)	10%	BRFSS	2004-2010
Diet and exercise (10%)	Adult obesity (percent of adults that report a BMI >= 30)	7.5%	National Center for Chronic Disease Prevention and Health Promotion, calculated from BRFSS	2009
	Physical inactivity (percent of adults that report no leisure time physical activity)	2.5%	National Center for Chronic Disease Prevention and Health Promotion, calculated from BRFSS	2009
Alcohol use (5%)	Excessive drinking (percent of adults who report heavy or bringe drinking)	2.5%	BRFSS	2004-2010
	Motor vehicle crash deaths per 100,000 population	2.5%	Vital Statistics, NCHS	2002-2008
Sexual activity (5%)	Sexually transmitted infections (chlamydia rate per 100,000 population)	2.5%	CDC, National Center for Hepatitis, HIV, STD, and TB Prevention	2009
	Teen birth rate (per 1,000 females ages 15-19)	2.5%	Vital Statistics, NCHS	2002-2008

Clinical Care (20%)				
Focus Area	**Measure**	**Weight**	**Source**	**Year(s)**
Access to care (10%)	Uninsured (percent of population < age 65 without health insurance)	5%	Census/American Community Survey (ACS)—Small Area Health Insurance Estimates (SAHIE)	2009
	Ratio of population to primary care physicians	5%	Health Resources and Services Administration, Area Resource File (ARF)	2009
Quality of care (10%)	Preventable hospital stays (rate per 1,000 Medicare enrollees)	5%	Medicare claims/Dartmouth Atlas	2009
	Diabetic screening (percent of diabetics that receive HbA1c screening)	5%	Medicare claims/Dartmouth Atlas	2009
	Mammography screening	5%	Medicare claims/Dartmouth Atlas	2009

2012 County Rank Report Data Tables cont.…

Social and Economic Environment (40%)				
Focus Area	**Measure**	**Weight**	**Source**	**Year(s)**
Education (10%)	High school graduation	5%	State sources and the National	Varies by state,
	Some college (Percent of adults aged 25-44 years with some post-secondary education)	5%	ACS	2006-2010
Employment (10%)	Unemployment rate (percent of population age 16+ unemployed)	10%	Local Area Unemployment Statistics, Bureau of Labor Statistics	2010
Income (10%)	Children in poverty (percent of children under age 18 in poverty)	10%	Census/CPS—Small Area Income and Poverty Estimates (SAIPE)	2010
Family and social support (5%)	Inadequate social support (percent of adults without social/emotional support)	2.5%	BRFSS	2004-2010
	Percent of children that live in single-parent household	2.5%	ACS	2006-2010
Community safety (5%)	Violent crime rate per 100,000 population	5%	Uniform Crime Reporting, Federal Bureau of Investigation –*State data sources for Illinois*	2007-2009

Physical Environment (10%)				
Focus Area	**Measure**	**Weight**	**Source**	**Year(s)**
Environmental quality (4%)	Air pollution-particulate matter days (average number of unhealthy air quality days)	2%	CDC-Environmental Protection Agency (EPA) Collaboration *Data not available for Alaska and Hawaii*	2007
	Air pollution-ozone days (average number of unhealthy air quality due to ozone)	2%		
Built environment (6%)	Limited access to health foods (percent of population who lives in poverty and more than 1 or 10 miles from a grocery store)	2% (all but AK & HI)	United States Department of Agriculture, Food Environment Atlas *Data not available for Alaska and Hawaii*	2006
	Access to healthy foods (percent of zip codes with healthy food outlets) *for Alaska and Hawaii*	2% (AK & HI)	Census Zip Code Business Patterns	2009
	Access to recreational facilities	2%	Census County Business Patterns	2009
	Fast food restaurants (percent of all restaurants that are fast food)	2%	Census County Business Patterns	2009

2013 County Rank Report Data Tables - http://www.countyhealthrankings.org

Health Outcomes				
Focus Area	**Measure**	**Weight**	**Source**	**Year(s)**
Mortality (50%)	Premature death (years of potential life lost before age 75 per 100,000 pop)	50%	National Center for Health Statistics	2008-2010
Morbidity (50%)	Poor or fair health (percent of adults reporting fair or poor health)	10%	Behavioral Risk Factor Surveillance System	2005-2011
	Poor physical health days (average number in past 30 days)	10%	Behavioral Risk Factor Surveillance System	2005-2011
	Poor mental health days (average number in past 30 days)	10%	Behavioral Risk Factor Surveillance System	2005-2011
	Low birthweight (percent of live births with weight < 2500 grams)	20%	National Center for Health Statistics	2004-2010

2013 County Rank Report Data Tables cont....

Health Behaviors (30%)				
Focus Area	**Measure**	**Weight**	**Source**	**Year(s)**
Tobacco use (10%)	Adult smoking (percent of adults that smoke)	10%	Behavioral Risk Factor Surveillance System	2005-2011
Diet and exercise (10%)	Adult obesity (percent of adults that report a BMI >= 30)	7.5%	National Center for Chronic Disease Prevention and Health Promotion, Division of Diabetes Translation	2009
	Physical inactivity (percent of adults that report no leisure time physical activity)	2.5%	National Center for Chronic Disease Prevention and Health Promotion, Division of Diabetes Translation	2009
Alcohol use (5%)	Excessive drinking (percent of adults who report heavy or bringe drinking)	2.5%	Behavioral Risk Factor Surveillance System	2005-2011
	Motor vehicle crash deaths per 100,000 population	2.5%	National Center for Health Statistics	2004-2010
Sexual activity (5%)	Sexually transmitted infections (chlamydia rate per 100,000 population)	2.5%	National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention	2010
	Teen birth rate (per 1,000 females ages 15-19)	2.5%	National Center for Health Statistics	2004-2010

Clinical Care (20%)				
Focus Area	**Measure**	**Weight**	**Source**	**Year(s)**
Access to care (10%)	Uninsured (percent of population < age 65 without health insurance)	5%	Small Area Health Insurance Estimates	2010
	Ratio of population to primary care physicians	3%	HRSA Area Resource File	2011-2012
	Ratio of population to dentists	2%	HRSA Area Resource File	2011-2012
Quality of care (10%)	Preventable hospital stays (rate per 1,000 Medicare enrollees)	5%	Dartmouth Atlas of Health Care	2010
	Diabetic screening (percent of diabetics that receive HbA1c screening)	2.5%	Dartmouth Atlas of Health Care	2010
	Mammography screening (percent of females that receive screening)	2.5%	Dartmouth Atlas of Health Care	2010

Social and Economic Environment (40%)				
Focus Area	**Measure**	**Weight**	**Source**	**Year(s)**
Education (10%)	High school graduation (percent of ninth grade cohort that graduates in 4 years)	5%	State sources and the National Center for Education Statistics	Varies by state
	Some college (Percent of adults aged 25-44 years with some post-secondary education)	5%	American Community Survey, 5-year estimates	2007-2011
Employment (10%)	Unemployment rate (percent of population age 16+ unemployed)	10%	Bureau of Labor Statistics	2011
Income (10%)	Children in poverty (percent of children under age 18 in poverty)	10%	Small Area Income and Poverty Estimates	2011
Family and social support (5%)	Inadequate social support (percent of adults without social/emotional support)	2.5%	Behavioral Risk Factor Surveillance System	2005-2010
	Percent of children that live in single-parent household	2.5%	American Community Survey, 5-year estimates	2007-2011
Community safety (5%)	Violent crime rate per 100,000 population	5%	Uniform Crime Reporting, Federal Bureau of Investigation *State data sources for Illinois*	2008-2010

2013 County Rank Report Data Tables cont.…

	Physical Environment (10%)			
Focus Area	**Measure**	**Weight**	**Source**	**Year(s)**
Environmental quality (4%)	Daily fine particulate matter (average daily measure in micrograms per cubic meter)	2%	CDC WONDER Environmental data *Data not available for Alaska and Hawaii*	2008
	Drinking water safety (percent of population exposed to water exceeding a violation limit in the past year)	2%	Safe Drinking Water Information System	FY 2012
Built environment (6%)	Access to recreational facilities (rate per 100,000 population)	2%	County Business Patterns	2010
	Limited access to health foods (percent of population who lives in poverty and more than 1 or 10 miles from a grocery store)	2%	USDA Food Environment Atlas	2012
	Fast food restaurants (percent of all restaurants that are fast food)	2%	County Business Patterns	2010