



**PHELPS COUNTY, MISSOURI  
HEALTH CARE NEEDS ASSESSMENT**

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## INTRODUCTION

Leaders in Phelps County, Missouri are interested in developing a sustainable model of health care delivery for those in their area who do not have access to care due to financial constraints or geographic distance. They received a year-long planning grant from the U.S. Health Resources and Services Administration (HRSA) to precisely determine the suitability of the area for a federally-qualified health center (FQHC) by examining the health care and financial needs of the population, determining gaps in service, eliciting community perceptions and defining a viable structure for service delivery.

One of the initial activities performed during the planning period is a comprehensive Needs Assessment that quantitatively outlines demographic and healthcare disparity data for Phelps County. The Needs Assessment, conducted by Ray & Associates LLC (R&A), a Bureau of Primary Health Care-approved consulting firm, fully satisfies HRSA's expectations for data for New Access Point (NAP) applications. The Needs Assessment examines the geographic area identified for the FQHC, provides a demographic profile of the people who call that area "home", explores population-based data on health disparities, reports on existing health care services available to those needing improved access to care, and preliminarily identifies gaps in services that the FQHC would be designed to fill.

The Needs Assessment includes information on Phelps County's total population *and* the target population of individuals whose income is at or below 200% of the Federal Poverty Level (FPL), with comparisons to state and national trends and to Healthy People 2020 goals. (Data is specifically included for individuals with incomes at or below 200% FPL because this group is often the target population to receive care at an FQHC). The Needs Assessment provides data on geography, population growth and density, income, education, language and literacy, economic factors impacting health, health indices by lifecycles, prevalence of disease, and health disparities related to primary, oral and behavioral health care. The Needs Assessment also presents information on the availability of public and private health resources within the service area that provide care to those who experience barriers to receiving care due to insufficient insurance or financial resources.

## METHODOLOGY AND DATA ANALYSIS

The primary sources of the demographic and health data used in this report are the U.S. Census Bureau, 2010 Census Summary and the 2008-2010 American Community Survey (<http://factfinder2.census.gov>); the Missouri Census Data Center (<http://mcdc.missouri.edu>); Missouri Census Data Center County Health Rankings ([www.countyhealthranks.org](http://www.countyhealthranks.org)); Centers for Disease Control's Behavioral Risk Factor Surveillance System ([www.cdc.gov/brfss](http://www.cdc.gov/brfss)); the Health Resource and Service Administration's Area Resource File ([www.arf.hrsa.gov](http://www.arf.hrsa.gov)) and the

U.S. Census Small Area Health Insurance Estimates /SAHIE (<http://www.census.gov/did/www/sahie/>). These data sources were supplemented with local data as needed.

Indicators for Phelps County and the State of Missouri are compared to the Healthy People 2020 whenever data is available. The HP 2020 goals and objectives are released by the U.S. Department of Health and Human Service each decade and provide a benchmark for measuring progress on health issues.

## SERVICE AREA DESCRIPTION

An initial task when considering the feasibility of establishing a federally-funded health center is determining the geographic area the center will serve. All of Phelps County has been selected as the “service area” to consider for a community health center due to its natural geographic boundaries and its catchment area for commerce and services.

***Federal health designations:*** Phelps County is designated a Health Professional Shortage Area (HPSA) for primary medical care, dental care and mental health care. Several factors are used by HRSA to determine the areas of greatest shortage and a score is assigned to each factor. The scale generally includes five scoring levels, and reflects different patient utilization patterns for primary care, dental and mental health services. The scores can range from 0 – 25 for Primary Care/Mental Health and 0 -26 for Dental, with 26 demonstrating HPSAs of greatest shortage. Phelps County scored 18 points for primary medical care, 17 points for dental care and 16 points for mental health.

In addition to Phelps County’s HPSA designation, the St. James area of Phelps County is designated as a Medically Underserved Area (MUA # 01937).<sup>1</sup> And, on October 24, 2011, the Missouri State Department of Health and Human Services submitted an application to HRSA for designation of Phelps County as an MUA; a decision is currently pending.

***Introduction to the service area – and ramifications for health care:*** The following Service Area Description reveals that Phelps County is a rural area, with most services and business concentrated in Rolla, the county seat. Other towns are scattered along primary and secondary roads throughout the county, with no public mass transit to transport residents from outlying areas to Rolla for services. For rural residents without cars – or the funds to maintain their cars - it is almost impossible to keep a job, shop for affordable groceries, or seek medical care.

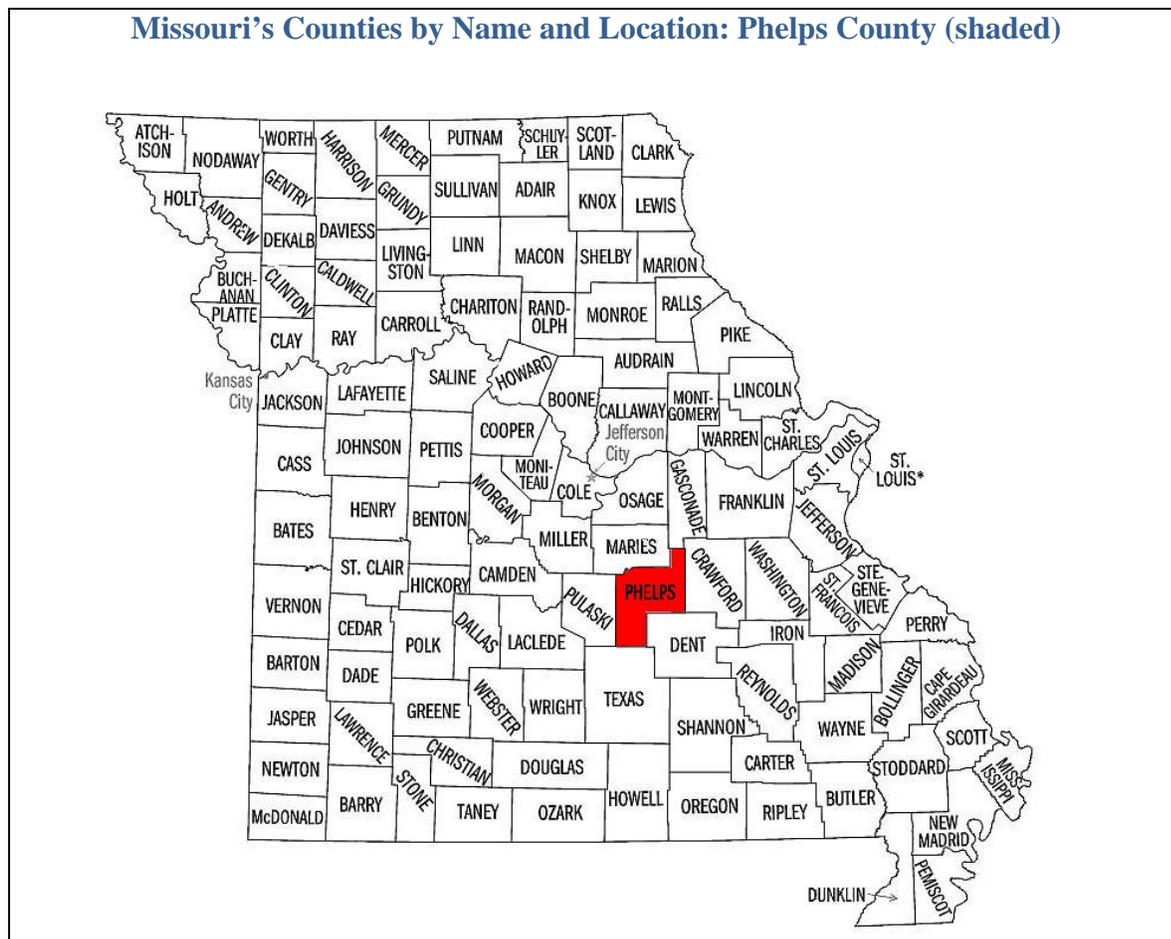
Phelps County’s rural nature influences the area’s culture, which in turn impacts health status and healthcare perceptions. The Agency for Healthcare Research and Quality (AHRQ) monitors the nation’s safety net and provides specific information on rural health care safety nets. AHRQ’s information is telling: rural populations on average tend to suffer from greater levels of poverty and unemployment and lower levels of income; rural residents are more likely to engage in risky health behaviors than urban residents; rates of smoking and alcohol consumption are higher in rural areas; chronic illness and associated limitations in activity are more prevalent;

and, rural areas have considerable health care access problems related to health insurance coverage and provider supply.<sup>2</sup>

National data from AHRQ for rural areas also suggests that the supply of providers is lower in rural areas than urban areas. AHRQ information notes that in addition to concerns about primary care, there is growing concern by many rural health advocates related to access to mental and oral health services, with chronic shortages of rural dentists and mental health providers.<sup>3</sup>

The following *Service Area Description* provides a detailed picture of Phelps County -- its natural landscape and its towns:

**Geography:** Phelps County, a rural county of 45,156 people, is located in south-central Missouri. Comprised of 674.3 square miles (672.8 square miles land, 1.4 square miles water), Phelps County is located midway between St. Louis (106 miles to the northeast) and Springfield, Missouri (110 miles to the southwest). Adjacent counties include Maries County (northwest), Gasconade County (northeast), Crawford County (east), Dent County (southeast), Texas County (south), and Pulaski County (west). Phelps County has rolling terrain and a four-season climate suitable for agriculture. Much of the county is included within the Ozark Highlands American Viticultural Area (AVA).



**Density:** Phelps County is designated a rural county due to its overall population density in 2010 of 67.2 persons per square mile (compared to 86.9 persons per square mile in the state of Missouri).<sup>4</sup> However, the population distribution varies from urban to rural depending on the census tract. The combined Census Tract (CT) total for Phelps County in 2000 (2010 individual urban vs. rural broken out by census tract data is not available) is comprised of 52.2% urban population and 47.8% rural population. Urban populations account for 69.4% of Missouri and 79.0% of the nation.<sup>5</sup>

**Municipalities, census tracts and zip codes:** Five primary municipalities are spread across Phelps County's 674 square miles: Rolla, St. James, Doolittle, Newburg and Edgar Springs.<sup>6</sup> In addition to these incorporated municipalities, there are eight other smaller, unincorporated towns in the county: Arlington, Cold Spring, Dawson, Dillon, Liberty, Meramec, Miller and Spring Creek.<sup>7</sup>

Phelps County includes 10 census tracts: 8901, 8902, 8903, 8904, 8905, 8906, 8907, 8908, 8909 and 8910.<sup>8</sup> It includes the following Zip Codes: 65401 (Rolla/General); 65402 (Rolla/PO Box Only); 65409 (Rolla/Unique); 65436 (Beulah); 65461 (Duke); 65462 (Edgar Springs); 65529 (Jerome); 65550 (Newburg); and 65559 (Saint James).<sup>9</sup>

Phelps County's largest city is Rolla, which is the county seat and is considered a Micropolitan Statistical Area. As the following map indicates, Rolla is located in the center of the county; the county's other municipalities are scattered throughout the area; the closest towns to Rolla are approximately 10 miles away. Each of Phelps County's towns has a unique personality. Rolla has a more urban, cosmopolitan feel, due primarily to the diversity of individuals drawn to the Missouri University of Science and Technology located there. Newburg was a big town in the 1950s, however, it suffered when the interstate bypassed it. Poverty there is extreme. Similarly, Edgar Springs is an isolated, poor area; residents have to drive ten to twenty miles for any services. The community of St. James and its surrounding area has become known for its grape productions and wineries and is part of the American Viticultural Area Vineyards.

### Map of Phelps County Missouri



**Transportation:** Travel across this rural county is via the major U.S. Interstate I-44 (east-west) and U.S. 63 (north-south), which cut through the county. While the city does not provide public transportation options, limited transportation is provided by Southeast Missouri Transportation Service, Inc (SMTS). SMTS is a non-governmental, non-profit general public passenger transportation service that operates on a donation basis and provides transportation for shopping, medical appointments, nutrition, recreation and personal business.<sup>10</sup> Service is limited, presenting major barriers for those outside of Rolla trying to access care or trying to commute to Rolla for jobs.

**School districts:** Phelps County includes four school districts totaling 12 schools, 560 staff and 6,450 students. Rolla 31 is the largest school district with 327 certified staff and 4,061 students enrolled.

School District <sup>11</sup>	Schools	Cert Staff	Total Enrollment
St. James R-I	3	166	1,711
Newburg R-II	2	50	475
Rolla 31	6	327	4,061
Phelps Co. R-III	1	17	203

## SERVICE AREA POPULATION

**Introduction to the service area population – and ramifications for health care:** Gaining a clear understanding of the population in the Phelps County service area is imperative in designing a delivery system to meet community needs. The following section provides demographic data and trends for those who call Phelps County “home.”

A summary of Phelps County demographic data shows a changing face that reflects America’s changing demographics: a growing percentage of the population is 65+ years old. In Phelps County, this group has a projected growth rate of 92.9% by 2030. Similarly, the percentage of minority populations in Phelps County is growing.

Phelps County is economically disadvantaged. A look at both per capita and median household income reveals Phelps County significantly lags behind Missouri and the nation, and the percentage of uninsured individuals in Phelps County exceeds the state and national rates. Similarly, a disproportionately high percentage of residents are Medicaid recipients – and often struggle to find primary care providers who accept this form of insurance.

This demographic data points to the importance of designing affordable health services that are accessible to those without financial means or insurance. Additionally, a service delivery model will need to be culturally aligned with the needs of the growing minority population, and assure availability of services designed for geriatric patients.

The following *Service Area Population* provides a detailed picture of Phelps County’s people.

**Population and growth rate:** Phelps County is home to 45,156 individuals according to the 2010 Census. The County’s population grew significantly in the last decade, increasing 13.4% above 2000 Census figures<sup>12</sup>, and outpacing Missouri’s growth of 7.0% during the same period.

Total Population: 2000 / 2010 Comparisons	Phelps County <sup>13</sup>			Missouri <sup>14</sup>		
	2000	2010	Growth Rate	2000	2010	Growth Rate
Total	39,825	45,156	13.4%	5,595,211	5,988,927	7.0%

According to the Missouri Census Data Center, Phelps County population is projected to grow more slowly over the next 20 years after its 13.4% increase between 2000 and 2010. By 2030, the population is projected to reach 47,635, a gain of 7,810 people or 19.6% from 2000-2030. The largest projected increases will be seen in the population 65 and older, and residents aged 70-74 have the highest projected growth rate (105.6%).

**Age:** The overall age of the Phelps County population parallels that of Missouri, except for those 20 -24 years of age. Phelps County residents aged 20-24 years represent 12.3% of the county population as compared to 6.9% for the state. Over the past 10 years residents in this age group had a growth rate more than three times that of the state (38.3% vs. 11.9%). This is most likely due to the student population at Missouri University of Science and Technology in Rolla.

As the following table depicts,<sup>15</sup> those in the 20-44 years of age group represent the largest segment of Phelps County’s population (35.1%), followed by those 0-19 years (26.6%), those 45 to 64 (24.6%) and those over 65 (13.6%) – however the percent that those over 65 represents will grow as the group known as ‘baby boomers’ continue to age.

Population by Age: 2000 / 2010 Comparisons	Phelps County				Missouri			
	2000	2010	Percent of County	Growth Rate	2000	2010	Percent of State	Growth Rate
<b>Total</b>	<b>39,825</b>	<b>45,156</b>		<b>13.4%</b>	<b>5,595,211</b>	<b>5,988,927</b>		<b>7.0%</b>
<b>0 to 19</b>	<b>11,212</b>	<b>12,009</b>	<b>26.6%</b>	<b>7.1%</b>	<b>1,594,172</b>	<b>1,601,411</b>	<b>26.7%</b>	<b>0.5%</b>
Under 5 years	2,261	2,812	6.2%	24.4%	369,898	390,237	6.5%	5.5%
5 to 9 years	2,511	2,555	5.7%	1.8%	398,898	390,463	6.5%	-2.1%
10 to 14 years	2,900	2,679	5.9%	-7.6%	412,080	396,925	6.6%	-3.7%
15 to 19 years	3,540	3,963	8.8%	11.9%	413,296	423,786	7.1%	2.5%
<b>20 to 44</b>	<b>14,422</b>	<b>15,899</b>	<b>35.1%</b>	<b>10.2%</b>	<b>1,995,800</b>	<b>1,937,372</b>	<b>32.3%</b>	<b>-2.9%</b>
20 to 24 years	4,023	5,564	12.3%	38.3%	369,498	413,289	6.9%	11.9%
25 to 29 years	2,404	3,073	6.8%	27.8%	362,305	403,239	6.7%	11.3%
30 to 34 years	2,334	2,460	5.4%	5.4%	376,428	372,228	6.2%	-1.1%
35 to 39 years	2,738	2,369	5.2%	-13.5%	443,250	368,070	6.1%	-17.0%
40 to 44 years	2,923	2,433	5.4%	-16.8%	444,319	380,546	6.4%	-14.4%
<b>45 to 64</b>	<b>8,664</b>	<b>11,091</b>	<b>24.6%</b>	<b>28.0%</b>	<b>1,249,860</b>	<b>1,611,850</b>	<b>26.9%</b>	<b>29.0%</b>
<b>65+</b>	<b>5,527</b>	<b>6,157</b>	<b>13.6%</b>	<b>11.4%</b>	<b>755,379</b>	<b>838,294</b>	<b>14.0%</b>	<b>11.0%</b>

**Gender:** The percentage of males in Phelps County (52.3%) exceeds that of Missouri (49.0%). Conversely, the percentage of females is 47.7% in Phelps County and 51.0% for the state. This represents a significant shift from 2000 when women in Phelps County represented 49.2% of the population.

Population by Sex: 2000 / 2010 Comparisons	Phelps County <sup>16</sup>				Missouri <sup>17</sup>			
	2000	2010	Percent of County	Growth Rate since 2000	2000	2010	Percent of State	Growth Rate Since 2000
Total	39,825	45,156		13.4%	5,595,211	5,988,927		7.0%
Female	19,600	21,538	47.7%	9.9%	2,875,034	3,055,450	51.0%	5.9%
Male	20,225	23,618	52.3%	16.8%	2,720,177	2,933,477	49.0%	7.8%

**Race and ethnicity:** Phelps County is a more homogeneous community than Missouri or the United States. Its white population (91.7%) exceeds that of Missouri (82.8%) and the nation (72.4%). Blacks account for 2.2% of the service area population compared to 11.6% for Missouri and 12.6% nationally. Less than 6.2% of the service area residents combined is American Indian (0.6%), Asian (2.9%) Pacific Islander (0.1%) or those with two races identified (2.6%).<sup>18</sup> However, the racial and ethnic composition of Phelps County is changing. 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 Phelps County is noteworthy.

Population by Race: 2000 / 2010 Comparisons	Phelps County <sup>19</sup>				Missouri <sup>20</sup>			
	2000	2010	Percent of State	Growth Rate since 2000	2000	2010	Percent of US	Growth Rate since 2000
Total	39,825	45,156	0.8%	13.4%	5,595,211	5,988,927	1.9%	7.0%
			Percent of County				Percent of State	
White Alone	37,132	41,409	91.7%	11.5%	4,748,083	4,958,770	82.8%	4.4%
Black Alone	596	1,008	2.2%	69.1%	629,391	693,391	11.6%	10.2%
American Indian & Alaskan Native Alone	236	251	0.6%	6.4%	25,076	27,376	0.5%	9.2%
Asian alone	936	1,316	2.9%	40.6%	61,595	98,083	1.6%	59.2%

Population by Race: 2000 / 2010 Comparisons	Phelps County <sup>19</sup>				Missouri <sup>20</sup>			
	2000	2010	Percent of State	Growth Rate since 2000	2000	2010	Percent of US	Growth Rate since 2000
Total	39,825	45,156	0.8%	13.4%	5,595,211	5,988,927	1.9%	7.0%
Native Hawaiian & Other Pacific Islander Alone	25	33	0.1%	32.0%	3,178	6,261	0.1%	97.0%
Two or More Races	714	971	2.2%	36.0%	82,061	124,589	2.1%	51.8%
Some Other Race	186	168	0.4%	-9.7%	45,827	80,457	1.3%	75.6%

Similar trends appear in the ethnic makeup of Phelps County. While Phelps County reflects a lower percentage of the Hispanic population (2.0%) than Missouri (3.5 %) or the nation (16.3%), the percentage of growth is noteworthy: the Hispanic population in Phelps County grew by 90.3% in the last decade.

Population by Ethnicity: 2000 / 2010 Comparisons	Phelps County <sup>21</sup>				Missouri <sup>22</sup>			
	2000	2010	Percent of County	Growth Rate since 2000	2000	2010	Percent of State	Growth Rate since 2000
Total	39,825	45,156		13.4%	5,595,211	5,988,927		7.0%
Non-Hispanic	39,340	44,233	98.0%	12.4%	5,476,619	5,776,457	96.5%	5.5%
Hispanic or Latino	485	923	2.0%	90.3%	118,592	212,470	3.5%	79.2%

This Census data provides a useful, but incomplete, picture. Data on ethnic and cultural background in Phelps County that is *not* reported to the U.S. Census Bureau tells a story of even more diversity, in part contributable to the families of students attending Missouri University of Science and Technology, an internationally-known university that attracts students from around the world. Information provided by the Phelps-Maries Health Department indicates the current number of students with F visas and J visas (N: 990) and their dependents (N: 260) total 1,250 individuals; there are an additional 85 scholars and their dependents (F visa holders are students studying full-time study the U.S. and J visa holders are students or scholars doing research). While foreign students are required to have health insurance, paid for by a sponsoring entity or purchased through the university, their dependents are not required to have insurance. The Health Department serves a number of foreign student dependents who qualify for the Women, Infant and Children (WIC) nutrition program. For example, data for those receiving services from the Phelps County WIC program in January 2011 shows 4.8% of recipients have Arabic as their primary language and 3.3% of recipients identify themselves as Asian.

**Language and literacy:** The latest available data on languages spoken in Phelps County is from the 2005-2009 American Community Survey. In Phelps County, 93.1% of the residents speak English only, compared to 93.0% for Missouri and 80.3% nationally. Only .9% of the Phelps County households are “linguistically isolated” (a household is linguistically isolated if all adults speak a language other than English and none speaks English “very well”).

In 2003 (the most current data available), the percent of Phelps County residents lacking basic prose literacy skills was 8.0%, compared to 7.0% for Missouri as a whole and 14.5% for the United States.<sup>23</sup> Basic prose literacy skills are defined as the ability to perform simple and everyday literacy activities.<sup>24</sup>

**Education:** The latest available data on Educational Attainment for Phelps County is from the 2008-2010 American Community Survey.<sup>26</sup> Phelps County (34.7%) exceeds the state (31.9%) and the nation (28.4%) in the percent of adults 25 years and older with a high school diploma. While the service area exceeds the nation in the number of high school graduates, it has fewer college and post-degree graduates than both the state and the nation.<sup>27</sup> The service area (24.9%) lags behind both the state (25.3%) and the nation (28.0%) in the percentage of adults with a bachelor’s degree or higher.

Highest Educational Attainment: 2008-2010 ACS <sup>25</sup>	Phelps County			Missouri		
	Total	Male	Female	Total	Male	Female
Population 25 years and over	27,174	12,996	14,178	3,943,725	1,888,392	2,055,333
Less than 9th grade	5.00%	5.80%	4.20%	4.50%	4.50%	4.50%
9th to 12th grade, no diploma	8.00%	8.80%	7.20%	8.80%	9.10%	8.60%
High school graduate (includes equivalency)	34.70%	32.90%	36.40%	31.90%	32.80%	31.10%
Some college, no degree	21.80%	21.40%	22.30%	22.80%	22.00%	23.50%
Associate's degree	5.60%	4.10%	7.00%	6.70%	6.00%	7.30%
Bachelor's degree	13.90%	13.70%	14.20%	15.90%	16.00%	15.80%
Graduate or professional degree	11.00%	13.30%	8.80%	9.40%	9.60%	9.30%
Percent high school graduate or higher	87.10%	85.30%	88.60%	86.70%	86.40%	87.00%
Percent bachelor's degree or higher	24.90%	27.00%	23.00%	25.30%	25.60%	25.10%

**Employment – and unemployment:** The five largest employers/industries in Phelps County are health care and social assistance, retail trade, educational services, accommodation/food services and public administration. According to the 2008-2010 American Community Survey and

depicted in the table below, these industries account for 60% of where those 19 year of age and older worked between 2008 and 2010. Interestingly, the percent of laborers in each of these industries in Phelps County’s labor market exceeds the percent in Missouri for the same categories, but the percent of Phelps County laborers in construction and manufacturing (12.7%) is far lower than the 18.4% engaged in construction and manufacturing in the State. These data reflect the presence of the Missouri University of Science and Technology and the role of healthcare, social services and government as employers in Phelps County. Major employers in Phelps County include Missouri University of Science & Technology, Phelps County Regional Medical Center, Walmart and Rolla Public Schools.

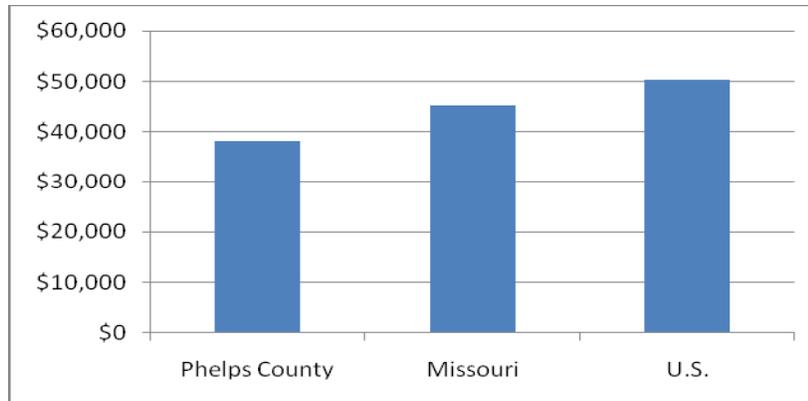
<b>Major Employers/Industries in Phelps County: 2008-2010</b>			
<b>Civilian employed population 16 years and over</b>	<b>Phelps County</b>		<b>Missouri</b>
	<b>Actual Number</b>	<b>Percent</b>	
Civilian employed population 16 years and over	19,201	No Data	2,791,184
Health care and social assistance	3,219	16.8%	14.1%
Retail trade	2,835	14.8%	12.0%
Educational services	2,656	13.8%	9.3%
Accommodation and food services	1,566	8.2%	6.8%
Public administration	1,302	6.8%	4.6%
Manufacturing	1,270	6.6%	11.8%
Construction	1,168	6.1%	6.6%
Professional, scientific, and management, and administrative and waste management services:	1,004	5.2%	9.0%
Other services, except public administration	944	4.9%	4.8%
Finance and insurance, and real estate and rental and leasing:	909	4.7%	6.9%
Transportation and warehousing, and utilities:	836	4.4%	5.2%
Arts, entertainment, and recreation	432	2.2%	2.0%
Wholesale trade	417	2.2%	3.0%
Information	365	1.9%	2.3%
Agriculture, forestry, fishing and hunting, and mining:	278	1.4%	1.8%

Phelps County’s main employers provide a fairly stable labor market, and one that has been slightly less at the whim of recession-induced reductions in construction and manufacturing industries. This is reflected in the Phelps County unemployment rate: Phelps County had a lower 2010 unemployment rate (7.7%) than the state (9.6%) and the nation (9.6%). However, the county unemployment rate grew by a rate of 5.5% between 2009 and 2010, which is higher than the growth rate for Missouri and the US (both 3.2%).<sup>26</sup>

**Income and poverty:** According to the 2010 American Community Survey, the per capita income in Phelps County was \$19,878, compared to \$23,920 for Missouri and \$28,661 nationwide.<sup>27</sup> Thus, the Missouri per capita income is 20.3% higher than Phelps County and the nation is 44.2% higher than Phelps County.

A similar pattern is evident when looking at median household income data for Phelps County where the median household income is \$38,126, compared to Missouri at \$45,149 and the U.S. at \$50,221. As depicted in the graph below, this means median household income in the U.S. is approximately 25% higher than in Phelps County and median household income in Missouri exceeds Phelps County by 15%.

**Median Household Income: Phelps County, Missouri, U.S.**



The flip side of looking at income levels is looking at poverty rates using the federal poverty guidelines commonly known as the federal poverty level (FPL) and set forth annually by the U.S. Department of health and Human Services. The 2011 Poverty Guidelines are:

2011 HHS Poverty Guidelines <sup>28</sup>			
Persons in Family	48 Contiguous States and D.C.	Alaska	Hawaii
1	\$10,890	\$13,600	\$12,540
2	14,710	18,380	16,930
3	18,530	23,160	21,320
4	22,350	27,940	25,710
5	26,170	32,720	30,100
6	29,990	37,500	34,490
7	33,810	42,280	38,880
8	37,630	47,060	43,270
For each additional person, add	3,820	4,780	4,390

Data for 2008-2010 from the American Community Survey reveals Phelps County has a significantly higher percentage of residents living at poverty level (18.4%) compared to the state (14.5%) and the nation (14.4%). The same pattern follows when looking at those individuals with incomes at 200% of FPL: 16,169 persons or 39.3% of Phelps County’s population have

incomes at or below 200% of FPL, compared to 34.0% of Missouri’s population and 31.4% of the U.S. population for the same time period.

The percent of Phelps County’s population with income at or below the poverty level grew by 23.4% between 2000 in the 2008-2010 period captured by the American Community Survey.

<b>Residents At or Below 200% of FPL</b>						
<b>2000<sup>29</sup> / 2010<sup>30</sup> Comparisons</b>	<b>Phelps County</b>			<b>Missouri</b>		
	<b>2000</b>	<b>2008-2010</b>	<b>Growth Rate or % Rate Change</b>	<b>2000</b>	<b>2008-2010</b>	<b>Growth Rate or % Rate Change</b>
Total: General Population	37,137	41,187	GR: 10.9%	5,433,293	5,781,653	GR: 6.4%
<b>200% FPL</b>	14,760	16,169	GR: 9.5%	1,627,593	1,964,816	GR: 20.7%
	39.6%	39.3%	-0.8%	30.0%	34.0%	13.3%
<b>At or Below FPL</b>	6,129	7,566	GR: 23.4%	637,891	836,098	GR: 31.1%
	16.4%	18.4%	12.2%	11.7%	14.5%	23.9%

Poverty impacts certain members of the community more than others, particularly children and the elderly: 53% of the children under age six are living at or below 200% FPL according to the 2008-2010 ACS. The 2009 SAHIE data show that 5,199 children under age 19 (35%) were living at or below 200% FPL.<sup>31</sup> Of these children, 726 were uninsured.<sup>32</sup> Children living at or below 100% FPL totaled 1,946 (19.7%) of all Phelps County children ages 0-17 years.<sup>33</sup>

Other indicators of poverty among children include the number of students receiving the following: meals through the federal Free and Reduced Meals Program (FARMS), with eligibility of up to 185% FPL; Medicaid enrollment; WIC participants; child food stamp recipients and children receiving cash assistance. In 2008, Phelps County surpassed the state rate on each of these indicators.

<b>Target Population: Economic indicators for children in poverty.<sup>34</sup></b>				
<b>Indicator</b>	<b>Year</b>	<b>Number of Events</b>	<b>Phelps County percent</b>	<b>Missouri</b>
Children enrolled in MO HealthNet for Kids	2008	3,663	39.0%	33.5%
Children receiving cash assistance	2008	443	4.7%	4.5%
WIC participation (children 0-5) <sup>35</sup>	2008	912	32.4%	26.0%
Students enrolled in free and reduced lunch program	2008	2,662	42.6%	42.0%
Child food stamp recipients	2008	3,260	34.7%	32.7%

Similar trends exist relative to poverty for elderly residents in Phelps County. As the following table illustrates, 32.4% of those 65 years of age and older have incomes at or below 200% FPL:

**Phelps County Individuals 65+ with Income at or Below 200% FPL**

Age	Number at 200% FPL	Total Population	Percent
65-74	890	3,123	
75+	995	2,687	
Total	1,885	5,810	32.4%

Variations in poverty levels are also seen in areas within Phelps County. The diversity of Phelps County's towns is representative of the economic diversity of the population in general. Individuals living in geographic pockets of Phelps County are disproportionately poor -- some residents have wealth and time to enjoy the great outdoors of rural, south central Missouri, but a disproportionate percent of the population suffers from rampant, often generational, poverty.

The following table presents an overview of poverty by township in Phelps County, showing the percentage of all residents living with incomes below FPL, as well as those children under the age of 18 who live in poverty and the percentage of residents receiving food stamps. The data indicates that poverty is not restricted to one portion of the county. In fact, the poverty rate in all but two tracts exceeds the national poverty rate; in some census tracts (including Rolla) the poverty rate is distressingly high, at 26.4%.

**Phelps County Township Economic Profile, 2005-2009 ACS Data<sup>36</sup>**

Township	% of Total Population	% Below Poverty	% under 18 years of Age in Poverty	% with Food Stamps
Arlington	4.8%	16.3%	26.8%	10.6%
Cold Spring	4.4%	22.2%	42.2%	15.7%
Dawson	1.7%	26.4%	53.2%	5.1%
Dillon	18.9%	11.3%	16.5%	4.2%
Liberty	.9%	9.2%	0.0%	4.8%
Meramec	1.8%	20.3%	44.9%	14.0%
Miller	9.6%	19.9%	29.3%	10.2%
Rolla	40.7%	26.4%	26.3%	15.4%
St. James	12.5%	15.4%	16.5%	19.1%
Spring Creek	4.7%	15.7%	17.5%	13.0%

**Insurance status:** Data from 2009 (the most current county-level data available) indicate that the percentage of uninsured Phelps County residents (18.2%) exceeds the state by 3.0%.<sup>37</sup> With 18.2% of the population uninsured, Phelps County also exceeds the national rate of 17.3% uninsured. In 2009, 17.5% of the service area residents were enrolled in Medicaid compared to 14.7% at the state level.<sup>38</sup> Thus, in Phelps County, Medicaid is the source of insurance for a disproportionate number of those who are insured in Phelps County.

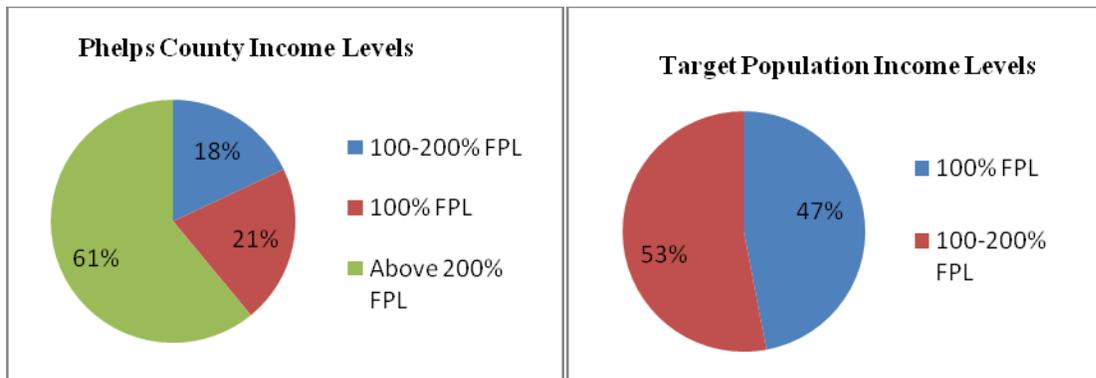
Insurance Status: 2009	Phelps County	Missouri
Uninsured	18.2%	15.2%

Insured (includes private and government funded)	81.8%	84.8%
Non-Medicaid	64.3%	70.1%
Medicaid	17.5%	14.7%

## TARGET POPULATION

**Introduction to the target population – and ramifications for health care:** As indicated above, Phelps County’s demographic data shows 39.3% of the population lives with incomes at or below 200% of the FPL. This high percent is important when considering the suitability of a federally qualified health center (FQHC) for Phelps County since FQHCs primarily serve -- and offer discounts in fees to -- individuals in this income category. Therefore, the 16,169 individuals in Phelps County at or below 200% FPL are identified as the “target population” for an FQHC.

Of the 16,169 individuals whose income is at or below 200% FPL, 7,566 individuals (46.8%) live at or below 100% FPL. The following charts show the breakdown of the Phelps County service area by income level and the breakdown of the target population by income level.



This section of the Needs Assessment describes characteristics of Phelps County’s population whose income is at or below 200% FPL, and, in some cases, those whose incomes are at or below 100% FPL.

**Education:** The most recent educational data available for the target population for Phelps County is from the 2008-2010 American Community Survey and reflects only those below 100% FPL, as opposed to 200% FPL. The data indicate almost twice as many people living in poverty in Phelps County do not graduate from high school (25% vs. 13%) and only 10% of people living in poverty earn a bachelor's degree or higher as compared to 25% of the total county population.

**Employment status:** The most recent data available for the target population for Phelps County is from the 2008-2010 American Community Survey and reflects only those below 100% FPL, as opposed to 200% FPL. Phelps County residents who are living in poverty hold fewer full

time jobs than the state and the nation (4.8%, 5.6% and 5.5% respectively). And, an even larger percentage of the service area population living in poverty works less than full time, year round (57.3%) as compared to the state (39.0%) and the nation (37.3%). Thus, as the following table illustrates, the majority of individuals with poverty status are working... but not at full time, year round jobs.

Poverty and Employment Status <sup>39</sup>	Phelps County		Missouri		United States	
<b>Unrelated individuals for whom poverty status is determined: Total</b>	3,602	100.0%	295,440	100.0%	13,979,435	100.0%
Worked full-time, year-round	174	4.8%	16,663	5.6%	722,160	5.5%
Worked less than full-time, year-round	2,065	57.3%	115,279	39.0%	5,215,336	37.3%
Did not work	1,363	37.8%	163,498	55.3%	8,041,939	57.5%

**Uninsured:** SAHIE data (the most reliable data for insurance status) estimates the number of residents at or below 200% FPL in the service area as 14,847 in 2009. Of those, 4,249 (28.6%) had no health insurance, which exceeds the state rate (27.1%) and is less than the national rate (29.9%). Children in the service area under 200% FPL comprised 35.0% (5,199) of the target population and 14.0% (726) of those were without health insurance, exceeding the state rate of 11.2% and the national rate of 13.6%.<sup>40</sup>

Uninsurance Rates and Estimates for Persons At or Below 200% of FPL: 2009 <sup>41</sup>	Phelps County			Missouri		United States	
	Number Below 200% of FPL	Number Uninsured	Percent Uninsured	Number Below 200% of FPL	Percent Uninsured	Number Below 200% of FPL	Percent Uninsured
Number Below 200% FPL	14,847	4,249	28.6%	1,741,449	27.1%	87,405,075	29.9%
Adults (18 - 64)	9,648	3,523	36.5%	1,104,085	36.3%	55,089,564	39.5%
Children (under 19)	5,199	726	14.0%	637,364	11.2%	32,315,511	13.6%

## PHELPS COUNTY HEALTH DATA

It is important to understand the health status of Phelps County's population when designing health services to respond to health needs. The following section describes the health status of Phelps County's population based on indicators used by the Bureau of Primary Health Care when considering the need for a federally-qualified health center in a community. The data

presented in this report concentrates on those areas where disparities exist between Phelps County’s status and that of Missouri or national goals.

Unless otherwise noted, health data has been procured from the Missouri Department of Health and Senior Services.<sup>42</sup> Data for Phelps County is presented with comparisons to data for Missouri, and wherever possible Healthy People 2020 (HP2020) goals<sup>43</sup> are utilized. HP2020 is a national initiative that provides science-based, 10-year national objectives for improving the health of all Americans by, among other things, setting targets for health indicators. (If the HP2020 goals do not contain targets specific to an indicator listed below, this is indicated with “N/A.”)

In general, the health data indicates that Phelps County lags in its immunization rates, exceeds state rates for unintentional injuries for children and adults, exceeds state rates for obesity, stroke, heart disease and COPD, and lags in cancer screenings. The following section provides detailed information on health indicators. Information is presented according to lifecycle (maternal and child, adolescent, adult, and geriatric health) and for special populations. Data is also presented related to oral health and behavioral health disparities in Phelps County.

***Maternal and child health:***

*Prenatal care utilization and low birth rate:* Phelps County has a higher rate of prenatal care initiated in the first trimester (93%) than Missouri (86.3%) and the HP 2020 goal (77.9%). During 2009, more pregnant women in Phelps County received Medicaid, WIC and food stamps than the state rate. The impact of pregnant women receiving timely care and support services during their pregnancy is reflected in data for low birth rates: the rates for preterm births, low birth weight and very low birth weight for Phelps County are less than the Missouri rate. Similarly, Phelps County’s rate of neonatal, perinatal and post-neonatal deaths per 1,000 is lower than Missouri’s but exceeds HP2020 goals. Of note, however: 19.7% of pregnant women in 2009 reported smoking during pregnancy, compared to 16.8% for Missouri and to a HP2020 goal of 1.4%. The following table<sup>44</sup> provides an overview of prenatal health indicators in Phelps County, compared to Missouri and HP2020 data:

<b>Indicator (2009)</b>	<b>Phelps County Rate</b>	<b>Missouri Rate</b>	<b>HP 2020 Target</b>
Care Began First Trimester	93.0%	86.3%	77.9% <sup>45</sup>
Late Care (2nd/3rd Trimester)	6.8%	12.9%	22.1% <sup>46</sup>
No Prenatal Care	0.2%	0.8%	N/A
Prenatal Medicaid	57.7%	48.4%	N/A
Prenatal WIC	57.5%	43.8%	N/A
Prenatal Food Stamps	35.9%	29.4%	N/A
Mother Smoked During Pregnancy	19.7%	16.8%	1.4% <sup>47</sup>

*Infant care utilization:* The percentage of very low birth rate (VLBW) Phelps County infants born in subspecialty perinatal centers is lower than the state rate and the HP 2020 goal. Also, there are more infants participating in WIC and Medicaid in Phelps County than the state rate.

**Infant Health Indicators**

Indicator	Years	Number of Events	Phelps County Rate	Missouri Rate	HP 2010 Target
VLBW delivered in subspecialty perinatal centers	2005-2009	18	69.2%*	77.3%	83.7% <sup>48</sup>
Infants Participating in WIC	2008	385	72.9%	58.2%	N/A
Infants Participating in WIC that ever Breastfed	2008	207	53.8%	56.0%	N/A
Infants on Medicaid	2009	323	62.5%	52.3%	N/A
<b>*Due to low incidence, rates may be unstable.</b>					

**Children and adolescent health:**

*Percentage fully immunized:* Limited county level immunization data for the service area is available. The figures in the table below are based on a total of six VFC (Vaccination for Children) providers which includes the LPHA. There are actually nine VFC providers in Phelps County; however three of these providers did not have data available.<sup>49</sup> Phelps County does not meet the HP 2020 goals for 3 out of 6 individual vaccines or the overall 4:3:1:3:3:1:4 series.

<b>Missouri &amp; US Childhood Immunization Rate 2000, 2010, 2011<sup>50</sup></b>			
Immunization	Phelps/Maries County Rate for VFC participants 2011	Missouri 2010	US 2010
4 DTaP (diphtheria, tetanus, pertussis)	82.2%	80.3%	84.4%
3 polio	95.5%	89.9%	93.3%
1 MMR (measles, mumps rubella)	87.2%	90.4%	91.5%
3 HIB (haemophilus influenza B)	94.2%	87.8%	90.4%
3 Hep B (hepatitis B)	91.9%	89.2%	91.8%
1 Varicella (Chickenpox)	89.8%	86.7%	90.4%
4:3:1:3:3:1:4 (DTaP, polio, MMR, HIB, HepB, Varicella,PCV)	68.3%	65.5%	70.2%

*Childhood injuries:* The rate for the Phelps County emergency room visits and hospitalizations for injuries exceeds that of Missouri.

<b>Pediatric Health Indicator – Injury</b>					
Pediatric Health Indicator	Year	Number of Events	Phelps County Rate	Missouri Rate	HP 2020 Target
Injury ER Visits per 100,000 (age 1-14)	2008	871	12,040.4	11,370.9	N/A
Injury Hospitalizations per 100,000 (age 1-14)	2008	19	262.7*	192.8	N/A

*Head Start:* According to the Missouri Head Start Association, 21,433 of Missouri children were enrolled in Head Start and Early Head Start programs in 2009. Of these children, 84% live below 100% of the federal poverty level. During this period, 78% of the Missouri children who participated in Head Start and Early Head Start had funded enrollment.<sup>51</sup>

Head Start in Phelps County is administered by Missouri Ozarks Community Action, Inc. (MOCA), which is a non-profit community action agency, People Helping People. Currently Rolla Head Start has 84 children enrolled in their program and St. James Head Start has 18 children enrolled in their program.<sup>52</sup> According to the information obtained from the Phelps / Maries County Health Department in January 2012, for every Head Start slot this is filled in Phelps County, three to four children are turned away.

*Healthy Start Programs:* According to the National Healthy Start Association, no Healthy Start Programs are administered in Phelps County. The Association lists three Healthy Start Programs within Missouri, which are localized and not accessible for Phelps County residents.<sup>53</sup>

*Nutrition Programs:* In 2008, 912 children ages 12-59 months participated in the Women, Infants and Children Nutrition Program. The rate for Phelps County was 410.3 (per 1,000 population), which is higher than the state rate of 318.2.

The percentage of children enrolled in the School Free and Reduced Meals (FARM) Program in Phelps County (42.6%) is slightly higher than that for the state (42.0%).<sup>54</sup>

*Adolescent Health:* Among 15-17 year old service area residents, the teen pregnancy rate is slightly lower than the rate for Missouri and the HP 2020 goals. The STD rates for the service area residents ages 15-19 are lower than the state rate.

**Adult health:**

*Diabetes and Diabetic Risk Factors:* As of 2008, 8.2% of the Phelps County adults were diagnosed with diabetes compared to 7.9% for Missouri.<sup>55</sup> Phelps County had a lower rate of diabetic hospitalizations than the state, but a slightly higher rate of emergency room visits.

Risk factors closely associated with diabetes include overweight, obesity and physical activity, factors that also affect cardiovascular health. As noted in the table below, Phelps County exceeds the state and HP 2020 goals for percentage of overweight people and also exceeds the state on the percentage of obese people. Consequently, Phelps County has less people at a healthy weight than the state and the HP 2020 goals.

<b>Diabetes Risk Factors</b>			
<b>Indicator</b>	<b>Phelps County 2007 Weighted Percent</b>	<b>Missouri 2007 Weighted Percent</b>	<b>HP 2020 Target</b>
No leisure time physical activity	22.5%	25.3%	32.6% <sup>56</sup>
Healthy Weight	32.6%	37.3%	33.9% <sup>57</sup>
Overweight (25.0-29.9 BMI)	39.6%	36.3%	35.5% <sup>58</sup>
Obese (>30 BMI)	27.8%	26.4%	30.6% <sup>59</sup>

*Cardiovascular:* Phelps County has a higher rate of stroke and coronary heart disease deaths than the state and it is significantly higher than HP 2020 goals. Hospitalizations and ER visits for heart disease in Phelps County also exceed the state rate.

<b>Heart Disease</b>					
<b>Indicator</b>	<b>Years</b>	<b>Number of Events</b>	<b>Phelps County Rate</b>	<b>Missouri Rate</b>	<b>HP 2020 Target</b>
Heart Disease deaths per 100,000	1999-2009	1,283	251.9	245.6	100.8 <sup>60</sup>
Heart Disease hospitalization per 10,000	2005-2009	4,080	178.6	152.4	N/A
Heart Disease ER Visits per 1,000	2005-2009	3,012	14.2	12.9	N/A
Stoke/Other Cerebrovascular deaths per 100,000	1999-2009	370	72.2	54.9	33.8 <sup>61</sup>
Stoke/Other Cerebrovascular hospitalizations per 1,000	2005-2009	673	29.5	30.4	N/A
Stoke/Other Cerebrovascular ER Visits per 1,000	2005-2009	311	1.4	0.8	N/A

*Cardiovascular risk factors:* Like diabetes, there are specific lifestyle risk factors associated with cardiovascular disease alone. These risk factors include cigarette smoking, blood pressure, high cholesterol and insufficient fruit/vegetable intake. Phelps County rates for cigarette smoking and cholesterol levels far exceed HP 2020 goals; further disparities between the county and state exist for the other related risk factors.

<b>Cardiovascular Risk Factors</b>			
<b>Indicator</b>	<b>Phelps County 2007 Weighted Percent</b>	<b>Missouri 2007 Weighted Percent</b>	<b>HP 2020 Target</b>
Current cigarette smoking	20.4%	23.2%	12.0% <sup>62</sup>
High blood pressure (hypertension)	15.9%	19.7%	26.9% <sup>63</sup>
Low fruit & vegetable intake	78.8%	76.1%	N/A <sup>64</sup>
Has high cholesterol	19.6%	20.2%	13.5% <sup>65</sup>

*Cancer:* In general, as the following table indicates, Phelps County has an overall lower incidence rate of cancer deaths than the state, but exceeds the HP 2020 goals for certain cancers (colorectal cancer, lung cancer).

<b>Cancer Deaths &amp; Hospitalizations</b>					
<b>Indicator</b>	<b>Years</b>	<b>Number of Events</b>	<b>Phelps County Rate</b>	<b>Missouri Rate</b>	<b>HP 2020 Target</b>
<b>All Cancers</b>	1999-	856	188.6	197.7	160.6 <sup>66</sup>

<b>Cancer Deaths &amp; Hospitalizations</b>					
<b>Indicator</b>	<b>Years</b>	<b>Number of Events</b>	<b>Phelps County Rate</b>	<b>Missouri Rate</b>	<b>HP 2020 Target</b>
Deaths per 100,000	2009				
Hospitalizations per 10,000	2005-2009	868	37.6	39.1	NA
<b>Colorectal Cancer</b> Deaths per 100,000	1999-2009	78	17.1	19.4	14.5 <sup>67</sup>
Hospitalizations per 10,000	2005-2009	105	4.5	4.9	NA
<b>Lung Cancer</b> Deaths per 100,000	1999-2009	268	58.6	61.4	45.5 <sup>68</sup>
Hospitalizations per 10,000	2005-2009	123	5.2	5.2	NA
<b>Breast Cancer</b> Deaths per 100,000	1999-2009	57	12.7	14.5	20.6 <sup>69</sup>
Hospitalizations per 10,000	2005-2009	44	1.9	2.2	NA
<b>Cervical Cancer</b> Deaths per 100,000	1999-2009	7	1.7*	1.4	2.2 <sup>70</sup>
Hospitalizations per 10,000	2005-2009	47	2.2	2.0	NA
<b>Prostate Cancer</b> Deaths per 100,000	1999-2009	41	8.7	9.1	21.2 <sup>71</sup>
Hospitalizations per 10,000	2005-2009	64	2.7	2.9	NA
<b>*Due to low incidence, rates may be unstable.</b>					

*Cancer screening:* Phelps County lags behind the state for recommended cancer screenings, putting service area residents at higher risk. As the following table illustrates, the county screening rates for breast, cervix and colon cancer are significantly lower than the recommend HP 2020 goals.

<b>Cancer Screening</b>			
<b>Indicator</b>	<b>Phelps County 2007 Weighted Percent</b>	<b>Missouri 2007 Weighted Percent</b>	<b>HP 2020 Target</b>
Women aged 40+ who have had a mammogram within the past year	64.8%	72.4%	81.1% <sup>72</sup>
Women aged 18+ who have had a pap test within the past three years	75.4%	80.5%	93.0% <sup>73</sup>
Adults aged 50+ who have had a blood stool test within the past year	11.0%	12.9%	N/A
Adults aged 50+ who have ever had a sigmoidoscopy or colonoscopy	55.5%	63.4%	70.5% <sup>74</sup>

*Chronic obstructive pulmonary disease (COPD):* Phelps County's rate of COPD deaths and hospitalizations exceeds the rates for Missouri, but is less than HP2020 goals.

COPD Health Indicator					
Indicator	Years	Number of Events	Phelps County Rate	Missouri Rate	HP 2020 Target
COPD Deaths per 100,000	1999-2009	276	55.0	48.7	98.5 <sup>75</sup>
Hospitalizations per 10,000	2005-2009	572	24.6	23.2	50.1 <sup>76</sup>
ER Visits per 1,000	2005-2009	1,739	8.4	5.4	N/A

*Unintentional injuries:* For both general unintentional injuries and motor vehicle injuries, Phelps County has a higher rate of deaths than Missouri and the HP 2020 goal. The hospitalization rate and emergency department visits for general unintentional injuries in Phelps County are also higher than the Missouri rate.

Unintentional Injuries					
Indicator	Years	Number of Events	Phelps County Rate	Missouri Rate	HP 2020 Target
<b>General Unintentional Injuries</b>					
Deaths per 100,000	1999-2009	244	53.6	45.0	36.0 <sup>77</sup>
Hospitalizations per 10,000	1998-2008	2,767	58.2	55.6	N/A
ER Visits per 1,000	1998-2008	42,871	95.9	93.4	N/A
<b>Motor Vehicle Traffic</b>					
Deaths per 100,000	1999-2009	115	25.0	19.0	12.4 <sup>78</sup>
Hospitalizations per 10,000	1998-2008	510	10.8	11.3	N/A
ER Visits per 1,000	1998-2008	3,641	7.8	10.9	N/A

**Geriatric population (65+):**

*Geriatric chronic disease mortality:* Disparities exist between Phelps County and Missouri for many of the chronic disease mortality rates among individuals 65 years and older. Phelps County ranks higher than the state on eleven of the twenty-one indicators listed below, most notably stroke, kidney disease, pneumonia/influenza and heart disease.

2000-2009 Total Mortality Rates <sup>79</sup>			
Mortality Rates (per 100,000 population):	Phelps County Number	Phelps County Rate	Missouri Rate
Heart disease	956.0	1662.6	1622.5
Cancer	596.0	1036.5	1108.3
Malignant neoplasms trachea/bronchus/lung	181	314.8	347.6
Malignant neoplasms of colon/rectum/anus	52	90.4	115.2
Malignant neoplasms of breast	35	60.9	70.2

2000-2009 Total Mortality Rates <sup>79</sup>			
Mortality Rates (per 100,000 population):	Phelps County Number	Phelps County Rate	Missouri Rate
Malignant neoplasms of prostate	39	67.8	66.4
Malignant neoplasms of pancreas	25	43.5	63.2
Leukemia	24	41.7	46.4
Non-Hodgkin`s lymphoma	33	57.4	45.2
Cerebrovascular disease (Stroke)	301.0	523.5	392.2
Chronic lower respiratory diseases	207.0	360.0	332.8
Pneumonia and influenza	154.0	267.8	168.3
Kidney disease (nephritis/nephrotic syndrome/nephrosis)	131.0	227.8	121.9
Alzheimer's disease	105.0	182.6	188.1
Other digestive diseases	90.0	156.5	128.8
Diabetes	63.0	109.6	140.2
Septicemia	49.0	85.2	71.7
All other accidents and adverse effects	46.0	80.0	89.4
Other respiratory diseases	41.0	71.3	60.7
Other major cardiovascular diseases	38.0	66.1	57.6
Essential hypertension	6.0	10.4*	46.7
<b>*Due to low incidence, rates may be unstable</b>			

*Geriatric immunizations:* Missouri is comprised of 114 counties and the City of St. Louis. The sample size from each county, on an annual basis, is too small to make conclusive estimates by county. Therefore, the counties and St. Louis are clustered into seven geographical BRFSS regions to examine sub-state level results: Kansas City Metro, St. Louis Metro, Central, Southwest, Southeast, Northwest, and Northeast. Phelps is included in the Central Region. According to the 2009 BRFSS Regional Data Summary, flu vaccination rates in the Central Region in the past year for persons 65 and older are slightly better than those in the state, while pneumonia vaccination rates parallel the state:

- 73.4% of the sample population from the Central Region, age 65 and older, has had a flu shot in the past year compared with 72.5% residents statewide;
- 68.0% of the sample population from the Central Region, age 65 and older, has ever had a pneumonia vaccination compared with 68.3% residents statewide.<sup>80</sup>

***Special populations:***

Health centers are community-based and patient-directed organizations that serve populations with limited access to health care. These include low income populations, uninsured individuals, and those with limited English proficiency. Some health centers also receive specific funding to focus on certain special populations listed below.

*HIV/AIDS:* Phelps County is located in the Southwest HIV Region in Missouri. This region is comprised of twenty-nine counties in the southwest portion of the state. In 2010 the Southwest HIV region reported 44 new cases of HIV with 401 people living with HIV, and 18 new cases of

AIDS with 412 people living with AIDS. This region ranks third out of the six regions for newly diagnosed and people living with HIV/AIDS in 2010. The racial mix of the newly diagnosed cases of HIV in the Southwest HIV region is 77% white, 11% black, 7% Hispanic and 5% unknown. Of those 401 people living with HIV, 15 list Phelps County as their county of residence.<sup>81</sup>

*Homelessness:* According to the State of Homelessness in America Report, the homeless population of the state numbered 7,186 persons in 2009, with a rate of 12.0 per 10,000.<sup>82</sup> County-level data is unavailable.

*Public housing:* The U.S. Department of Housing and Urban Development online tool for locating subsidized housing by state and county indicates that there are 253 residents in Public Housing in the Phelps County in 2008.<sup>83</sup>

*Gay, lesbian, bisexual, and transgender:* New information released by the US Census Bureau, 2008-2010 American Community Survey shows that of the 16,567 Phelps County households, 0.3% are unmarried partner households with same sex couples as compared to 0.4% for Missouri and 0.5% for the nation. Phelps County had 17 male householders with a male partner and 37 female householders with a female partner in 2010.<sup>84</sup>

*Migrant workers:* According to Missouri’s Office of Social and Economic Analysis, there are no migrant workers in Phelps County.<sup>85</sup>

*Minority health:* Due to the low minority population in Phelps County, data for minority populations is not widely available. The following indicators reflect a disparity in the African American population at the county and state level.

Minority Health Profile - Maternal Child Health Indicators					
Indicator	Years	Phelps County		Missouri	
		White	African American	White	African American
Inadequate Prenatal Care	2004-2008	9.4	23.4	8.9	21.2
Low Birth Weight	2004-2008	7.0	14.0	7.1	13.7
Infant Deaths per 1000	1998-2008	6.6	0.7	5.0	2.4
Sudden Infant Death Syndrome (SIDS) per 1000	1998-2008	0.4	0.0	0.5	0.2

**Behavioral health:**

*Mental health:* Phelps County is designated a Health Professional Shortage Area (HPSA) for mental health care, indicating a low level per capita of mental health professionals.

In 2009, six Phelps County residents committed suicide. The suicide rate for Southeast Missouri was 14.6 per 100,000 persons, which is higher than the state rate (14.3 per 100,000 persons). Males are approximately four times more likely to commit suicide than females. Older males have higher rates of suicide than younger males.<sup>86</sup> The Central Behavioral Risk Factor Surveillance Survey (BRFSS) Region in Missouri is comprised of the 19 counties in the central-

most portion of the State. There are a total of seven BRFSS regions in Missouri. According to the 2010 Central BRFSS Region in Missouri, 6.5% of the region’s residents reported they felt down, depressed or hopeless on seven to fourteen days of the past 14 days, compared to 6.7% for the state. A greater percentage of residents in the region felt bad about themselves on one to six of the past 14 days (12%), versus 11.5% for Missouri. Also, a greater percentage of residents in the region had ever been told by a doctor that they had a depressive disorder (25.9%) compared to 20.9% for Missouri.<sup>87</sup>

*Substance abuse:* While alcohol-related hospitalizations and emergency room visits in Phelps County have held steady in the last two years, drug-related hospitalizations and emergency room visits have increased by 19%. DWI/DUI arrests and self inflicted injuries have also increased.

<b>Substance Abuse<sup>88</sup></b>			
<b>Indicator</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Alcohol Related Hospitalization/ Emergency Room (ER)Visits	425	357	357
Drug Related Hospitalization/ Emergency Room (ER)Visits	361	336	399
Alcohol Involved Traffic Crashes	74	69	74
Drug Involved Traffic Crashes	10	20	22
DWI/DUI Arrests	329	365	387
Drug Arrests	359	262	243
Self-Inflicted Injury	58	67	84

***Oral Health:***

Phelps County has a Dental Health Professional Service Area (HPSA) designation (indicating a low level of dental health professionals). The number of dentists expected to retire over the next 10 years, compared to the number of those graduating from dental school and establishing practice in Missouri, is alarming and indicates a growing shortage of dentists in rural and underserved areas of the state.<sup>89</sup> In Phelps County, over 50% of the active dentists are age 50 or older.

*Pediatric oral health:* Approximately 133 communities in Missouri are currently supplementing the natural fluoride level in the water system to the optimum for dental decay prevention. In Phelps County, four public water systems add fluoride to the water system and one public water system is naturally fluoridated.<sup>90</sup>

County-level data for child oral health utilization indicators are unavailable, therefore Missouri data are reflected below. In 2004-2005, the state did not meet the Healthy People goals for untreated tooth decay and dental caries experience, but did have a slightly higher rate for percent with dental sealants. Since Phelps County has a Dental Health Professional Service Area (HPSA) designation, it likely fares worse than Missouri for oral health indicators.

**Child Oral Health Indicators**

Indicator	Missouri (2004-2005) <sup>91</sup>	HP 2020 Target
Untreated decay (child 6-8)	27.0%	25.9% <sup>92</sup>
Dental caries experience (6-8)	55.0%	49.0% <sup>93</sup>
Dental sealants present	29.0%	28.1% <sup>94</sup>

The Missouri Oral Health Preventive Services Program (PSP) provides oral health screening, preventive services including fluoride varnish applications and oral health education with dental hygiene materials (such as toothbrushes, toothpaste and dental floss) and referral networks. The Missouri PSP is available to children attending Early Childhood Learning Centers, Early Head Start and Head Start, as well as school children in participating communities including Schools for Developmentally Disabled. In the 2008-2009 school years, the PSP served 35,308 children in Missouri. Data from PSP indicates that 90 children in Phelps County participated – a number that appears quite low when compared to the 5,100 children 0-19 that live at or below 200% FPL in Phelps County.<sup>95</sup>

Data obtained directly from the Missouri Department of Health shows that 95 children in Phelps County participated in the PSP program in 2010. Of these 95 participants, 28% had untreated tooth decay; 87% had no dental sealants; and 5% were in urgent need of dental care.<sup>96</sup>

*Adult oral health:* County-level data for adult oral health indicators are unavailable. Comparisons between Missouri, the United States and HP 2020 goals show that Missouri fares worse than the nation as a whole. Only one indicator, tooth extractions for those 25-34 years of age, shows a lower percentage than the national rate. Since Phelps County has a Dental Health Professional Service Area (HPSA) designation (indicating a low level of dental health professionals), it likely fares worse than the state for oral health indicators.

Adult Oral Health Indicators 2010 <sup>97</sup>			
Indicator	Missouri	United States	HP 2020 Target
Percent of adults who visited dentist	64.3%	70.1%	N/A <sup>98</sup>
Adults with extraction of permanent teeth	46.7%	44.0%	N/A
18-24	13.8%	13.1%	N/A
25-34	24.1%	26.7%	
35-44	37.5%	32.9%	
45-54	49.8%	46.6%	
55-64	69.0%	60.9%	31.2% <sup>99</sup>
65+	76.9%	76.0%	

Data for the oral health status of residents 65 years and older is difficult to find for Phelps County. 19.9% of residents 65 and older in the Central Region have had all their natural teeth extracted. This exceeds the state rate (19.5%) and the U.S. rate (17%).<sup>100</sup>

*Mortality rates:*

Phelps County rates exceed Missouri's levels for mortality rates for heart disease, smoking attributable, stroke, all injuries and poisonings, chronic lower respiratory diseases, total unintentional injuries including motor vehicle accidents, pneumonia and influenza, kidney disease, septicemia, chronic liver disease and injury at work, according to the Missouri Department of Health and Senior Services. The service area death rates exceed the state in thirteen of the twenty categories below.

<b>1999-2009 Total Mortality Rates per 100,000: <sup>101</sup></b>		
<b>Cause of Death by Most Prevalent in Phelps County</b>	<b>Phelps County</b>	<b>Missouri</b>
All Causes	924.5	871.5
Heart Disease	251.9	245.6
All Cancers (Malignant Neoplasms)	192.2	197.7
Smoking-Attributable (estimated)	162.6	152.2
Stroke/Other Cerebrovascular Disease	72.2	54.9
All Injuries and Poisonings	71.7	67.0
Chronic Lower Respiratory Disease	55.0	48.7
Total Unintentional Injuries	53.6	45.0
Pneumonia and Influenza	39.8	23.1
Kidney Disease (Nephritis and Nephrosis)	29.4	17.2
Motor Vehicle Accidents	24.9	18.6
Alzheimer's Disease	21.8	21.9
Diabetes Mellitus	17.1	23.8
Alcohol/Drug-Induced	15.5	16.4
Suicide	12.8	12.8
Septicemia	12.4	11.5
Firearm	10.5	12.7
Chronic Liver Disease and Cirrhosis	9.0	7.3
Homicide	3.5*	7.1
Injury at Work	3.0*	2.0
HIV/AIDS	0.7*	2.3
<b>*Due to low incidence, rates may be unstable</b>		

## REIMBURSEMENT ENVIRONMENT

**Overview of MO HealthNet:** The Missouri Medicaid program is administered by the MO HealthNet Division (MHD) of the Missouri Department of Social Services. The purpose of the MO HealthNet Division is to purchase and monitor health care services for low income and vulnerable citizens of the State of Missouri. The Family Support Division within the Department of Social Services determines program eligibility. MO HealthNet is organized by Managed Care Regions; Phelps County is part of the Central Managed Care Region, as are the surrounding counties of Maries, Pulaski and Gasconade.

In Missouri, the Early Periodic Screening, Diagnosis and Treatment (EPSDT) program is named Healthy Children and Youth (HCY). Missouri has expanded coverage to include all necessary

treatment services for conditions identified by EPSDT. These services include: counseling, case management, private duty nursing, speech, occupational and physical therapy, personal and home health care, orthodontic care and durable medical equipment.

Eligibility for MO HealthNet is determined predominantly by economic status and age.

Eligibility for MO HealthNet for Kids includes:

- Infants under age one year whose family income is less than 185% federal poverty level (FPL);
- Children under age six at 133% FPL;
- Children ages six through eighteen at 100% FPL; and
- Uninsured children to age 19 with a gross family income up to 300% FPL.

MO HealthNet for Women includes obstetric services for pregnant women whose income is below 185% FPL; uninsured women who lose their MO HealthNet coverage 60 days after the birth of their child are covered for women's services (Women's Health Services Program (1115 Demonstration Waiver)) for an additional year.

MO HealthNet for Families (MHF) provides healthcare coverage for families with income that does not exceed the July 16, 1996 Aid to Families with Dependent Children (AFDC) income standards. Transitional MO HealthNet (TMH) — Provides healthcare coverage to a family for up to 12 months, after the closing of MHF case due to employment or increased earnings.

Missouri has approval to provide home and community based services under nine Medicaid Waivers. These include:

- MO HealthNet Managed Care (1915(b)) Waiver
- Aged and Disabled Waiver
- AIDS Waiver Independent Living Waiver
- Mental Retardation/Developmental Disabilities (MR/DD)

Remaining waivers provide all inclusive care for the elderly (PACE) and for those with serious and complex physical disabilities.

The MO HealthNet Division administers the provision and payment of services while the Family Support Division (FSD) determines eligibility for individuals and families. FSD offices are located in each of Missouri's 114 counties and the City of St. Louis. However, the State hopes to close some county-level FSD offices and create regional offices as a way to save administration costs. MO HealthNet covers about 15% of all Missourians, including 35% of Missouri's children and 10% of seniors over age 65. It pays for 48% of all births and 61% of all nursing home care in the state and helps cover Medicare cost-sharing (premiums, deductibles, and coinsurance) for eligible seniors and people with disabilities. As a result, MO HealthNet is a significant source of State expenditures, accounting for roughly 26% of Missouri's total budget for FY 2010. These expenditures include substantial federal matching funds as Missouri normally receives federal matching funds at a rate of about 64% for Medicaid and 74% for CHIP. The federal Medicaid matching rate is significantly enhanced under the American Recovery and Reinvestment Act of 2009 (ARRA) through fiscal year 2011.

Missouri's CHIP program provides the same basic health services as traditional Medicaid, except it does not cover non-emergency medical transportation for higher income CHIP participants (in families with incomes above 150% of poverty). Based on an income scale, some individuals covered under Missouri's CHIP program (families above 150% of poverty) must pay premiums. Premiums paid per family per month range from \$13 to \$277. Approximately 63,700 children have CHIP coverage in Missouri, representing about 8% of the total MO HealthNet population.<sup>102</sup> Missouri uses a managed care delivery system across the State's "I-70 corridor" for children, families and pregnant women, while health care for the elderly and disabled is generally provided on a fee-for-service basis. DSS has expressed interest in expanding managed care across the State; expanding managed care to seniors and individuals with disabilities is likely to resurface as an issue in the legislature given the State's difficult fiscal environment.

**2005 Medicaid reductions:** A major aspect of Missouri's health policy environment is the cuts to the State's Medicaid program in 2005 under which more than 90,000 people lost coverage and "optional" services like dental care and medically-necessary therapies were eliminated for over 300,000 Missouri Medicaid recipients. The majority of these cuts were never restored, although legislation passed in 2007 made some small but significant changes, such as reinstating a small Ticket-to-Work Health Insurance Program, expanding the State's Uninsured Women's Health Program, and reinstating durable medical equipment coverage, while renaming the Medicaid program "MO HealthNet."

The 2005 cuts had a significant impact on FQHCs and Missouri Medicaid recipients. FQHCs have historically been a critical component of the State's health care safety net for uninsured and low-income populations. In reviewing the impact of the 2005 cuts, Health Management Associates, Inc (HMA) examined three years of patient and financial data for Missouri's FQHCs. HMA's review found a significant decline in the percentage of health center patients covered by Medicaid (particularly for adults and CHIP-funded children) and a significant increase in the percentage of their patients without any health coverage, particularly adults.<sup>103</sup> The continuing economic crisis and the rising rate of uninsured present significant challenges for Missouri's hospitals and FQHCs, which are stressed to handle the increased demand with reduced Medicaid funding. Rising uninsurance rates also increase the State's uncompensated care burden while shifting costs onto private paying customers and employers.

Not surprisingly, the 2005 cuts also had a negative impact on the health status and productivity of the Medicaid recipients who lost coverage. A Washington University Study found that when benefits are taken away or reduced, a person is more likely to report a negative change in health status. Over half of those who had a change in or a loss of Medicaid coverage reported a decline in their health status, and 1 in 5 Missourians reported a change in their health status related to a change in their Medicaid coverage. Also, 12% reported that a change in their health status affected their ability to work. The study also looked at the impact of the 2005 cuts on children. While most of the changes were directed at adults, children who experienced a change or loss of coverage were more likely to need medical care but not receive it. As with adults, children were more likely to experience a negative change in health status if they had a reduction in or loss of Medicaid benefits. The loss of health coverage also negatively affected the quality of care for these former Medicaid recipients.<sup>104</sup>

**Post-2005 expansion efforts:** Major efforts to restore or otherwise expand coverage in Missouri in the last several years have been unsuccessful. Governor Blunt's (2005-2009) *Insure Missouri* coverage initiative was unsuccessful in 2008. While Missouri's current Governor Nixon initially pledged to restore the 2005 Medicaid cuts and enroll eligible uninsured children, he was unable to enact even a modest Medicaid expansion in 2009. The State has been saddled with a fiscal crisis for the last few years and policymakers have generally been reducing the size of government programs rather than expanding coverage or services. The State's budget crisis continues to present huge challenges for Missouri. Thus, Missouri has been unable to make any significant inroads in addressing the rate of uninsured during the last few years and will likely have difficulty doing so before federal health reform takes full effect in 2014.

Meanwhile, the number of uninsured Missourians continues to rise. National Census data show that Missouri's uninsured rose from 744,000 in 2006-07 to 823,000 in 2008-09, a 10.6% percent increase. This is largely due to the decline of employer-based coverage in the State, which fell from 64.8% in 2006-07 to 62.7% in 2008-09.<sup>105</sup>

**Impact of health reform:** The Affordable Care Act (ACA) will have a profound effect on Missouri's health policy environment, including the State's Medicaid and CHIP programs. The ACA will substantially increase enrollment in Medicaid, particularly for childless adults who have previously not been eligible for MO HealthNet. The ACA's Medicaid expansion will bring significant numbers of low-income parents into the program as well as children who are likely to enroll when their parents do. The Medicaid expansion provisions alone are expected to reduce Missouri's uninsured by 46%.

These coverage expansions should have a profound impact on health access and outcomes in Missouri. It is well established that those without health insurance are more likely to delay seeking medical care when sick, and less likely to use screening and preventive services. As a result, their health statuses decline and, when they do enter the medical care system, they tend to be sicker and at more advanced disease stages than the insured. Moreover, even when seriously ill or suffering from an identified chronic condition, the uninsured receive less care than the insured. Together, these factors result in higher rates of morbidity and mortality for the uninsured, both in general and for specific diseases. The successful treatment and management of cancer, cardiovascular disease, and diabetes depends heavily on early detection, and the uninsured are less likely to receive screening and preventive care for these conditions. Among people with specific risk factors, higher proportions of the uninsured do not see a doctor because of costs. By increasing coverage in Missouri, the ACA should make significant positive inroads into these critical health policy problems.

Equally critical will be the ACA's new health insurance exchanges and premium credits for individuals to purchase coverage through these exchanges. Missouri must choose whether to set up its own exchange or whether to have the federal government run an exchange for the State. Other questions for the State to address include how to determine eligibility for the new premium credits, how to effectively coordinate eligibility for these credits with Medicaid and CHIP, and what will be the precise role of the new exchanges in the healthcare marketplace. Missouri must also choose whether to pursue many of the new options in the ACA such as "health care homes" and new home- and community-based initiatives. To oversee the implementation of health

reform, the Governor created a “health care cabinet” consisting of the Directors of several State Departments (Social Service, Mental Health, Health and Senior Services, and Insurance). These implementation efforts will be critical to the health policy environment in the coming years.

## OTHER PROVIDERS OF CARE AVAILABLE TO THE TARGET POPULATION

Once a service area has been determined and an understanding gained of the people within that area who lack the financial resources to reliably obtain healthcare, the next step of the Needs Assessment involves identifying providers in the service area available to care for those with insufficient funds or insurance. Identifying true availability of existing Phelps County providers to those without financial resources, transportation or with limited health literacy allows an understanding of gaps in accessible care to emerge.

***Other Federally-Qualified Health Centers:*** Phelps County has been designated a Health Provider Shortage Area (HPSA) for primary medical care, dental care and mental health care by the HRSA, U.S. Department of Health and Human Services. In addition, the St. James service area in Phelps County is designated as a Medically Underserved Area (MUA # 01937).<sup>106</sup> The nearest Federally Qualified Health Center (FQHC) is in neighboring Pulaski County; Central Ozark Medical Center located at 304 W Washington Ave, Richland, MO 65556.<sup>107</sup> The driving time to this FQHC from Rolla is 48 minutes (45 miles via I-44 W).

***Medicaid providers:*** Information obtained from a search of Medicaid providers on the Missouri Department of Social Services’ MO HealthNet indicates 187 primary care, oral health or behavioral healthcare providers participate in Medicaid in Phelps County. However, this list includes any provider who maintains a Medicaid billing number, whether or not they are available to the Medicaid population; the inflated list included retired clinicians who work in the hospital emergency department, and counselors who work with patients at Boys and Girls Town in St. James.

To gain a more accurate picture of the number and type of providers available to the Medicaid population in Phelps County, staff at The Community partnership conducted a brief phone survey of providers to ascertain whether they accept Medicaid patients. The results of the phone survey indicate 23 medical, dental and behavioral health professionals accept general population Medicaid patients: 15 primary care medical providers, four dentists (two of whom limit their Medicaid patients to those under 20 years of age), and four mental health providers. An additional two internal medicine physicians accept Medicaid but only for specialty oncology care, and an additional three advanced practice nurse practitioners are located at a family planning clinic. The type and number of providers by type are presented in the following table:

### Clinicians Accepting General Population Medicaid Patients in Phelps County

Type of Provider	Number
<b>Medical providers</b>	
Advanced Practice Registered Nurse (APRN)	3
Family Practice	2
Internal Medicine	4
OB-Gynecology	3
Pediatrics	3
<b>Dentists</b>	4
<b>Mental Health Professionals</b>	
Psychiatrists	1
Psychologists & professional counselors	3

**Other safety-net providers:** The Community Care Clinic (CCC) is a primary care clinic located in Rolla and open weekday mornings. CCC began in 1996 with time-limited grant support; the clinic is now supported by the Phelps / Maries County Health Department, Phelps County Regional Medical Center (PCRMC), and several volunteer health professionals. The clinic is staffed by physicians, family nurse practitioners, nurses, social workers and other volunteers and is available for individuals without health insurance who have limited income and those receiving Medicaid benefits. All patients are charged a nominal fee for service and payment is made based on the patient's income. Between 2008 and 2010, income generated from self-pay payments represented approximately 92% of patient revenue; Medicaid payments accounted for approximately 8% of patient revenue.<sup>108</sup>

CCC provides primary medical care for diagnosis and treatment of illnesses, management of chronic and stable medical conditions, treatment of injuries and minor medical conditions, and examinations and screening for health problems. Required lab and radiology services are provided at PCRMC.

CCC also provides mental health services; the emphasis is on helping mental health patients achieve stability in managing their mental illness through consistent medication management and re-evaluation. According to information provided by the Phelps / Maries Health Department<sup>109</sup> on January 9, 2012, CCC is scheduled to have nearly 70% more clinic visits for mental health services in 2011 compared to 2010. New patients requiring mental health services at the CCC are limited to those that have been referred by PCRMC providers.

Data on the number of patient visits at CCC for the years 2008 through 2011 indicates a range between 1200 and 1450 visits per year for medical care; mental health visits ranged between 133 and 218 visits per year in that same time span. Of note, mental health visits nearly doubled between 2010 (128 visits) and 2011(218 visits).<sup>110</sup>

According to data from PCRMC administration, the hospital's emergency department is often inappropriately used by patients seeking primary care medical services who have nowhere else to go due to finances or accessible hours. Hospital administrator Jacob Wieties reports that of the more than 38,000 emergency department visits in 2011, nearly 11,000 could be categorized as visits that could potentially have been seen in a primary care office setting. Hospital staff work

closely with CCC administrators to keep patients on a care plan within the CCC and limit their utilization of the Emergency Department; positive trends are emerging.<sup>111</sup>

Mercy Clinic (formerly St. John's Clinic) operates We Care Clinic on the first and third Tuesday of each month between 4 p.m. and 9 p.m.; care is provided free of charge to uninsured individuals by volunteer clinicians. Patients are seen on a first come / first served basis; patients often start lining up for care by 4:30 p.m.

**Pharmacies:** There are eleven pharmacies, three located in St. James and eight located in Rolla. CCC patients are provided generic prescriptions when possible; prescriptions are filled at WalMart or K-Mart low cost programs whenever possible. A monthly average of 90 patients with 130 prescriptions through pharmaceutical assistance programs through pharmaceutical companies.

## SUMMARY

The data presented in the Needs Assessment indicate that barriers exist in Phelps County for economically-disadvantaged residents who seek basic primary medical care, oral health services and behavioral health care. The County has received HPSA designation due to the shortage of health care professionals in general, and particularly for patients who are uninsured, underinsured or insured through Medicaid.

Economic barriers exist. A look at both per capita and median household income in Phelps County reveals it significantly lags behind Missouri and the nation. Data for 2008-2010 indicate Phelps County has a significantly higher percentage of residents living at poverty level and at 200% FPL, compared to the state and the nation.

Poverty impacts certain members of the community more than others, particularly children and the elderly: 19.7% of Phelps County children ages 0-17 years live below FPL, and 35% of children under age 19 live below 200% FPL. The aged fare no better: of those Phelps County residents 65 years of age and older, 32.4% of have incomes at or below 200% FPL.

The percentage of uninsured Phelps County residents exceeds the state rate. Similarly, a disproportionately high percentage of residents are Medicaid recipients – and often struggle to find primary care providers who accept this form of insurance. Data estimates that 28.6% of residents with incomes below 200% FPL have no health insurance.

Phelps County's demographic data point to the importance of designing affordable health services that are accessible to those without financial means or insurance. Additionally, a service delivery model will need to be culturally aligned with the needs of the growing minority population, and assure availability of services designed for geriatric patients.

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