

# SAINT LUKE'S COMMUNITY HEALTH NEEDS ASSESSMENT

2015

› Saint Luke's North Hospital



› **Contact us**

**Saint Luke's North Hospital**

5830 NW Barry Rd.

Kansas City, MO 64154

816-891-6000

[saintlukeskc.org](http://saintlukeskc.org)

 **Saint Luke's**  
NORTH HOSPITAL

## **Executive Summary**

### *Introduction*

A Community Health Needs Assessment (CHNA) was conducted for Saint Luke's North Hospital which includes Saint Luke's North Hospital- Barry Road and Saint Luke's North Hospital- Smithville, both of which are part of the Saint Luke's Health System.

### **About Saint Luke's North Hospital**

Saint Luke's North Hospital–Barry Road opened in 1989 as the first and only hospital serving Platte County Missouri.

Saint Luke's North Hospital-Smithville was founded in 1938 as one of the region's first hospitals, and today continues to serve residents of Smithville and surrounding Clay County, Missouri communities.

Between the Barry Road and Smithville campuses, Saint Luke's offers 159 patient beds and more than 20 specialized health care services, which are listed below.

- Athletic Heart Clinic
- Brain & Spine
- Breast Care
- Care Van
- Diabetes & Endocrinology
- Ear, Nose & Throat
- Emergency Services
- Gastroenterology
- Heart & Vascular Care
- Hip & Knee Center
- Intensive Care
- Laboratory
- Mammography
- Maternity and NICU
- Orthopedics
- Pain Management
- Palliative Care
- Pharmacy
- Radiology
- Rehabilitation
- Sleep Disorders
- Surgical Services
- Women's Health
- Wound Care

## **Mission**

At Saint Luke's North Hospital, we are committed to providing quality health care services to enhance the physical, mental, and spiritual health of the people of the Northland and surrounding region. As a member of Saint Luke's Health System we are dedicated to partnering with patients, physicians, payers, health providers, our community, and others.

## **Vision**

*The Best Place to Get Care. The Best Place to Give Care.*

## **About Saint Luke's Health System**

Saint Luke's North is part of the Saint Luke's Health System in Kansas City. The health system has 10 hospitals throughout the Kansas City region. The health system also includes home health, hospice, and behavioral health care, as well as multiple physician practices.

## *Objectives*

The objectives of the Community Health Needs Assessment are as follows:

- Define the community served by the hospital and gather secondary data related to demographics, health behaviors, and health indicators.
- Identify key stakeholders representing the hospital leadership and community partners and seek their perspectives on the health needs of the community.
- Assess existing services in the community and gaps in services.
- Compare local data to national data and national health priorities.
- Identify and prioritize the most pressing community health needs in the Northland.
- Provide a base from which an implementation plan can be built.

## *Community Health Needs*

A wide range of primary and secondary data was used to identify five health priorities in Saint Luke's North's community.

### Priority 1: Mental Health

- It is estimated 13,000 individuals have a serious mental health issue.
- Under half of these individuals have access to care.
- The shortage of mental health providers significantly contributes to this issue.

### Priority 2: Access to Care

- Treating the uninsured and Medicaid populations.
- Transportation is a barrier for patients when accessing health care services.
- Lack of primary care providers and prenatal care for the uninsured and Medicaid populations.

### Priority 3: Cancer

- Accounts for 25% of all deaths in Clay and Platte Counties.
- Mortality rates are much higher than the Healthy People 2020 goals related to cancer mortality.
- Breast cancer and lung cancer have the highest mortality rates.

- Screening rates have worsened and the uninsured and underinsured lack access to care once diagnosed.

#### Priority 4: Obesity

- The CDC has calculated the medical costs for obese people to be \$1,429 higher than the medical costs for normal weight people.
- Obesity was projected to be one of the most important health problems indicated on the Northland Health Care Alliance 2015 Community Health Survey.
- In Platte County, 30.5% of the population is obese. In Clay County 28.4% of the population is obese.
- Obesity has serious health implications and reduces life expectancy by increasing the risk of chronic disease such as: heart disease, stroke, high blood pressure, diabetes, and cancer.

#### Priority 5: Diabetes

- As of 2012, diabetes was the tenth most common cause of mortality in both Clay and Platte Counties.
- In 2012, the age-adjusted rate of diabetes was greater for the combined Clay and Platte County areas than the state of Missouri as well as the nation.
- Factors driving diabetes for Clay and Platte Counties include poor diet, physical inactivity, and the effects of obesity.
- Available resources include public health centers and county health departments that offer diabetes treatment and preventative measures such as diabetes screenings.

## Key Contributors

### Hospital Leadership

- i. President and Chief and Executive Officer – Matthew Wenzel
- ii. Chief Nursing Officer- Amy Brummer
- iii. Senior Development Director- Jan Kauk

### Public Health Collaborators

- i. Clay County Public Health Center
- ii. Platte County Public Health Department
- iii. Tri-County Mental Health Services

### Community Partners

- i. Northland Health Care Access
- ii. Children’s Mercy North
- iii. Liberty Public School System

## Assessment Methodology

To prepare the CHNA, both primary sources and secondary data were compiled and analyzed. The CHNA team conducted multiple interviews with hospital leadership and community stakeholders to better understand the needs in the community. Secondary quantitative data was pulled and analyzed from multiple community and hospital sources to better understand the impact of each of the identified needs.

### Primary Data

Primary data was collected by connecting with community stakeholders to discuss the needs of the Northland population. Stakeholders were chosen to represent broad interests of the community, including underserved populations. Stakeholders provided information, which was used to help identify and prioritize community needs.

### Primary Data Sources

- Saint Luke’s North Hospital Leadership
- Clay County Public Health Center
- Platte County Public Health Department
- Tri-County Mental Health Services
- Northland Health Care Access
- Children’s Mercy North
- Liberty Public School System

## **Secondary Data**

Secondary data was collected through multiple community resources. The most current data available was compiled and analyzed for key population health indicators.

### **Secondary Data Sources**

- County Health Rankings
- United States Census Bureau
- American Community Survey
- Zip Map
- City Data
- Association of Religion Data Archives
- Platte County Health Department
- Missouri Department of Mental Health
- Missouri Hospital Association

## Community Analysis

### Demographic Profile

This section outlines the demographic profile for Saint Luke's North Hospital's defined community.

### Geography

Saint Luke's North Hospital's community is defined as Clay and Platte Counties in Missouri. The land area in square miles of Clay County is 397.3, compared to 420.19 in Platte County<sup>1</sup>. Both counties reside in Northwest Missouri and are part of the Kansas City Metropolitan Statistical Area.

The following zip codes and towns comprise Clay County<sup>2</sup>:

Claycomo (64119)

Excelsior Springs (64024)

Gladstone (64118)

Holt (64048)

Kansas City (64116, 64117, 64118, 64119, 64155, 64156, 64157, 64158, 64161, 64165, 64166, 64167)

Kearney (64060)

Liberty (64068)

Pleasant Valley (64157)

Smithville (64089)

The following zip codes and towns comprise Platte County<sup>3</sup>:

Camden Point (64108)

Dearborn (64439)

Edgerton (64444)

Farley (64028)

Ferrelview (64163)

Iatan (64098)

Kansas City (64150, 64151, 64152, 64153, 64154, 64163, 64164)

Parkville, Platte City (64079)

Waldron, Weston (64098)

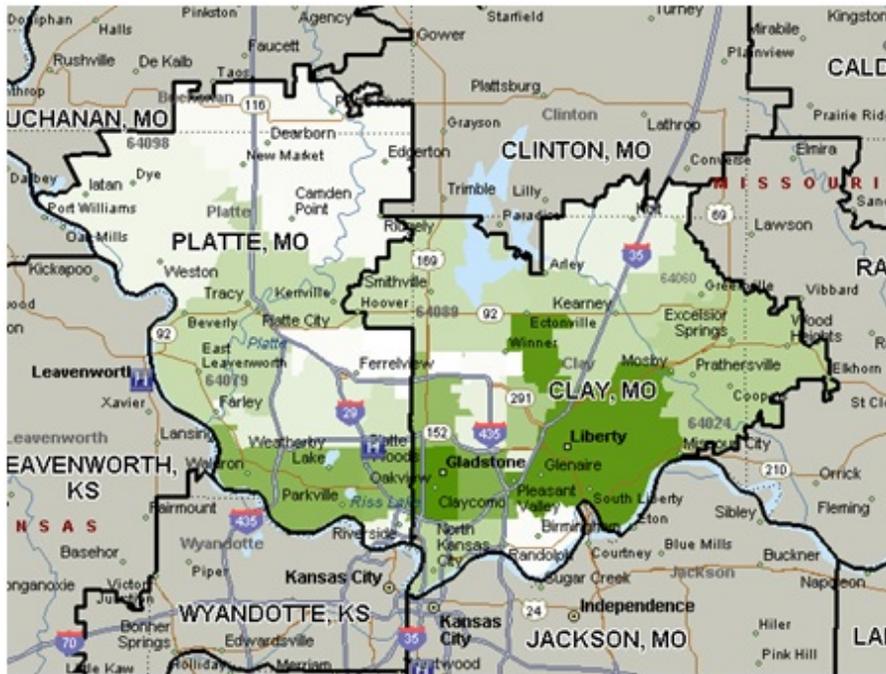
---

<sup>1</sup> United States Census Bureau.

<sup>2</sup> Zipmap.net : Clay County.

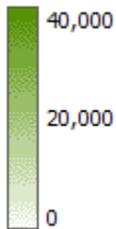
<sup>3</sup> Zipmap.net: Platte County.

## 2014 Population Density Map Clay and Platte Counties



### Saint Luke's Hospital Locations

#### 2014 Population by ZIP Code



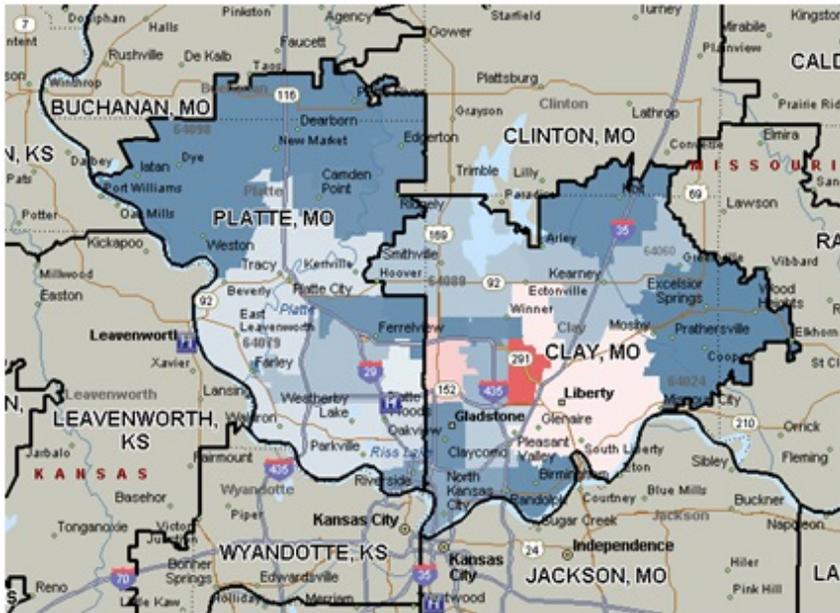
### Population Characteristics & Growth

The combined population estimates of Clay and Platte Counties as of 2013 are 323,783. The population is overwhelmingly urban. Platte County is 84% urban and 16% rural. Clay County is 90% urban and 10% rural.<sup>4</sup> The population of Clay County grew by 3.8% between 2010 and 2013, while the population in Platte County grew by 4.5%.<sup>5</sup> The future growth will be highly concentrated in the Kansas City zip codes residing in both counties.

<sup>4</sup> Citydata.com.

<sup>5</sup> United States Census Bureau.

**Projected Population Growth (2014-2019) Map of Clay and Platte Counties**



**Saint's Luke's Hospital Locations**

**Population Change by ZIP Code**

- 4,000 to 5,000
- 3,000 to 3,999
- 2,000 to 2,999
- 1,000 to 1,999
- 0 to 999
- 1,000 to -1

## Gender, Age, Ethnicity, Language, Religion & Disability

### Gender & Age

Census Bureau data indicate that in 2013, females comprised 51.0% of the population of Clay County, or 117,541 individuals. As of 2013, females comprised 50.7% of Platte County, or 47,308 individuals. The majority of persons in both Clay and Platte Counties are between the ages of 18 and 64, as demonstrated by the table below.

#### Exhibit 1: Age<sup>6</sup>

Age	Clay County	Platte County
Persons under 18 years	25.2%	24.2%
Persons 18 years to 64 years	62.4%	63.3%
Persons 65 years and over	12.4%	12.5%

According to Census Bureau data, the population aged 65 years and over grew by 2% between 2010 and 2013, while the other two age groups grew by 1%.<sup>7</sup>

### Ethnicity

#### Exhibit 2: Ethnicity<sup>5</sup>

Ethnicity	Clay County	Platte County
White	83.0%	82.9%
Black of African American	5.8%	6.4%
Asian	2.3 %	2.5%
Native Hawaiian and other Pacific Islander	0.3 %	0.4%
Hispanic or Latino	6.3%	5.6%
American Indian	0.6%	0.6%

#### White

Census Bureau data indicates that 83% of Clay County is white, while 82% of Platte County is white. Between 2010 and 2013, this percentage decreased in Clay and Platte Counties, by 4.5% and 4.3%, respectively.<sup>8</sup>

#### Black

According to Census Bureau data, the black population comprises 5.8% of Clay County, compared to 6.4% of Platte County. Between 2010 and 2013, this percentage grew Clay and Platte Counties, by 0.8% and 0.7%, respectively.<sup>9</sup>

---

<sup>6</sup> United States Census Bureau.

<sup>7</sup> Factfinder.census.gov.

<sup>8</sup> Factfinder.census.gov.

### *Hispanic*

According to Census Bureau data, 6.3% of Clay County's population is Hispanic, compared to 5.6% in Platte County. Between 2010 and 2013, this population grew in both Clay and Platte Counties, by 0.6% and 0.9%, respectively.<sup>10</sup>

### **Language**

According to 2010 data from the Language Map Data Center, the primary language spoken by residents in both Clay and Platte Counties is English, representing 93.07% and 93.55% of the populations, respectively. The second most common language spoken is Spanish, representing 3.25% of the population in Clay County and 2.52% of the population in Platte County.

### **Religion**

In 2010, Catholicism represented the largest faith group in Clay and Platte Counties, representing 10.6 and 12.7% of the respective populations<sup>11</sup>. The three largest faith groups in Clay County are Catholicism, Southern Baptist Convention, and non-denominational Christianity. In Platte County, the three largest faith groups are Catholicism, Southern Baptist Convention and Methodism.

## **Education & Housing Profiles**

### **Education**

The percentage of high school graduates and the percentage of individuals who obtained their bachelor's degree were higher than the Missouri averages in both counties.

#### *Clay County*

From 2009-2013, 91.8% of Clay County residents 25 or older were high school graduates, while 30.6% had obtained their bachelor's degree.

#### *Platte County*

Platte County had a slightly higher percentage of persons 25 or older who were high school graduates, with 94.2%, while 39.2% had obtained their bachelor's degree.

### **Housing**

Census Bureau data indicates that home ownership rates are higher in Clay County than in Platte County, with 71% and 64.3%, respectively. Clay County's home ownership rate is higher than that of Missouri (68.4%). The median value of owner occupied housing units is as follows: Clay- \$153,700 and Platte- \$184,900.

---

<sup>9</sup> Factfinder.census.gov.

<sup>10</sup> Factfinder.census.gov

<sup>11</sup> Association of Religion Data Archives.

## **Income**

### *Clay County*

Census Bureau reports indicate that those living in Clay County earn a higher income compared to the average per capita and household income for the state of Missouri. The per capita income in Clay County was \$29,323 compared to \$25,545 for Missouri. The median household income in Clay County was higher than the state of Missouri, \$60,936 compared to \$47,380.<sup>12</sup>

### *Platte County*

Based on per capita income data reported between the years 2008 and 2012, Platte County reported a per capita income of \$35,132 compared to \$25,545 in Missouri. The median household income for Platte County was \$67,721 for the years between 2009 and 2013 compared to Missouri's median household income of \$47,380.

## **Social and Economic Factors**

### **Federal Poverty Level**

The federal poverty level, which is established by the Department of Health and Human Services on an annual basis, is a measure of income level. These levels are used to quantify poverty and determine eligibility for services and benefits. In 2015, the federal poverty level for a family of four is \$24,250.

### *Clay County*

The latest Census data shows that the percentage of those living below the poverty level in Clay County is lower than Missouri, with 9.0% compared to 15.5%.

### *Platte County*

From 2009 to 2013, 7.4% of persons in Platte County were living below poverty level compared to the state's 15.5%.

### **Unemployment**

### *Clay County*

According to the Bureau of Labor Statistics, the 2014 unemployment rate in Clay County is below that of the national average, 4.6 percent compared to 5.4 percent.

**Exhibit 3: Clay County Economic Indicators**

	<b>Clay County, MO</b>	<b>Missouri</b>
<b>Per Capita Income<sup>13</sup></b>	\$29,323	\$25,545
<b>Median Household Income</b>	\$60,936	\$47,380
<b>Percentage of Persons below poverty level</b>	9.00%	15.50%
<b>Unemployment Rate</b>	4.60%	5.30%

---

<sup>12</sup> US Census Bureau.

<sup>13</sup>U.S. Census Bureau.

### Platte County

The Bureau of Labor and Statistics reported that the 2014 unemployment rate in Platte County was 4.3% compared to the national unemployment rate of 5.4%.

**Exhibit 4: Platte County Economic Indicators**

	Platte County, MO	Missouri
Per Capita Income <sup>14</sup>	\$35,132	\$25,545
Median Household Income	\$67,721	\$47,380
Percentage of Persons below poverty level	7.40%	15.50%
Unemployment Rate	4.30%	5.30%

### Access to Care and the Uninsured

#### Insurance Coverage

#### Clay County

According to 2013 American Community Survey data, those with private health insurance represent 76.6% of the population. The County Health Rankings and Roadmaps report that 13% of persons in Clay County are uninsured, a 1% increase between 2006 and 2012.

**Exhibit 5: Health Insurance Coverage Status for Clay County<sup>15</sup>**

Health Coverage Type:	Number Insured	Percent Insured
Private health insurance	175,380	76.6%
Private health insurance alone	146,145	63.8%
Employment-based health insurance	149,767	65.4%
Employment-based health insurance alone	131,071	57.2%
Direct-purchase health insurance	29,479	12.9%
Direct-purchase health insurance alone	12,526	5.5%
TRICARE/military health coverage	4,084	1.8%
TRICARE/military health coverage alone	2,548	1.1%
Public coverage*	53,656	23.4%
Public coverage alone*	24,789	10.8%
Medicare coverage	31,818	13.9%
Medicare coverage alone	6,479	2.8%

<sup>14</sup> U.S. Census Bureau.

<sup>15</sup> The American Community Survey questionnaire does not specifically ask about some forms of means-tested coverage, marked by (\*). These forms of means-tested coverage include Medicaid or Medical Assistance, Children's Health Insurance Program, and state-specific plans. Respondents who indicate these types of coverage are counted as having public coverage or public coverage alone, both marked by (\*). People whose only health coverage is Indian Health Service are uninsured as IHS is not considered comprehensive coverage. Uninsured is marked by (\*\*).

Medicaid/means-tested public coverage*	23,057	10.1%
Medicaid/means-tested public coverage alone*	17,286	7.5%
VA Health Care	6,179	2.7%
VA Health Care alone	1,024	0.4%
Uninsured**	25,439	11.1%

### *Platte County*

Estimates from the 2013 American Community Survey show that the largest portion of those insured have private health insurance. The percentage of persons with private health insurance or employer based insurance is similar in both Clay and Platte Counties. The percentage of uninsured in Platte County decreased between 2006 and 2012 from 15 to 11%.<sup>16</sup>

### **Exhibit 6: Health Insurance Coverage Status for Platte County<sup>17</sup>**

<b>Health Coverage by Type:</b>	<b>Number Insured</b>	<b>Percent Insured</b>
Private health insurance	72,907	79.2%
Private health insurance alone	60,681	66.0%
Employment-based health insurance	60,288	65.5%
Employment-based health insurance alone	52,751	57.3%
Direct-purchase health insurance	11,547	12.6%
Direct-purchase health insurance alone	5,505	6.0%
TRICARE/military health coverage	4,629	5.0%
TRICARE/military health coverage alone	2,425	2.6%
Public coverage*	20,776	22.6%
Public coverage alone*	9,778	10.6%
Medicare coverage	12,341	13.4%
Medicare coverage alone	2,905	3.2%
Medicaid/means-tested public coverage*	7,850	8.5%
Medicaid/means-tested public coverage alone*	6,773	7.4%
VA Health Care	2,801	3.0%
VA Health Care alone	100	0.1%
Uninsured**	8,946	9.7%

### **Employer and Industry Profile**

#### ***Business Establishments and Paid Employees by Sector***

#### *Clay County*

<sup>16</sup> County Health Rankings.

<sup>17</sup> The American Community Survey questionnaire does not specifically ask about some forms of means-tested coverage, marked by (\*). These forms of means-tested coverage include Medicaid or Medical Assistance, Children's Health Insurance Program, and state-specific plans. Respondents who indicate these types of coverage are counted as having public coverage or public coverage alone, both marked by (\*). People whose only health coverage is Indian Health Service are uninsured as IHS is not considered comprehensive coverage. Uninsured is marked by (\*\*).

United States Census Bureau data from 2014 indicates that retail trade is the predominant industry in Clay County. Healthcare and social assistance, and professional, scientific and technical services are also predominant. Retail trade has the highest number of paid employees.

*Platte County*

United States Census Bureau data released in 2014 indicates that retail trade is the predominant industry in Platte County. Professional, scientific and technical services, and health care and social assistance are also predominant. Retail trade has the highest number of paid employees.

*Health Status Indicators*

**General Health Status Indicators**

Health factors represent what influences the health of the county while health outcomes represents how healthy the county actually is. Health outcomes measure the length and quality of life. Health factors measure health behaviors, clinical care, social and economic factors, and physical environment.

*Clay County*

Clay County ranked high in both health outcomes and health factors according to County Health Rankings 2014. There are 115 counties in the state of Missouri, Clay County ranked 12<sup>th</sup> in health outcomes and seventh in health factors for Missouri.

*Platte County*

Platte County ranked high in both health outcomes and health factors according to County Health Rankings 2014. There are 115 counties in the state of Missouri, Platte County ranked fourth in health outcomes and first in health factors for Missouri.

**Morbidity and Mortality**

*Clay County*

The data in exhibit 9 shows the top ten leading causes of death from 2002-2012. Cancer is the most prevalent cause of death, followed by heart disease and deaths attributed to smoking. The causes of death outside of the Missouri state average are chronic lower respiratory disease and Alzheimer’s disease.

**Exhibit 9: Clay County’s Top Ten Leading Causes of Death (2002-2012)<sup>18</sup>**

	Number of Events	Rate	State Rate
All Causes	16,408	782.5	847.40
All Cancers	4,077	189.1	191.14
Heart Disease	3,511	169.8	223.62
Smoking (attributable)*	3,064	144.1	146.85

<sup>18</sup> Mortality rates are per year per 100,000 population and are age-adjusted to the U.S. 2000 standard population. Causes of death with an asterisk(\*) are of lower rank or are non-rankable groups which include other causes, but are included due to special interest, and high number of events. Missouri Department of Health and Senior Services.

All Injuries and Poisoning*	1,299	58.2	69.99
Chronic Lower Respiratory Disease	1,276	62.2	49.71
Total Unintentional Injuries	888	40.3	47.27
Stroke/ Other Cerebrovascular Disease	849	42.1	49.81
Alzheimers' Disease	534	27.4	25.07
Alcohol/Drug Induced*	449	18.7	19.28
Diabetes Mellitus	410	19.3	22.51

#### *Platte County*

The data in exhibit 10 shows the top ten leading causes of death from 2002-2012. Cancer is the most prevalent cause of death, followed closely by heart disease.

**Exhibit 10: Platte County's Top Ten Leading Causes of Death (2002-2012)<sup>19</sup>**

	Number of Events	Rate	State Rate
<b>All Causes</b>	5,879	693.5	847.40
All Cancers	1,447	165.3	191.14
Heart Disease	1,300	154.3	223.62
Smoking (attributable)*	1,036	120.3	146.85
All Injuries and Poisoning*	510	55.7	69.99
Chronic Lower Respiratory Disease	375	47.2	49.71
Total Unintentional Injuries	360	40.2	47.27
Alzheimers' Disease	300	38.1	25.07
Stroke/ Other Cerebrovascular Disease	293	35.8	49.81
Alcohol/ Drug Induced*	150	15.2	19.28
Diabetes Mellitus	142	16.4	22.51

#### ***Heart Disease Prevalence***

##### *Clay County*

The top five risk factors for heart disease among adults 18 years and older for Clay County include low fruit and vegetable intake, overweight, current high cholesterol, obesity and, current high blood pressure. Heavy drinking is identified as the main behavioral risk factor. The overall rate for heart disease in Clay County is lower than the state rate<sup>20</sup>. Clay County ranks higher than the state for hospitalizations due to heart disease, stroke, or other cerebrovascular diseases.

<sup>19</sup> Mortality rates are per year per 100,000 population and are age-adjusted to the U.S. 2000 standard population. Causes of death with an asterisk(\*) are of lower rank or are non-rankable groups which include other causes, but are included due to special interest, and high number of events. Missouri Department of Health & Senior Services.

<sup>20</sup> Missouri Department of Health & Senior Services

**Exhibit 11:**

Clay County, MO	Number of Events	County Rate	State Rate
<b>Heart Disease<sup>21</sup></b>			
Deaths	3,511	169.8	223.62
Hospitalizations	14,719	136.1	129.78
ER Visits	15,567	14.0	14.32
<b>Ischemic Heart disease</b>			
Deaths	2,104	100.9	151.17
Hospitalizations	4,201	37.6	41.61
ER Visits	521	.5	.65
<b>Stroke/Other Cerebrovascular Disease</b>			
Deaths	849	42.1	49.81
Hospitalizations	3,173	29.7	29.27
ER Visits	590	.5	.78

*Platte County*

The top five risk factors for heart disease among adults 18 years and older for Platte County are low fruit and vegetable intake, current high cholesterol, overweight, current high blood pressure, and obesity. Heavy drinking is the main behavioral risk factor of heart disease for Platte County residents. Estimates from the Missouri Department of Health & Senior Services indicate the overall heart disease rate of Platte County is lower than the state rate. Platte County ranks marginally lower than the state for hospitalizations due to heart disease, and due to stroke or other cerebrovascular disease

**Exhibit 12:**

Platte County, MO	Number of Events	County Rate	State Rate
<b>Heart Disease<sup>22</sup></b>			
Deaths	575	133.3	202.2
Hospitalizations	4,546	101.1	129.8
ER Visits	4,852	10.6	14.3
<b>Ischemic Heart disease</b>			
Deaths**	819	97.4	151.17
Hospitalizations	1,410	30.3	41.61
ER Visits	157	.3	.65

<sup>21</sup> Death rates are per year per 100,000 population and are age-adjusted to the U.S. 2000 standard population. Hospitalization rates are per year per 10,000 population 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. Unless otherwise marked rates are from years 2008-2012, if marked by (\*\*). Rates are from 2002-2012.

\* Fewer than 20 events in numerator; rate is unstable.

<sup>22</sup> Death rates are per year per 100,000 population and are age-adjusted to the U.S. 2000 standard population. Hospitalization rates are per year per 10,000 population 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. Unless otherwise marked rates are from years 2008-2012, if marked by (\*\*). Rates are from 2002-2012.

\* Fewer than 20 events in numerator; rate is unstable.

<b>Stroke/Other Cerebrovascular Disease</b>			
Deaths	149	35.8	44.4
Hospitalizations	1,042	24.1	29.3
ER Visits	157	.3	.7

### ***Cancer Prevalence***

#### *Clay County*

Estimates from the Missouri Department of Health & Senior Services indicate the overall cancer rate of Clay County is higher than the state rate, 188.49 per 100,000 compared to 186.11 per 100,000. Clay County has a higher hospitalization rate due to cancer than the state. Clay County ranks marginally higher than the state for deaths due to breast and lung cancer. All other incidences related to cancer are lower within Clay County than within the state of Missouri.

#### *Platte County*

Estimates from the Missouri Department of Health & Senior Services indicate the overall cancer rate of Platte County is lower than the state rate, 156.71 per 100,000 compared to 186.11 per 100,000. The top five leading causes of cancer deaths in Platte County for male residents from most prevalent to least were lung, prostate, colon, pancreatic cancer, and leukemia. The top five- leading causes of cancer deaths in Platte County for female residents from most prevalent to least were lung, breast, colon, ovarian, and, pancreatic cancer.

### ***Diabetes Prevalence***

#### *Clay County*

In Clay County there were 410 deaths related to diabetes, which is lower than the state average. Hospitalizations and ER visits for Clay County also remained below the state average.

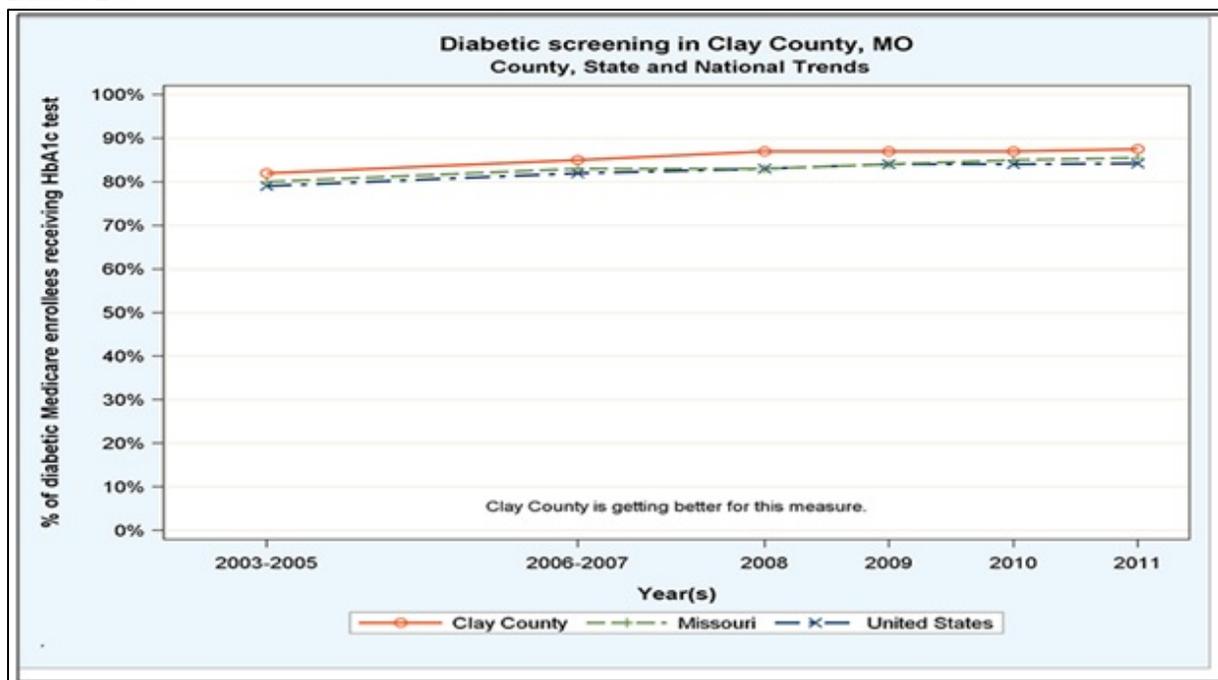
#### **Exhibit 13:**

<b>Clay County, MO</b>	<b>Number of Events</b>	<b>County Rate</b>	<b>State Rate</b>
<b>Diabetes Mellitus<sup>23</sup></b>			
Deaths	410	19.3	22.51
Hospitalizations	1,869	16.9	17.83
ER Visits	1,375	1.2	1.84

<sup>23</sup> Death rates are per year per 100,000 population and are age-adjusted to the U.S. 2000 standard population. Hospitalization rates are per year per 10,000 population 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. Unless otherwise marked rates are from years 2008-2012, if marked by (\*\*). Rates are from 2002-2012. \* Fewer than 20 events in numerator; rate is unstable.

Estimates from County Health Rankings 2014 indicate Clay County has an 87% screening rate for diabetes. This is higher than the Missouri average of 86% and approaching the top US performer margins rated at 90%. According to the statistics, Clay County is improving their performance for this measure.

**Exhibit 14:**



*Platte County*

In Platte County between 2008-2012 there were 65 deaths per 100,000 residents due to diabetes. Deaths, hospitalizations, and ER visits due to diabetes remained below the state’s averages.

**Exhibit 15:**

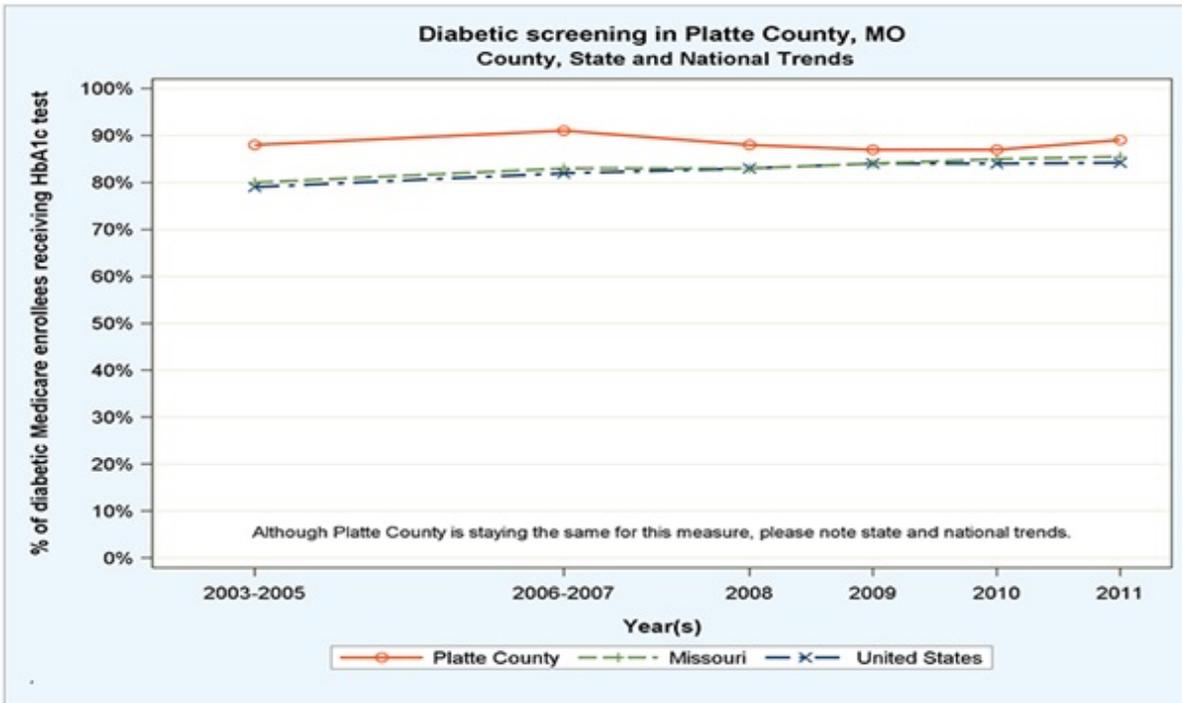
Clay County, MO	Number of Events	County Rate	State Rate
<b>Diabetes Mellitus<sup>24</sup></b>			
Deaths	65	14.44	20.2
Hospitalizations	537	11.9	17.8
ER Visits	477	1.1	1.8

<sup>24</sup> Death rates are per year per 100,000 population and are age-adjusted to the U.S. 2000 standard population. Hospitalization rates are per year per 10,000 population 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. Unless otherwise marked rates are from years 2008-2012, if marked by (\*\*). Rates are from 2002-2012.

\* Fewer than 20 events in numerator; rate is unstable.

Estimates from County Health Rankings 2014 indicate Platte County has an 89% screening rate for diabetes. This is higher than the Missouri average of 86% and approaching the top US performer margins rated at 90%. According to the statistics Clay County is remaining stable in this measure.

**Exhibit 16:**



### **Health Behaviors**

Clay and Platte Counties have made significant improvements in the health and well-being of their populations. Improvements have been seen in comparison to the 2012 Community Health Needs Assessment. Both counties saw either a decrease or no change in the amount of adult obesity, physical inactivity, and excessive drinking.<sup>25</sup> Both counties were below the overall state average.

Tobacco usage remains a problem in both counties. In Platte County an estimated 1,036 deaths were attributed to smoking from 2002-2012.<sup>26</sup> The Platte County Health Department estimates that the rate of smokers is currently two times higher than the goal set by Healthy People 2020.<sup>27</sup> Additionally, cancer is the leading cause of death in both Clay and Platte Counties.<sup>28</sup>

<sup>25</sup> Countyhealthrankings.org.

<sup>26</sup> Plattecountyhealthdept.com.

<sup>27</sup> Countyhealthrankings.org.

<sup>28</sup> Plattecountyhealthdept.com.

**Exhibit 17:**

Health Behaviors <sup>29</sup>	Clay County 2012	Clay County 2015	Platte County 2012	Platte County 2015	Missouri
Adult Smoking	23%	21%	20%	16%	23%
Adult Obesity	30%	27%	29%	29%	31%
Excessive Drinking	17%	16%	20%	21%	17%
Sexually Transmitted Infections	326	334	299	259	464
Teen Births	36	31	26	23	41
Physical Inactivity	27%	24%	27%	25%	25%

**Health Outcomes**

The health outcomes identified through research and analyses of data are listed below. Both Clay and Platte Counties scored lower in every health outcome compared to the state average.

**Exhibit 18:**

Health Outcomes <sup>30</sup>	Clay County	Platte County	Missouri
Premature Death Rate	6,278	5,251	7,827
Those with Poor or Fair Health	14%	11%	16%
Poor Physical Health	3.4	3.5	3.7
Poor Mental Health Days	4	3.4	3.8
Low Birth Weight Rate	6.6%	6.9%	8%

**Obesity**

Although the state of Missouri has the 16<sup>th</sup> highest adult obesity rate in the nation, both Clay and Platte Counties have a relatively low percentage of adult obesity at 28 and 29 percent respectively. Although adult obesity percentages are relatively low, both counties are still above the national average.<sup>31</sup> More Clay and Platte County residents have access to exercise opportunities than the state of Missouri. In Clay County, 82% of residents have access to exercise opportunities compared to Platte County's 78%.<sup>32</sup> Both of these are higher than the state average of 70%.

<sup>29</sup> Countyhealthrankings.org.

<sup>30</sup> Countyhealthrankings.org.

<sup>31</sup> Countyhealthrankings.org.

<sup>32</sup> Countyhealthrankings.org.

Exhibit 21:

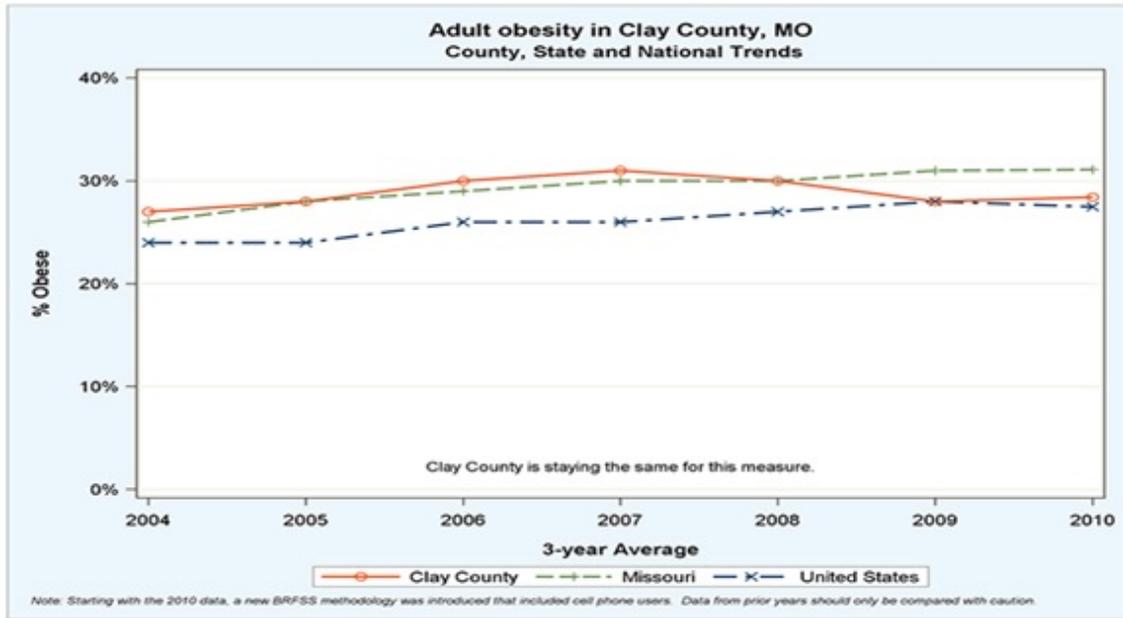
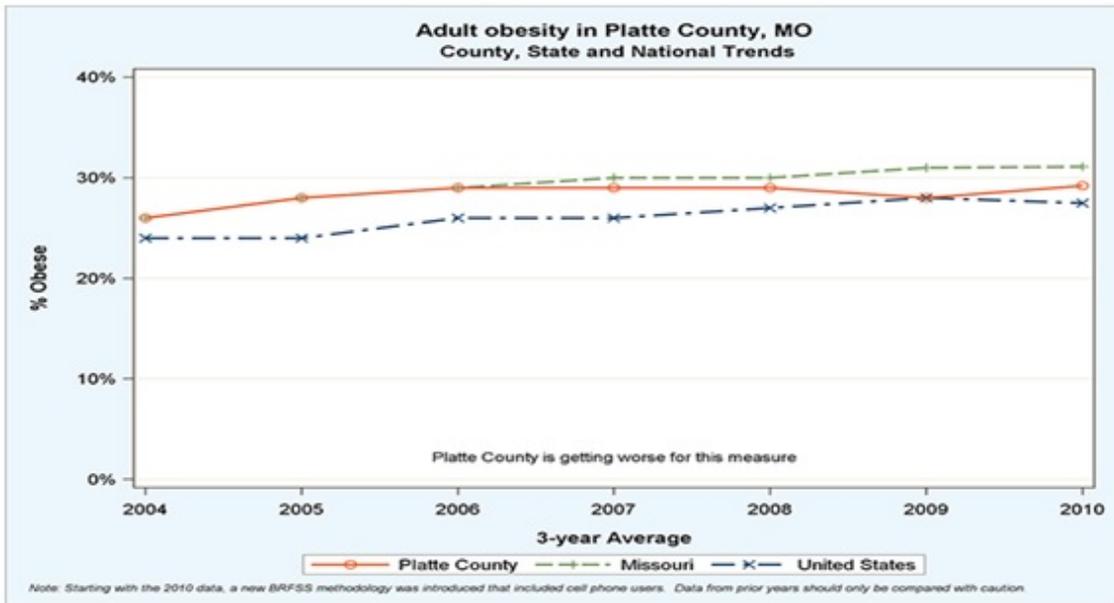


Exhibit 22:



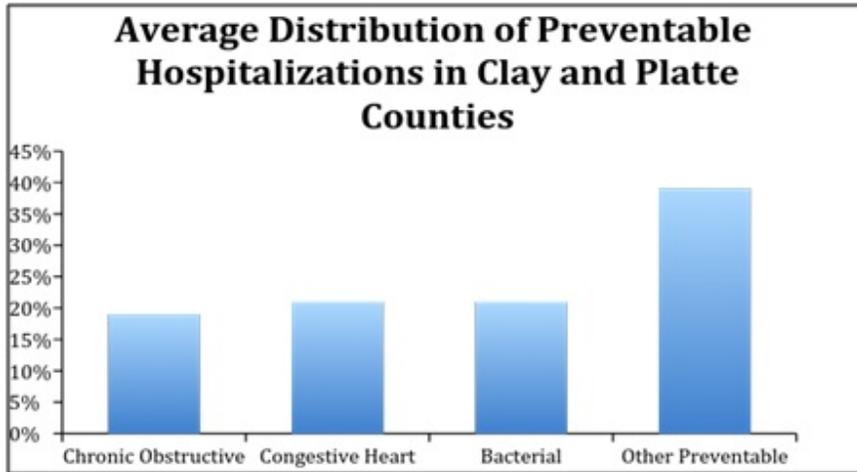
**Preventable Hospitalizations**

Clay and Platte Counties experienced a high number of preventable hospitalizations in several categories. Out of all preventable hospitalizations in 2012, congestive heart failure, bacterial pneumonia, and chronic obstructive pulmonary disease topped the list in both counties.<sup>33</sup> Other top leading causes of hospitalizations in Clay and Platte Counties in 2013 included dehydration, urinary

<sup>33</sup> Mhanet.com/resources/community-and-population-health.

tract infections, diabetes, COPD, hypertension, and asthma.<sup>34</sup> The rate of preventable hospitalizations in Clay County was 7% higher in 2012 than the state risk-adjusted rate of preventable hospitalizations. In Platte County the rate of preventable hospitalizations was 32% lower than the state rate. Both counties saw a 19% decrease in the risk-adjusted rate of preventable hospitalizations since 2003.<sup>35</sup> African-Americans were 1.45 times more likely to be hospitalized for a preventable hospitalization compared to whites.<sup>36</sup>

**Exhibit 19:**



**Clinical Care**

**Exhibit 20:**

Clinical Care	Clay County	Platte County	Missouri
Uninsured	13%	10%	16%
Primary Care Physicians	1,656:1	1,420:1	1,455:1
Dentists	1,792:1	1,770:1	1,985:1
Mental Health Providers	1,388:1	1,644:1	947 1
Diabetic Screening	87%	89%	86%
Mammography screening	64%	65%	62%

**Mental Health & Substance Abuse**

<sup>34</sup> Mhanet.com/resources/community-and-population-health.

<sup>35</sup> <http://web.mhanet.com/resources/community-and-population-health>

<sup>36</sup> <http://web.mhanet.com/resources/community-and-population-health>

In Missouri, nearly one in five adults suffer from a mental illness and nearly one in 13 suffers from a substance abuse disorder.<sup>37</sup> As of May 2014, the prevalence of mental health amongst adults in Clay and Platte was 20.7%. The percentage of the population with a serious mental illness is 5% while approximately 7% have depression.<sup>38</sup> In Clay County, 2748 residents received comprehensive psychiatric services compared to 725 in Platte County.<sup>39</sup> Mental disorders accounted for 9% of all hospitalizations and 4% of all ER visits.<sup>40</sup> The top two diagnoses for hospitalizations resulting from mental disorders consisted of affective disorders, alcohol and substance related mental health disorders.

**Exhibit 21:**<sup>41</sup>

	Alcohol Related	Drug Related
Clay County	586	659
Platte County	248	203

In Missouri, the ratio of residents to mental health providers is 947:1.<sup>42</sup> In both counties the ratio of residents to mental health providers is even worse, the ratio in Clay County is 1,388:1 and 1,644:1 in Platte County.<sup>43</sup>

***Suicide***

In Platte County, suicide is the 10<sup>th</sup> leading cause of death among residents, which represents a significant increase over the past 15 years.<sup>44</sup> Mental health issues in the adolescent population have become a major concern across the county. Students considering, planning, or attempting suicide is significantly higher than in nearby counties. Clay County had 28 suicides compared to 14 in Platte County. Clay County also had a larger number of self-inflicted injuries than Platte, 351 compared to 124.<sup>45</sup>

***Benchmark Data***

Healthy People 2020, launched in 2010, provides objectives related to improving the nation’s health. Four key health indicators that track progress towards these goals include: general health status, health related quality of life and well-being, determinants of health, and disparities<sup>46</sup>. Specific leading health indicators are listed below.

---

<sup>37</sup> Missouri Department of Mental Health.

<sup>38</sup> Missouri Department of Mental Health and the REACH Foundation.

<sup>39</sup> Missouri Department of Mental Health.

<sup>40</sup> Missouri Department of Mental Health.

<sup>41</sup> Missouri Department of Mental Health.

<sup>42</sup> Countyhealthrankings.org.

<sup>43</sup> Countyhealthrankings.org.

<sup>44</sup> Missouri Department of Mental Health.

<sup>45</sup> Countyhealthrankings.org.

<sup>46</sup> Healthy People 2020.

**Exhibit 22:**<sup>47</sup>

<b>Indicator</b>	<b>2012</b>	<b>Target</b>
<b>Access to Health Services</b>		
Persons with medical insurance	83.1%	100%
Persons with a primary care provider	77.3%	83.9%
<b>Clinical Preventive Services</b>		
Adults receiving colorectal cancer screening	59.2%	70.5%
Adults with hypertension whose blood pressure is controlled	48.9%	61.2%
Persons with diabetes with A1c <9 percent	21.0%	16.1%
Children receiving recommended doses of specific vaccines	68.5%	80.0%
<b>Environmental Quality</b>		
Air Quality Index exceeding 100 (number of billion person days)	1.252	1.980
Children exposed to secondhand smoke	41.3%	47.0%
<b>Injury and Violence</b>		
Injury deaths (per 100,000 population)	57.1	53.7
Homicides (per 100,000 population)	5.3	5.5
<b>Maternal Infant and Child Health</b>		
Infant deaths (per 1,000, births <1)	6.1	6.0
Total preterm live births (percent, <37 weeks gestation)	11.5%	11.4%
<b>Mental Health</b>		
Suicide (per 100,000 population)	12.1	10.2
Adolescents with major depressive episodes (percent, 12-17 years)	9.1%	7.5%
<b>Nutrition Physical Activity and Obesity</b>		
Adults meeting aerobic physical activity and muscle strengthening Federal guidelines (18+ years)	20.6%	20.1%
Obesity among adults (20+ years)	35.3%	30.5%
Obesity among children and adolescents (2-19 years)	16.9%	14.5%
Mean daily intake of total vegetables ( cup equivalent to 1,000 calories (2+ years)	0.8	1.1
<b>Oral Health</b>		
Persons who visited the dentist in the past year (2+ years)	41.8%	49.0%
<b>Reproductive and Sexual Health</b>		
Sexually experienced females receiving reproductive services in the past 12 months (15-44 years)	-----	86.5%
Knowledge of serostatus amongst HIV- positive persons (13+ years)		90.0%

<sup>47</sup> Healthy People 2020.

	84.2%	
Social Determinants Students awarded a high school diploma 4 years after starting 9 <sup>th</sup> grade	78.2%	82.4%
Substance Abuse Adolescents using alcohol or illicit drugs in past 30 days (12-17 years) Binge drinking in past 30 days (adults, 18+ years)	17.4% 27.1%	16.6% 24.4%
Tobacco Adult cigarette smoking (18+ years) Adolescent cigarette smoking in past 30 days (grades 9-12)	18.2% 18.1%	12.0% 16.0%

*Information Gaps*

The following areas were identified as having gaps in health data:

***Mental Health***

It was difficult to find accurate information on the prevalence of mental health illness in Clay and Platte Counties. There is statewide data, thus the prevalence was extrapolated from this data and applied to Clay and Platte Counties. Additionally, it was difficult to determine the number of undiagnosed persons with mental illnesses, those refusing treatment, or the extent of those served elsewhere in the community.

***Access to Care***

This area is difficult to measure due to the issue being access-related. More complete and non-suppressed data would have been beneficial when researching the lack of access to prenatal care in Platte County. In addition, more complete data regarding access to other types of providers could have helped the analysis. Access issues with public transportation are also a measure lacking concrete data. Public transportation data could have proved useful to gauge the amount of the population whose main barrier to care is transportation related. High deductible health plans have the potential to significantly impact access to care. The emergence of these plans on the insurance exchanges is relatively new, thus there is not enough data to analyze. Prior studies suggest that individuals with higher deductible plans are more likely to report difficulty in accessing needed health care services.

***Obesity***

In our findings there was limited information pertaining to social demographics concerning childhood obesity. Furthermore, there was limited amount of information relating to the food choices in the community especially in low income areas. It would be beneficial to know if the lack of access to supermarkets in low income neighborhoods coincides with disparities experienced by various racial/ethnic groups of low socioeconomic status. This includes the quantity and quality of healthy food choices versus fast food. Also, it would be beneficial to know if there are any food deserts that exist in

Clay and Platte County. Finally, data from existing secondary sources is often several years old, creating a lag between the data and present day circumstances.

### ***Diabetes***

After evaluating the primary and secondary data related to diabetes, it was determined that more information was needed to develop a more complete understanding of how the disease affects Clay and Platte Counties. Data could not be found listing diabetes prevalence by age distribution for Clay and Platte Counties. This data is important to have in order to understand which age groups are most affected by the disease. Diabetes is also associated with many other comorbidities. It was very difficult to locate data on deaths and hospitalizations arising from diabetes induced comorbidities. For future health needs assessments, it would be helpful to know the percentage of deaths and hospitalizations attributed to diabetes linked comorbidities. Having this information would allow providers and public health stakeholders to offer services targeted at preventing and managing diabetes related comorbidities.

### ***Cancer***

It would have been helpful to have morbidity and mortality information broken down by socioeconomic status and ethnicity. Segmenting these rates by demographic factors would allow health care organizations to build more targeted interventions. Additionally, information related to access to oncology services would have been beneficial in identifying the need for care in the community.

## ***Summary of Findings***

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

#### ***Priority 1: Mental Health***

##### ***Defining the Need***

Mental health, according to the World Health Organization, is defined as a state of well-being which allows individuals to achieve his or her potential, be productive, deal with stress, and contribute to his or her community. Severe and persistent mental illnesses (SPMI) are characterized by complex symptoms that require ongoing care and include disorders such as schizophrenia, bipolar disorder, major depression, autism disorder, and obsessive-compulsive disorder. It is estimated that approximately 13,000 adults in Clay and Platte Counties have a SPMI. Tri-County Mental Health Services cares for approximately 6,000 adults with serious mental illnesses annually. Although it is difficult to discern how many of the remaining 7,000 adults access other services, there is a significant number (at least 6,000) who lack access to these services<sup>48</sup>. Representatives from both Clay and Platte Counties identified mental health as the most pressing need in the community.

##### ***Prevalence***

The prevalence of mental health among Clay, Platte counties was 20.7% as of May 2014. Approximately 5% of the population in Clay and Platte Counties are suffering from a serious mental illness and

---

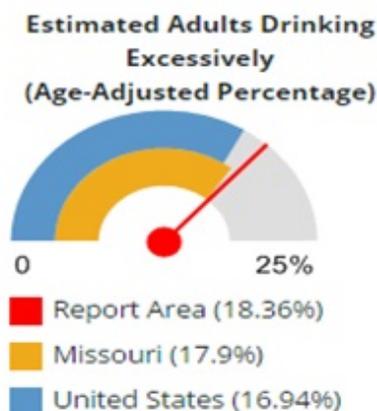
<sup>48</sup> Interview, Tom Petrizzo.

approximately 7% are suffering from depression.<sup>49</sup> Approximately half of those suffering from a serious mental illness also have a co-occurring substance abuse disorder. Top diagnoses for adults are depression and schizophrenia, while top diagnoses amongst children are abuse/neglect and ADHD.<sup>50</sup>

***Impact***

This population has significantly suffered as a result of the disparity between the lack of resources and the need in the community. Mental disorders accounted for 9% of all hospitalizations and 4% of ER visits in Clay and Platte Counties.<sup>51</sup> Suicide is the 10<sup>th</sup> leading cause of death in Platte and Clay County. Additionally, there were a combined 834 alcohol related hospitalizations and 826 drug related hospitalizations in 2014.<sup>52</sup> The figure below represents the percentage of adults 18 years and older who self-reported heavy alcohol consumption (two drinks or more a day for men and one drink or more a day for women). The percentage in Clay and Platte Counties (18.36%) is higher than both the percentages in Missouri (17.9%) and the United States (16.94%). This is alarming because excessive alcohol consumption can lead to poor health outcomes.

**Exhibit 23:**<sup>53</sup>



***Available Resources***

As indicated above, there aren't sufficient resources to meet the need in the community. Tri-County Mental Health Services is the designated mental health provider in the Northland. Other resources include Saint Luke's North-Smithville, ReDiscover, and Truman Medical Center. Limited resources have forced Tri-County Mental Health Services to serve only those with acute status.<sup>54</sup> Thus, there are many persons with less severe mental health illnesses that aren't receiving care. Professional shortages have

<sup>49</sup> Missouri Department of Mental Health.

<sup>50</sup> Interview, Tom Petrizzo.

<sup>51</sup> Missouri Department of Mental Health.

<sup>52</sup> Missouri Department of Mental Health.

<sup>53</sup> [Communitycommons.org](http://Communitycommons.org).

<sup>54</sup> Interview, Tom Petrizzo.

negatively impacted access to care for this population. The ratio of persons to providers in Clay County is 1,388:1 and 1,644:1 in Platte County. Other challenges include transportation and lack of integrated care.<sup>55</sup>

## *Priority 2: Access to Care*

### Defining the Need

Access to health care means having "the timely use of personal health services to achieve the best health outcomes."<sup>56</sup> Attaining good access to care requires three discrete steps:

- Gaining entry into the health care system.
- Getting access to sites of care where patients can receive needed services.
- Finding providers who meet the needs of individual patients and with whom patients can develop a relationship based on mutual communication and trust.<sup>57</sup>

The residents of Clay and Platte Counties struggle with issues pertaining to access to care. Factors that contribute to access issues within include shortages of primary care physicians, community members who don't have a primary care provider, transportation, lack of access to prenatal care, and lack of access to mental healthcare services.

### Prevalence

According to secondary data obtained from The American Community Survey questionnaire 11.1% of persons in Clay County are uninsured while 9.7% of residents within Platte County are uninsured.<sup>58</sup>

Additionally, in 2012 in Clay County the rate of primary care physicians per 100,000 residents was 62.84.<sup>59</sup> While this number has been steadily increasing from 2002-2011 it remains too low to adequately meet all of Clay County residents' primary care needs. Platte County has fared slightly better in their rate of primary care physicians per 100,000 residents at 74.96.<sup>60</sup> This number is actually higher than the average for the rest of Missouri and the United States. While Platte County's access to primary care is acceptable the lower access in Clay County negates those numbers since Saint Luke's North is frequented by both Platte and Clay County residents.

To delve deeper into the primary care issue we looked at the percentage of population who consider themselves to be without a personal doctor or healthcare provider. 19.98 percent of Platte County residents and 16.13% of Clay County residents did not have a regular doctor.<sup>61</sup>

Lack of access to prenatal care in Platte and Clay Counties is also a concern. Data was insufficient regarding prenatal care in Platte County. Clay County reported 5.56% of the mothers who gave birth in the county received late or no prenatal care.<sup>62</sup>

---

<sup>55</sup> [www.countyhealthrankings.org](http://www.countyhealthrankings.org)

<sup>56</sup> (IOM, 1993)

<sup>57</sup> <http://www.ahrq.gov/research/findings/nhqrdr/nhqr11/chap9.html>

<sup>58</sup> American Community Survey.

<sup>59</sup> US Department of Health And Human Services.

<sup>60</sup> US Department of Health And Human Services.

<sup>61</sup> US Department of Health And Human Services.

Transportation was also cited as a common barrier to accessing health care services amongst representatives from Northland Health Care Access, Saint Luke's North Hospital, Tri-County Mental Health Services, and the Health Departments. Despite the fact that Clay and Platte Counties are primarily urban, there are many residents living in rural settings. Saint Luke's North provided transportation services valued at \$180,000 in 2013, yet the demand continues to exceed capacity.<sup>63</sup>

Lastly, Tri-County Mental Health Services exposed a large gap in access to mental healthcare. As mentioned previously approximately 13,000 adults in Platte and Clay Counties suffer from a serious mental illness annually.<sup>64</sup> Of the 13,000 residents with a mental illness, Tri-County cares for approximately 6,000 adults annually.<sup>65</sup> This begs the question of where the other 7,000 adults are being seen or if they are even getting the help they need. These numbers also do not account for the number of children suffering from a serious mental illness who are unable to obtain the help they need.

### Impact

These uninsured populations contribute to the access to care issue found within Clay and Platte Counties. Uninsured residents of both counties are less likely to seek care due to the high out-of-pocket costs they would incur for healthcare services. Individuals are more likely to develop serious and chronic diseases exacerbated by not seeking care. An additional factor to consider is the population's access to primary care. A shortage of primary care physicians can also contribute to access and correlates with maintaining a good health status. Having a primary care physician is vital in maintaining a healthy life. Visiting regularly can prevent hospitalization stay and detect early onset symptoms.

Furthermore, prenatal care is vital to a child's health at birth and serves as a basis of health throughout their life. Ensuring access to prenatal care is available to expecting mothers will help boost the health outcomes of the population Saint Luke's North serves. Lastly, adequate mental healthcare services are important for the residents of Clay and Platte Counties. If individuals are unable to get treatment for their mental illnesses other aspects of their health may suffer.

### Available Resources

Lack of access to care is a serious issue with repercussions pertaining to health status of the community members. Community members have the opportunity to seek limited primary care services at Clay Public Health Center, Platte County Health Department, Northland Healthcare Access, and the Samuel U. Rodgers Health Center. These organizations also provide limited education on prenatal care. Another resource Platte and Clay Counties have is Tri-County Mental Health Services and Northland Behavioral Health and Wellness. Both organizations are great resources for those suffering from mental illness.

---

<sup>62</sup> US Department of Health And Human Services.

<sup>63</sup> Saint Luke's North 2015 Community Benefit Totals.

<sup>64</sup> Interview, Tom Petrizzo.

<sup>65</sup> Interview, Tom Petrizzo.

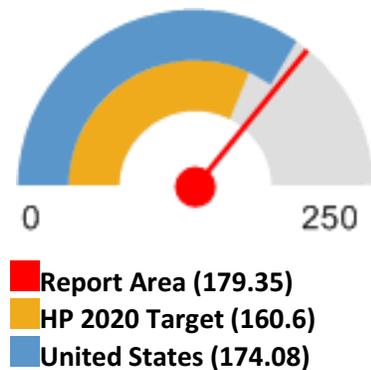
## Priority 3: Cancer

### Defining the Need

Characterized by the rapid division and spreading of cells, cancer can occur almost anywhere in the body. While cancer is a genetic disease, there are also environmental and behavioral factors that influence the likelihood of developing cancer. In 2015, there will be an estimated 580,000 deaths from this devastating disease.<sup>66</sup> Between 2002 and 2012, cancer accounted for the highest number of deaths in both Clay and Platte Counties, representing approximately 25% of all deaths. The figure below represents the age adjusted cancer death rate per 100,000. Clay and Platte Counties had a higher death rate than the United States and almost 20 deaths higher than the goal of Healthy People 2020.<sup>67</sup>

### Exhibit 24

#### Cancer Mortality Rates for Clay & Platte Counties (per 100,000)



### Prevalence

Cancers with the highest incidence rates in Clay and Platte Counties include breast cancer and lung cancer, both of which have higher rates than the United States. The annual breast cancer incidence rate in Clay and Platte Counties is 133.1 compared to 122.7 in the United States and the Healthy People 2020 target of 40.9<sup>68</sup>. The lung cancer incidence rate in Clay and Platte Counties is 76.42 per 100,000 compared to 76.1 in Missouri and 64.9 in the United States<sup>69</sup>. This suggests that efforts should be specifically targeted for breast and lung cancer.

### Impact

Concerns related to cancer were echoed by a variety of stakeholders at community organizations including the Platte County Health Department, Clay County Public Health Center, and Northland Health Care Access. The Platte County Health Department shared that the smoking rate in Platte County is

---

<sup>66</sup> Cancer.org.

<sup>67</sup> Communitycommons.org.

<sup>68</sup> Communitycommons.org.

<sup>69</sup> Communitycommons.org.

more than double the goal rate set forth by Healthy People 2020. This is especially alarming because smoking is a significant risk factor for lung cancer, a disease which significantly impacts mortality in Platte County. Other risk factors for lung and breast cancer, obesity and physical inactivity, were also cited as significant issues in Platte County. According to the Clay County Public Health Center, cancer is the fifth most pressing health need in the community. Northland Health Care Access also expressed concerns about cancer care, citing the lack of access to specialty care as an issue for the uninsured and underinsured who are diagnosed with cancer. The need in the community combined with the lack of access to specialty care has resulted in higher hospitalization rates due to cancer and higher cancer mortality rates in the Northland than the state of Missouri.<sup>70</sup> Increasing hospitalization rates and mortality rates translate to a sicker community and contribute to rising health care costs.

#### Available Resources

The lack of access to specialty care services for the Northland's uninsured population was cited as a significant barrier for this population to receive needed oncology services.<sup>71</sup> Not having access to care for this critical health need negatively impacts mortality rates. Further investigation would be necessary to identify disparities in cancer care amongst socioeconomic and ethnic groups. Oncology care is currently provided by the following organizations: Saint Luke's North Hospital, Liberty Hospital, and North Kansas City Hospital. Clay and Platte Counties have higher screening rates for breast cancer and colon cancer than the state of Missouri and nationally. Yet these rates have worsened since 2012, suggesting that Clay and Platte County residents have inadequate access to screening and services and treatment.

---

<sup>70</sup> Communitycommons.org.

<sup>71</sup> Interview, Karen Dolt.

**Exhibit 25: Breast Cancer Screening Rates** <sup>72</sup>

Report Area	Total Medicare Enrollees	Female Medicare Enrollees Age 67-69	Female Medicare Enrollees with Mammogram in Past 2 Years	Percent Female Medicare Enrollees with Mammogram in Past 2 Year
Report Area	27,902	2,387	1,544	64.68%
Clay County, MO	20,250	1,683	1,077	63.99%
Platte County, MO	7,652	704	466	66.34%
Missouri	578,710	48,778	30,322	62.17%
United States	53,131,712	4,402,782	2,772,990	62.98%

***Priority 4: Obesity***

***Defining the Need***

Obesity is generally defined as ranges of weight that are greater than what is considered as healthy for a given height. According to the Centers for Disease Control and Prevention (CDC), adults with a Body Mass Index (BMI) greater than 30 are considered obese. Adults with a BMI between 25 and 29.9 are considered overweight. In 2008, the estimated annual medical cost for the obese exceeded \$147 billion dollars. The CDC has calculated the medical costs for obese people to be \$1,429 higher than the medical costs for those in a normal weight range.<sup>73</sup>

According to stakeholder interviews and secondary data sources, obesity was identified as a significant health need for both Clay and Platte Counties. Furthermore, all community stakeholders interviewed prioritized obesity as a health need. In fact, obesity was projected to be one of the most important health problems indicated on the Northland Health Care Alliance 2015 Community Health Survey. This survey is administered to residents of Clay and Platte County to gain a better understanding of the health and well-being of the community.

---

<sup>72</sup> Communitycommons.org

<sup>73</sup> Centers for Disease Control.

### Prevalence

In the United States more than one-third of adults (34.9%) and 17% of youth are considered obese.<sup>74</sup> In Missouri 30.4% of adults report having a Body Mass Index (BMI) that exceeds the World Health Organization standards.<sup>75</sup> In Platte County, 30.5 percent of the population is obese. This is above the state average, but below the national average.<sup>76</sup> In Clay County only 28.4% of the population is obese.

In both counties there are more adult males that are obese than females. In Clay County 29.2% of males are obese compared to 27.2% of females.<sup>77</sup> In Platte County that number is marginally higher. The portion of obese males is 30.9% compared to 30.2% of females.<sup>78</sup> While comparing both counties, both Clay and Platte have more Caucasians (35.6) that are obese compared to African-Americans (34.7) and Hispanics (34.1).<sup>79</sup> The percentage of children that are obese (aged 2-4 whose BMI is in the 95<sup>th</sup> percentile) is 14.0% and 14.6% for Clay and Platte Counties.<sup>80</sup> Both counties are above the Missouri average (13.3%), but only Platte County exceeds the national average by .02%.

### Impact

Even though both counties are below the national benchmark, obesity is a serious concern in the community. Excess weight may indicate an unhealthy lifestyle and lead to negative health outcomes if not addressed early. Obesity has serious health implications and reduces life expectancy by increasing the risk of developing a chronic disease such as: heart disease, stroke, high blood pressure, diabetes, and cancer.<sup>81</sup> Chronic diseases are the greatest drivers of mortality on an annual basis for residents of both counties. More specifically, heart disease and cancer are the chronic diseases with the highest mortality rates. Furthermore, being overweight impacts not only physical health but mental health as well.

---

<sup>74</sup> Ogden, C. L., Carroll, M. D., Kit, B. K., & Flegal, K. M. (2014). Prevalence of childhood and adult obesity in the United States, 2011-2012. *Jama*, 311(8), 806-81.

<sup>75</sup> Assessment.communitycommons.org

<sup>76</sup> Assessment.communitycommons.org

<sup>77</sup> Assessment.communitycommons.org

<sup>78</sup> Assessment.communitycommons.org

<sup>79</sup> Assessment.communitycommons.org

<sup>80</sup> Assessment.communitycommons.org

<sup>81</sup> Ogden, C. L., Carroll, M. D., Kit, B. K., & Flegal, K. M. (2014). Prevalence of childhood and adult obesity in the United States, 2011-2012. *Jama*, 311(8), 806-814.

### Available Resources

When examining the underlying behaviors and lifestyles that drive obesity, research suggests poverty, poor nutrition, unhealthy eating, and physical inactivity to be the major factors.<sup>82</sup>

### **Nutrition/Unhealthy Eating Habits**

A healthy diet and good eating behaviors will reduce the likelihood of being overweight. Americans with a healthy diet tend to consume a variety of nutrient-dense foods, especially whole grains, fruits, vegetables, low-fat or fat-free milk, and lean meats. Furthermore, limiting the intake of saturated and trans-fats, added sugars, and sodium is critical in maintaining good health. According to the Clay and Platte County health departments several policies have been established to assist with nutrition education in the community. Additionally, a partnership called the Liberty Community Health Action Team (LCHAT) has been formed in Clay County to help reduce obesity. This coalition is between the Liberty Parks and Recreation Department, Liberty Public School District, Clay County Public Health Center, and Liberty Hospital. Their purpose is to assist communities in developing obesity interventions necessary to support improvement in personal and population-based health.

Access to healthier foods can also play a major role in reducing the impact of obesity throughout the community. According to the Platte County Health Department, the Missouri public schools have implemented healthier eating choices throughout the district.<sup>83</sup> This includes removing soda and vending machines as well as offering a wide variety of fruits and vegetables during lunch. Secondary data analysis reveals that the percent of adults with inadequate fruit and vegetable consumption in Clay (82.4) and Platte (81) Counties are higher compared to the Missouri (79) and National Average (75.7).<sup>84</sup>

Nutrition education also plays a critical role in healthy eating habits in the community. Understanding the long-term health benefits associated with proper nutrition can play a significant role in reducing the amount of overweight individuals. The Platte County Health Department has spent several years providing education seminars on obesity awareness and prevention.<sup>85</sup> The organization provides health promotion education classes in Clay and Platte Counties. The health department has also been at the forefront of implementing nationally recognized nutrition programs for children such as the I Am Moving, I Am Learning (IMIL) campaign. There has also been an increased effort to educate parents with children. The Healthy Alternatives for Little Ones (HALO) was one such effort that provides nutritional guidance to parents with small children.

### **Physical inactivity**

Exercise and physical activity are crucial to maintaining a healthy lifestyle and promoting long-term health longevity. Regular physical activity in childhood and adolescence improves strength and

---

<sup>82</sup> Vucenik, I., & Stains, J. P. (2012). Obesity and cancer risk: evidence, mechanisms, and recommendations. *Annals of the New York Academy of Sciences*, 1271(1), 37-43.

<sup>83</sup> Sanders, E. (2015, March 5) Platte County Health Department

<sup>84</sup> Assessment.communitycommons.org

<sup>85</sup> Kisker, S. (2015, March 5) Platte County Health Department

endurance, helps build healthy bones and muscles, can limit weight gain, and reduce anxiety and stress. According to County Health Rankings both Clay and Platte Counties score above the Missouri state average on health behaviors.<sup>86</sup> In both Clay and Platte Counties 22.8% of adults aged 20 and older self-reported no leisure time for physical activity. Almost one quarter of the population in Clay and Platte Counties reported engaging in no physical activity. Females in both counties are more likely to be physically inactive than their male counterparts.

The prevalence of physical inactivity has decreased in both counties since 2004. Programs available through the Clay and Platte County Health Departments have played a crucial role in this reduction. The Platte County Health Department has helped implement initiatives aimed at increasing physical activity. This has included after-school programs, family bike nights and run and read programs. Additionally, the city councils have established more neighborhood parks, trail systems, and recreation centers to promote physical activity and exercise. Furthermore, in 2014 taxpayers voted to fund two YMCA's in the Northland to increase their commitment to promote a healthier community.

## *Priority 5: Diabetes*

### Defining the Need

Diabetes is one of the most prevalent chronic diseases in Clay and Platte Counties, and is the 10<sup>th</sup> most common cause of death. During the process of conducting stakeholder interviews, the CEO of Northland Health Care Access noted diabetes to be one of the most significant health issues facing residents of the Northland. According to the Centers for Disease Control and Prevention's National Center for Chronic Disease Prevention and Health Promotion, there were 19,251 individuals age 20 and older living in Clay County that were told by a doctor they had diabetes.<sup>87</sup> By comparison, there were 6,918 individuals age 20 and older living in Platte County, whose physician told them they had diabetes as of 2012.

### Prevalence

The age-adjusted rate of the Clay County population with diagnosed diabetes was 11.2% in 2012 compared to 9.5% in Platte County. The age-adjusted rate for both counties in 2012 was 10.69%. This is concerning because it indicates that the combined age-adjusted prevalence rate of diagnosed diabetes cases for the combined county area is higher than that for both the state of Missouri as well as the United States. The age-adjusted rate of those diagnosed with diabetes in Missouri was 9.62% in 2012 and the age-adjusted rate of those diagnosed with diabetes in the United States was 9.11%.

### Impact

To understand the impact that diabetes has on population health, it is important to evaluate the effects as well as the drivers that increase the risk of developing diabetes. Diabetes has a profound impact on community health as many morbidities can be linked to diabetes. These comorbid conditions include increased risk of stroke, blindness and eye problems, kidney disease, amputations, and increased risk of

---

<sup>86</sup> CountyHealthRankings.com

<sup>87</sup> Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion

cardiovascular disease.<sup>88</sup> Diabetes also contributes to a large portion of annual medical costs in the United States. According to the American Diabetes Association, the total cost of diagnosed diabetes in the United States in 2012 was \$245 billion. In addition, the direct medical cost of diabetes in 2012 was \$176 billion and the cost from lost productivity due to diabetes in 2012 was \$69 billion.

When evaluating the underlying factors driving diabetes prevalence, it is important to consider behavioral risk factors like poor diet, physical inactivity, and the effects of obesity. Data on these lifestyle behaviors are listed above. Because current behaviors are often relevant predictors of future health, poor dietary intake could be a major driver behind the prevalence of diabetes for both Clay and Platte Counties.

Another behavioral risk factor impacting diabetes prevalence in Clay and Platte Counties is physical inactivity. According to the Centers for Disease Control and Prevention's National Center for Chronic Disease Prevention and Health Promotion, the percent of the population with no leisure time physical activity for Clay and Platte Counties combined was 22.84 percent in 2012.<sup>89</sup> This is more than the national average of 22.64% and slightly less than the Missouri state average of 25.49%.

#### Available Resources

In order to reduce the prevalence and incidence of diabetes in Clay and Platte Counties, community programs and interventions promoting physical activity in schools as well as other community settings should be a public health priority. The Clay County Missouri 2013 - 2015 Community Health Improvement Plan (CHIP) represents an effort by the community partners of Clay County and the Clay County Public Health Center (CCHP) to address major population health priority areas for Clay County. Diabetes tops the list of priority areas of focus for the community stakeholders responsible for developing the CHIP. In order to accomplish the objectives set forth to address different health priority areas including diabetes, Clay County Public Health Center has partnered with different health care providers in the community to evaluate the local public health system, prioritize chronic disease health problems, develop chronic disease interventions, and align resources with the health needs of the community.<sup>90</sup> Northland Health Care Access, in coordination with the Platte County Health Department, Samuel U. Rodgers Health Center, and MetroCare, facilitates access to chronic disease care services for the uninsured and underinsured in the Northland.<sup>91</sup>

There is also a range of services in place intended to prevent diabetes as well as treat those currently suffering with the disease. Clay County Senior Services for example, offers senior wellness checks as well as diabetic screenings. Clay County Public Health Center provides walk-in immunizations, blood pressure screening, diabetic screening, and health counseling.<sup>92</sup> There are also several different free and discounted health clinics in Platte County that offer treatment and screening services for chronic diseases like diabetes. These include Platte County Health Department – Platte City, Platte County

---

<sup>88</sup> American Diabetes Association

<sup>89</sup> Centers for Disease Control and Prevention, [National Center for Chronic Disease Prevention and Health Promotion](#)

<sup>90</sup> Clay County Community Health Improvement Plan; 2013 Annual Update

<sup>91</sup> [www.northlandhealthcareaccess.org](http://www.northlandhealthcareaccess.org)

<sup>92</sup> <http://claycoseniors.org/community-resources>

Health Department – Riverside, and Swope Health Northland. Both Platte County Health Department – Platte City and Platte County Health Department – Riverside offer discounted services to the community. These services include adult and senior physicals, treatment of chronic disease conditions like diabetes, and diabetes screenings. Swope Health Northland provides screenings, immunizations, and treatment for chronic diseases to the community as well as the homeless.

## Appendices

### **Appendix A: Key Contributor Additional Information**

#### **Saint Luke's North Hospital**

Interview: Jeffrey Eye, Chief Nursing Officer

Saint Luke's North Hospital has two locations, one on Barry Road and another in Smithville, Missouri. Saint Luke's North – Barry Road opened in 1989 as the first and only hospital serving Platte County. This location offers 24-hour emergency services, inpatient and outpatient diagnostic testing, maternity care, neonatal intensive care, comprehensive rehabilitation services, and on-campus physician offices. Saint Luke's North – Smithville was founded 1938 under the name Smithville Community Hospital. It currently offers 24-hour Emergency Care, Inpatient Rehabilitation, Occupational, and speech therapy, Behavioral Health, and transportation assistance services.

#### **Saint Luke's Hospital Foundation**

Interview: Jan Kauk, Senior Development Director

Founded in 1963, the Foundation provides funding for medical and nursing education, research, charity care and medical programs. Over the years the mission has expanded to include all Saint Luke's campuses and locations. Fundraising priorities for the Northland include the care van program and ensuring access to care for underserved populations. Funds help to support two care vans for patient's transportation needs as well as supplying vouchers to those in need. The vouchers can be for anything including transportation, food and clothing. In addition, funds raised help to provide free breast cancer screenings to uninsured and underinsured women.

#### **Clay County Public Health Center**

Interview: Jamie Powers, Community Development Specialist

Clay County Public Health Center was established in 1953 to protect the health of those living in the county by implementing population based prevention programs and services. Clay County Public Health Center also delivers programs that prevent the spread of disease and empower people to make healthy choices through health education, disease prevention, and treatment services. A large number of these services are available to everyone free of charge while others are based upon income guidelines and are available to the uninsured, underinsured, or on the Medicaid program.

#### **Platte County Health Department**

Interview: Erin Sanders, Epidemiology Specialist

Officially opened on January 19, 1953 to provide public health services for the county, the Platte County Health Department has since grown and adapted to the changing community. To accommodate for the growing population and changing health needs, the department grew from having three employees and one public health nurse in 1953 to now employing 45 people, including 12 nurses. The Platte County Health Department provides public services through its two clinics, a family health care clinic and a walk-in clinic. A separate division runs the federal Special Supplemental Nutritional Program for Women, Infants, and Children (WIC). In addition to medical and nutritional provisions, the department ensures consumer protection through health inspections, food safety classes, and engaging in emergency preparedness. Finally, health education and community events increase community health and public

awareness.

### **Tri-County Mental Health Services**

Interview: Tom Petrizzo, CEO

Tri-County Mental Health Services is the designated mental health provider of the Northland, providing services to approximately 6,000 individuals annually. Services include psychiatric services, therapy and outpatient programs, crisis services for individuals and families and substance abuse programs for adults and adolescents. Approximately 63 percent of patients served have a serious mental illness while the remaining 37 percent represent anxiety disorders, mood disorders, childhood disorders and other disorders. Co-occurring substance abuse is a problem for 51% of all new admissions. The organization is committed to providing services that are quality assured and person-centered.

### **Northland Health Care Access**

Interview: Karen Dolt, Executive Director

Northland Health Care Access (NHCA), which is located in Platte County, Missouri, coordinates primary and specialty care services for the low income, uninsured and underinsured in the Northland.

Collaborations with multiple community partners, including the Platte County Health Department, MetroCare and the Samuel Rodgers Health Clinic, resulted in approximately 89,000 patient visits in 2014. Providing funding to these community partners helps to ensure access to care for nearly 42,000 Northland residents with inadequate insurance coverage.

### **Children's Mercy North**

Interview: Scott Sullivan, Service Line Director

Children's Mercy Northland brings the nationally recognized care of Children's Mercy to children in the Northland and beyond. Representing one of five outpatient centers in the metro area, Children's Mercy North serves the urgent care and specialty needs of children ages birth to 18. Urgent care services are provided seven days a week from noon to 10 p.m. and over 20 specialties are offered Monday-Friday 8 am to 5 pm. In 2014, Children's Mercy North provided care for over 27,000 urgent care visits and 29,763 specialty care visits.

### **Liberty Public School District**

Interview: Kathy Ellermeier, Director of Health Services

Kathy Ellermeier MSN RN, has served as Director of Health Services at Liberty Public Schools for nine years. In this span, her department has continued to show increasing numbers of students with significant health concerns requiring professional nursing services throughout the course of the school day, serving over 11,800 students enrolled in the district. The health services mission of the Liberty Public School District is to provide the health services and knowledge necessary to enable children to be productive learners and to develop the necessary skills to make health decisions for the rest of their lives. The Health Services Department for the Liberty Public School District offers Influenza vaccinations, nutritional services, and immunizations to students in the school district.

The Saint Luke's North Hospital CHNA was comprised of University of Kansas Medical Center Master's in Health Systems Administration Students Lauren Davis, Joel Lane, Nathan Lindshield, & Krista Logan, who completed this CHNA as part of their capstone project. This team was overseen by Saint Luke's Health System representatives Audrey Hill, Robert Olm-Shipman (VP of Strategic Planning and Project Management), and Robert Bonney (Senior Vice President, Network Operations & Development).