

# Missouri Baptist Sullivan Hospital

## Community Health Needs Assessment and Implementation Plan 2013

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*Our Mission is to improve the health of the people and communities we serve.*

## TABLE OF CONTENTS

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|      |  |    |
|------|--|----|
| I.   | EXECUTIVE SUMMARY .....  | 3  |
| II.  | COMMUNITY DESCRIPTION .....  | 5  |
|      | A. Overview and Map .....  | 5  |
|      | B. Demographics .....  | 6  |
| III. | CONDUCTING THE ASSESSMENT .....                                    | 8  |
|      | A. Work Group Structure .....                                      | 8  |
|      | B. Primary Data Collection: External Focus Groups.....             | 8  |
|      | C. Secondary Data Analyses .....                                   | 16 |
| IV.  | PRIORITIZATION OF HEALTH NEEDS .....                               | 28 |
|      | A. Internal Work Group Prioritization Meetings .....               | 28 |
|      | B. Final CHNA Health Priority Ranking .....                        | 32 |
| V.   | IMPLEMENTATION PLAN .....  | 33 |
|      | A. Issues to be Addressed .....                                    | 33 |
|      | B. Issues That Will Not be Addressed .....                         | 45 |
| VI.  | SPECIFIC INPUT FROM THE CRAWFORD COUNTY DEPARTMENT OF HEALTH ..... | 47 |
| VII. | APPENDICES .....   | 48 |
|      | A. Appendix A .....  | 48 |
|      | B. Appendix B .....  | 49 |
|      | C. Appendix C .....  | 50 |
|      | D. Appendix D .....  | 51 |
|      | E. Appendix E .....  | 53 |
|      | F. Appendix F .....  | 54 |

## *I. EXECUTIVE SUMMARY*

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Missouri Baptist Sullivan Hospital is a non-profit hospital located in Sullivan, Missouri that provides inpatient and outpatient care to the residents of Franklin, Crawford, and Washington Counties.

Because Missouri Baptist Sullivan Hospital is a non-profit, the Patient Protection and Affordable Care Act (PPACA) mandates that it is required to conduct a community health needs assessment (CHNA) and implementation plan every three years. A clear definition of community must be included in this assessment. Missouri Baptist Sullivan Hospital has defined Crawford County—the county in which it is physically located—as the primary community for this CHNA.

In accordance with PPACA requirements, Missouri Baptist Sullivan Hospital conducted its first CHNA during the spring and summer of 2013. The purpose was to identify the most important health issues in Crawford County, Missouri.

In January and February 2013, a two part focus group was conducted to collect primary data from external stakeholders who have public health experience or who work closely with the defined community, including a public health department representative. This focus group identified the following priority health issues: access, healthy lifestyles, mental health, substance abuse, communication and coordination of care, dental care, healthcare needs of children and cancer.

After the focus groups were complete, an internal work group comprised of clinical and non-clinical hospital staff came together to analyze primary and secondary data. Input from hospital physicians and administrators was also taken into consideration. The internal work group used the Department of Health and Senior Services' Priorities Missouri Information for Community Assessment (MICA) tool to generate secondary data for both risk factors and diseases. Secondary data from the Healthy Communities Institute (HCI) was also gathered for review.

Issues identified by the external focus groups, internal workgroup, Priorities MICA, hospital physicians and hospital administrators were grouped into categories by topic and assigned weighted values based on rank to determine the top health need areas for Crawford County:

1. Healthy Lifestyles
2. Substance Abuse
3. Access to Care
4. Mental Health
5. Cancer
6. Pediatric Psychiatry
7. Chronic Disease
8. Public Safety and Dental Care
9. Infant and Maternal Health
10. Pediatric Care

11. Health Literacy
12. Infectious Disease
13. Air Quality

Missouri Baptist Sullivan Hospital has chosen to focus on the top five priority health needs through continuation or implementation of free outreach programs, with the exception of substance abuse. The hospital will also address public safety. The health need areas the hospital has chosen to address are healthy lifestyles, access to care, mental health, cancer and public safety.

The selected priority health need areas will be addressed through the hospital's Healthy Sullivan Coalition education and outreach programs, annual Community Health and Wellness Fair, CAMP for a Cause, financial assistance program, community support groups and first aid services at community events. Measurable objectives will guide evaluation of these programs.

## II. COMMUNITY DESCRIPTION

### A. OVERVIEW AND MAP

Missouri Baptist Sullivan Hospital is located along Interstate Highway 44 in the City of Sullivan, Missouri. Our Mission is to improve the health of the community and people we serve. Our Vision is to be the employer of choice and to provide excellent healthcare in the communities we serve.

The hospital also operates rural medical clinics in the Crawford County cities of Bourbon, Cuba and Steelville, Missouri.

The hospital has defined the target community for its CHNA as Crawford County—the county in which it is physically located. Below is a map of Crawford County.



## B. DEMOGRAPHICS

Crawford County is a rural county whose demographics point to risk factors for several health issues. For example, when compared with the state of Missouri, Crawford County has a higher percentage of residents over the age of 65, a lower high school graduation rate, significantly lower median and per capita income, and a higher percentage of the population living below poverty level. Missouri Baptist Sullivan Hospital and the Crawford County Health Department are the primary facilities providing health care, screenings and education to the county. There are no other hospitals in Crawford County. The rural setting and limited access to health care facilities, coupled with the demographic risk factors listed above, create significant challenges in providing health care and health resources to county residents.

The following tables provide detailed demographic statistics from the US Census Bureau State & County QuickFacts.

| GEOGRAPHY                       | Crawford County | Missouri  |
|---------------------------------|-----------------|-----------|
| Land area in square miles, 2010 | 742.52          | 68,741.52 |
| Persons per square mile, 2010   | 33.3            | 87.1      |

| POPULATION  | Crawford County | Missouri  |
|---|-----------------|-----------|
| Population, 2012 estimate                           | 24,832          | 6,021,988 |
| Population, 2010 (April 1) estimates base           | 24,696          | 5,988,924 |
| Population, % change, April 1, 2010 to July 1, 2012 | 0.6%            | 0.6%      |
| Population, 2010                                    | 24,696          | 5,988,927 |

| RACE / ETHNICITY  | Crawford County | Missouri |
|---|-----------------|----------|
| White alone, percent, 2012 (a)                                      | 97.5%           | 83.9%    |
| Black or African American alone, percent, 2012 (a)                  | 0.4%            | 11.7%    |
| American Indian and Alaska Native alone, percent, 2012 (a)          | 0.5%            | 0.5%     |
| Asian alone, percent, 2012 (a)                                      | 0.4%            | 1.8%     |
| Native Hawaiian and Other Pacific Islander alone, percent, 2012 (a) | 0.1%            | 0.1%     |
| Two or More Races, percent, 2012                                    | 1.2%            | 2.0%     |
| Hispanic or Latino, percent, 2012 (b)                               | 1.6%            | 3.7%     |
| White alone, not Hispanic or Latino, percent, 2012                  | 96.1%           | 80.6%    |

| <b>AGE</b>                               | <b>Crawford County</b> | <b>Missouri</b> |
|--|------------------------|-----------------|
| Persons under 5 years, percent, 2012     | 6.3%                   | 6.3%            |
| Persons under 18 years, percent, 2012    | 24.2%                  | 23.3%           |
| Persons 65 years and over, percent, 2012 | 16.7%                  | 14.7%           |

| <b>GENDER</b>                 | <b>Crawford County</b> | <b>Missouri</b> |
|-------------------------------|------------------------|-----------------|
| Female persons, percent, 2012 | 50.3%                  | 51.0%           |

| <b>EDUCATION</b>  | <b>Crawford County</b> | <b>Missouri</b> |
|---|------------------------|-----------------|
| Language other than English spoken at home, percent age 5+, 2007-2011 | 1.6%                   | 6.1%            |
| High school graduate or higher, percent of persons age 25+, 2007-2011 | 76.6%                  | 86.8%           |

| <b>INCOME</b>   | <b>Crawford County</b> | <b>Missouri</b> |
|---|------------------------|-----------------|
| Per capita money income in the past 12 months (2011 dollars), 2007-2011 | \$17,416               | \$25,371        |
| Median household income, 2007-2011                                      | \$35,947               | \$47,202        |
| Persons below poverty level, percent, 2007-2011                         | 17.4%                  | 14.3%           |

| <b>HOUSING</b>   | <b>Crawford County</b> | <b>Missouri</b> |
|--|------------------------|-----------------|
| Housing units, 2011  | 12,015                 | 2,723,415       |
| Homeownership rate, 2007-2011                              | 76.5%                  | 69.5%           |
| Housing units in multi-unit structures, percent, 2007-2011 | 6.8%                   | 19.6%           |
| Median value of owner-occupied housing units, 2007-2011    | \$106,900              | \$138,900       |
| Households, 2007-2011                                      | 9,528                  | 2,354,104       |
| Persons per household, 2007-2011                           | 2.56                   | 2.46            |

### III. CONDUCTING THE ASSESSMENT

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#### A. WORK GROUP STRUCTURE

##### Internal CHNA Work Group

Missouri Baptist Sullivan Hospital formed an Internal CHNA Work Group of clinical and nonclinical staff to analyze primary and secondary data. The hospital selected the following staff for this team based on their background and experience in community outreach, public health, and hospital census and admissions, etc.

- BS, Certified Health Education Specialist, Community Outreach (Assessment Leader)
- MD, Pediatrician, Sullivan Medical Office
- FNP, Family Nurse Practitioner, Steelville Medical Office
- MA, Office Manager, Medical Office Clinics in Sullivan, Bourbon, Cuba and Steelville
- Patient Access Lead, Patient Access
- Community Relations/Marketing Specialist, Public Relations

##### BJC CHNA Work Group

As part of the BJC HealthCare system, the hospital received support from BJC's corporate CHNA Work Group. This group provided the facilitator, audio equipment, transcripts and analysis for the two part external focus group. Additionally, the BJC Community Benefit Manager, who is a also a member of the BJC CHNA Workgroup, was available as a resource during all Internal CHNA Work Group meetings.

A list of BJC's CHNA Work Group leaders is included in Appendix A.

#### B. PRIMARY DATA COLLECTION: EXTERNAL FOCUS GROUP

##### BACKGROUND

In keeping with the requirements of the Patient Protection and Affordable Care Act (PPACA), Missouri Baptist Sullivan Hospital conducted external focus groups in January and February 2013. Individuals across multiple sectors represented the broad interests of the community. All focus group participants served in roles in which they worked closely with the Crawford County or Sullivan, Missouri population. Several focus participants had special knowledge in the area of public health, including representatives from the Crawford County Health Department, Meramec Community Mission (local food pantry), Steelville Ambulance District and Lifespan Counseling Center.

A complete list of focus group participants and observers is included in Appendix B.



## **PARTICIPANTS**

Participants from the following organizations were represented in the external focus group:

- Lifespan Counseling Center (Sullivan)
- Parents as Teachers, Sullivan
- Steelville Ambulance District
- Sullivan Area Chamber of Commerce
- Parents as Teachers, Sullivan
- Meramec Community Mission (Sullivan)
- Crawford County Health Department
- Crawford County Public Administrator
- Sullivan School District

## **RESEARCH OBJECTIVES**

The main objective for this research was to solicit input from health experts and those who have a special interest in the populations served by Missouri Baptist Sullivan Hospital in Crawford County.

## **ACTION PLAN**

Hospital representatives formulated a two-step process. An initial focus group was conducted in January 2013 to solicit feedback on the needs of the Crawford county population. A second meeting was held in February to share the results of the first focus group as well as the findings from additional secondary data analyses.

The first focus group was held on the evening of January 8, 2013 in the Missouri Baptist Sullivan Hospital (MBSH) Conference Room in Sullivan, MO. It lasted 2 hours and was moderated by the Manager of Market Research for BJC HealthCare.

Ten individuals representing various Crawford County organizations were in attendance at either one or both focus groups. These organizations were identified by the hospital as representing key stakeholders who would have specific insights into the health needs of the area. Each individual was sent a worksheet to complete prior to that evening to identify their perceptions of the greatest healthcare needs in Crawford County, their knowledge of available resources to address these needs and the greatest “gap” that exists between need and available resources (See Appendices C, D and E).

On February 12, the same group of community leaders was invited back to MBSH. At that meeting, the healthcare needs that were identified in the earlier group, along with available secondary data that attempted to quantify the size of each need were presented. At the end of the second meeting, community leaders were asked to re-evaluate the identified health needs in terms of their priority for the community as well as the ability for the community to collaborate around them. Those results were compiled and are presented at the end of this report.

## **KEY FINDINGS: FOCUS GROUP #1 (January 8, 2012)**

The transcript of the focus group was analyzed in conjunction with the completed worksheets that were returned by community stakeholders. The following needs were identified and are listed from those most frequently mentioned to least. Comments made during the focus group have also been included.

### **Access: (16 mentions)**

- There are not enough physician specialists in this area, including orthopedists (especially in an emergency), cardiologists and those specializing in geriatrics. There is a need for pediatricians as well.
- Those who are un-or under-insured have a difficult time accessing care.
- The cost of medications can be prohibitive for some.
- There is a need for weekend/after hours care when doctors' offices are closed. Otherwise, patients will end up in the emergency rooms for non-life threatening situations and delay access for those who really need it. Steelville and Cuba also need these services, in addition to Sullivan.
- A lack of public transportation creates obstacles for those who do not have a vehicle.
- In the summer, when the area's population increases significantly due its recreational focus, the need for emergency health services dramatically increases.
- The area is in need of a higher level of trauma services. Patients must travel via ambulance or helicopter to St. Louis when they have a serious injury or illness. This is very expensive, and creates a burden for patients and their families due to the distance they must travel for care.

### **Healthy Lifestyles, including Obesity and Smoking: (6 mentions)**

- Obesity contributes to the exacerbation of many chronic conditions including heart disease and diabetes.
- There are also limited local resources where area residents can work out and exercise.
- Many people do not have access to healthy, fresh food. It is often more expensive than higher calorie options.
- The schools have made changes in their lunch menus, offering healthier choices. But there is still a need to educate students about healthy food options as well as the importance of regular physical activity.
- Smoking is also a major determinant of high rates of heart disease, stroke and cancer.

### **Mental Health: (5 mentions)**

- There is a lack of beds for those ages 18 – 54 who require inpatient care, including stabilization and medication review.
- There is the perception that emergency room caregivers do not have enough experience in this area to appropriately evaluate these individuals.

- There are limited service options available in Crawford County for those who require mental health evaluation and treatment.
- Lack of health insurance coverage prevents many from seeking the care they need.
- There are no shelters in the immediate area for women who are escaping domestic abuse.
- More teens are being seen who are in crisis and have mentioned thoughts of suicide.
- Diagnoses of bipolar disorder, anxiety and depression are more commonly seen in area families.

#### **Substance Abuse: (3 mentions)**

- There is a general concern about drug use/abuse, especially the abuse of prescription medications. Meth is also an area of concern, and there is an increasing use of heroin in this market.
- There are reports of parents increasingly using their children's medications for ADD or ADHD, and their children going without as a result.
- There are also limited options available for those who seek treatment. The New Vision program at MBSH has limited capacity to evaluate and admit patients on Friday afternoons and during the weekends.

#### **Communication and Coordination of Care: (2 mentions)**

- Patients do not always have a "healthy mindset." They do not understand the impact their choices have on their health and why it is important for them to care about making healthy choices.
- The communication process between physicians, patients and those who are their appointed guardians does not always function as it should. Legal guardians are not always notified when patients present for treatment in the emergency room, or are transferred to another hospital for care.
- Health literacy is often an obstacle to establishing and maintaining health.

#### **Dental Care: (1 mentions)**

- There is a lack of dental care in the area, especially among middle-aged men who have no health insurance.
- Dentists who will treat children covered by Medicaid are also in short supply.

#### **Healthcare Needs of Children: (1 mention)**

- Compliance with childhood immunizations is becoming more challenging due to policy changes at the Department of Public Health (DPH). Parents are unable to afford them but the DPH will not provide them to parents who have insurance, even if it is a high deductible plan.
- There is a lack of pediatricians in the area, especially in the emergency room.

- High rates of smoking contribute to prenatal issues, including miscarriage and low birth weight.
- Crisis planning between the school district and area first responders was mentioned as an area of concern.
- The Parents as Teachers representatives identified “high needs families” as a growing issue for them: multiple children in a single parent, teen parent or incarcerated parent family, or being raised by grandparents or another relative. Substance abuse and/or mental health issues may also be involved.

### **Cancer:**

- Rates are high, especially for lung cancer and esophageal cancer, due to high rates of smoking.
- Access to quality treatment is a challenge due to transportation and availability of services locally.

### **What role should the hospital play?**

As a part of BJC HealthCare, Missouri Baptist Sullivan Hospital can serve as a conduit to the local area by making the extensive capabilities, expertise and resources of BJC available to Sullivan and its surrounding communities. Local leaders discussed how the hospital’s reputation has dramatically improved since it has aligned with BJC from that of a “band-aid hospital” to one that can successfully treat more serious conditions, including premature births. People used to express concerns about coming to the hospital, but now speak of it with pride and confidence.

In addition, MBSH can provide the leadership that is needed to engage other community organizations in broadening the range of services that are available to area residents. This may involve taking the initiative in applying for grants to provide funding to develop new service options and community resources. The example was given of how MBHS staff member developed a grant and received funding to secure better access to fresh food via the creation of a farmer’s market.

The hospital can also provide education to members of the community, making sure they understand what services are offered and how to access them. Many in the group were unaware that the hospital had started the Weekend Clinic or that a trained pediatrician had recently begun practicing on the hospital campus. Finding ways to continue to keep the community informed of its service offerings was considered to be an important role for the hospital.

Offering education and training to first responders was also identified as a valuable service to the community. It would also function to create alignments with the first responders and make them feel more like they were on the same team with the hospital ED staff. The hospital in Rolla was identified as taking a leadership role in this area. They regularly have educational classes for the first responders taught by physicians who work at the Rolla hospital.

Offering education classes to area residents was also identified as an important role for the hospital. These could be offered by the hospital alone or in conjunction with community organizations like the United Way. Suggestions included classes for kids on self-esteem issues, classes of kids on the appropriate use of 911 and what to do in an emergency, the importance of healthy eating and other lifestyle choices, CPR classes, diabetes education.

By inviting community stakeholders to share their opinions and perceptions with the hospital about area health needs, the hospital reinforced its role as a leader in the community. Future opportunities exist to engage community organizations and bring them together to address many of the health issues that were raised during the evening's discussion.

### **KEY FINDINGS: FOCUS GROUP #2 (February 12, 2013)**

After viewing the secondary data on the previously identified community health needs, community stakeholders were asked to evaluate each of them based on two attributes: level of community concern and potential to collaborate around the health issue. Each was rated on a scale of 1 (low) to 5 (high).

An average score was calculated for each healthcare need. No issue had an average score less than 3.0. The average score for Level of Concern was 3.91 and for Ability to Collaborate was 3.69.

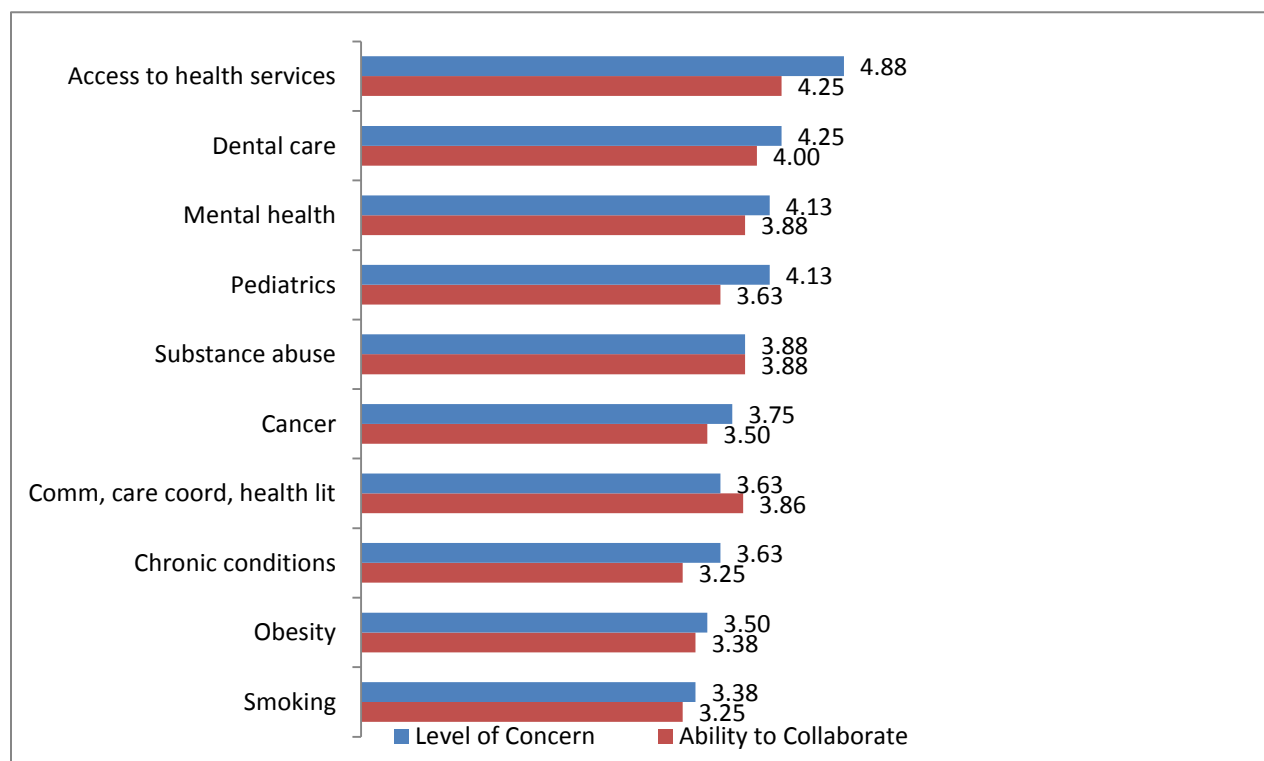
Access to health services, dental care and mental health were rated the highest in terms of level of community concern and ability to collaborate, with an average score greater than the attribute averages.

Pediatrics also scored high relative to community concern (average score  $\geq 3.91$ ) but their ability to collaborate was rated lower.

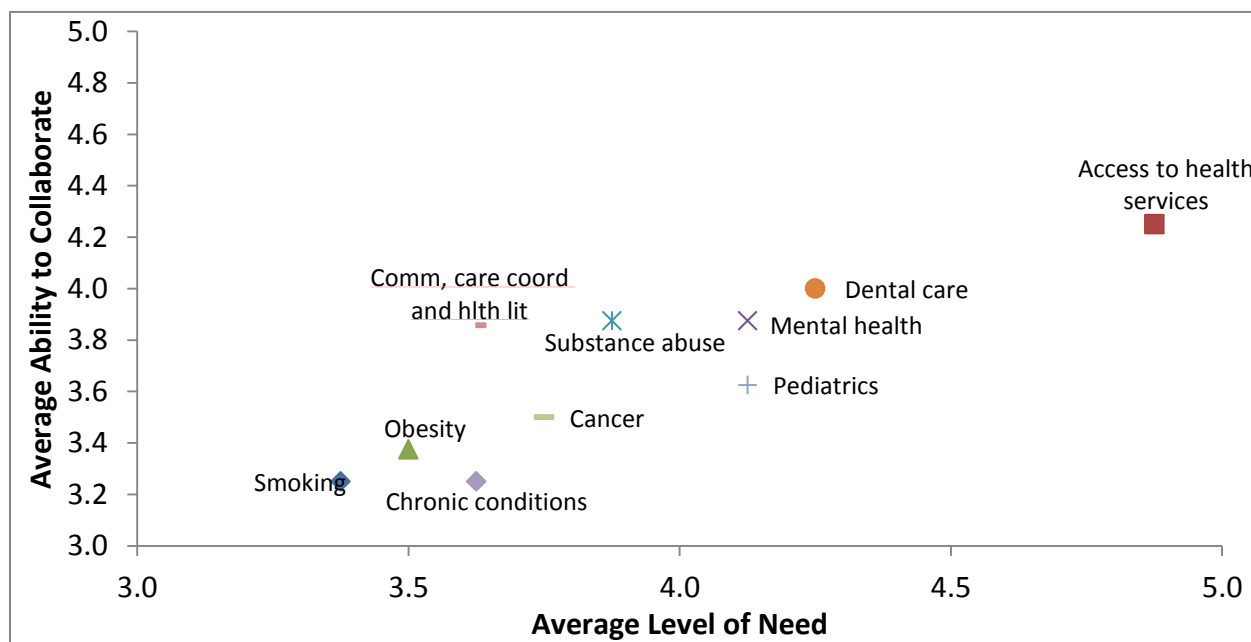
Substance abuse and communication, care coordination and health literacy ranked high on ability to collaborate, but were lower in terms of level of concern.

Cancer, chronic conditions, obesity and smoking rated below the average ratings for both level of concern and ability to collaborate.

### Level of Concern Compared to Ability to Collaborate



### Plot of Average Ability to Collaborate by Level of Community Concern



| Potential to Collaborate   | Health Topic Ranking |                                  |                           |               |
|----------------------------|----------------------|----------------------------------|---------------------------|---------------|
|                            | High                 | Communication, care coordination | Access to health services |               |
|                            |                      | health literacy                  | Dental care               |               |
|                            |                      |                                  | Substance abuse           | Mental health |
|                            |                      |                                  |                           |               |
|                            |                      | Cancer                           | Pediatrics                |               |
|                            |                      | Chronic conditions               |                           |               |
| Obesity                    |                      |                                  |                           |               |
| Lower                      | Smoking              |                                  |                           |               |
|                            | Lower                | High                             |                           |               |
| Level of Community Concern |                      |                                  |                           |               |

## B. SECONDARY DATA ANALYSES

### DATA SOURCES

Secondary data was primarily collected from the following sources and analyzed for the hospital's CHNA:

- **Healthy Communities Institute (HCI):** Provides an online dashboard of health indicators for Crawford County as well as the ability to evaluate and track the information against state and national data and Healthy People 2020 goals. Sources of data include the National Cancer Institute, Environmental Protection Agency, US Census Bureau, US Department of Education, and other national, state, and regional sources.
- **Missouri Information for Community Assessment (MICA):** According to the Department of Health and Senior Services, Missouri Information for Community Assessment (MICA) is an interactive system that allows the user to create and download tables, based on selected variables.
- **Missouri Baptist Sullivan Hospital:** Primary data retrieved from Missouri Baptist Sullivan Hospital's departments and information systems is included where noted in the following sections for comparison with secondary data findings.

### ACCESS TO HEALTH SERVICES

| Access   | Crawford Co | Status | MO    | U.S. | HP 2020 |
|--|-------------|--------|-------|------|---------|
| Primary Care Provider Rate (per 100,000 pop) ('09)                   | 17          | ●      | -     | 52   | -       |
| ER Visits for all Diseases and Conditions (per 1,000 pop) ('10)      | 439.8       | ●      | 372.7 | -    | -       |
| ER Visits for Pneumonia and Influenza (per 1,000 pop) ('10)          | 11.4        | ●      | 7.9   | -    | -       |
| Preventable Hospital Stays (ACSC per 1,000 Medicare enrollees) ('09) | 9.3%        | ●      | -     | 7.5% | -       |
| Preventable Hospitalizations (<65) ('09)                             | 138.3       | ●      | 141.3 | -    | -       |
| Households without a Vehicle ('10)                                   | 6.6%        | ●      | -     | 5.7% | -       |
| No Health Insurance Coverage (Ages 18-64) ('11)                      | 31.1%       | ●      | 23.7% | -    | -       |
| Could Not Get Needed Care in Past 12 Months ('11)                    | 12.0%       | ●      | 8.9%  | -    | -       |

Sources: HCI (County Health Rankings, American Community Survey), MICA

|                     |                    |                    |
|---------------------|--------------------|--------------------|
| ● Better than MO/US | ● Similar to MO/US | ● Worse than MO/US |
|---------------------|--------------------|--------------------|



Data from Missouri Baptist Sullivan Hospital indicates that 17 of top 75 diagnoses seen in its Emergency Department from 2010-2012 were for non-emergent conditions, including:

- Bronchitis
- Upper respiratory infection
- Pharyngitis
- Dental caries
- Dental pain
- Cough
- Rash
- Dental abscess
- Ear infection
- Fever
- Wound check

Use of the hospital's Emergency Department for non-emergent conditions or primary care is common. This is often due to patients' lack of insurance or insufficient insurance coverage. Socioeconomic factors noted in the demographics for Crawford County contribute to this issue.

A breakdown of Missouri Baptist Sullivan Hospital's payor mix shows that approximately one third (36%) of patients discharged from Missouri Baptist Sullivan Hospital were Medicaid or Self Pay. These data reflect inpatient payor mix only.

#### **Missouri Baptist Sullivan Hospital Inpatient Payor Mix**

| Payor          | % Discharges |             |             |
|----------------|--------------|-------------|-------------|
|                | '10          | '11         | '12         |
| Medicare       | 49%          | 48%         | 48%         |
| Medicaid       | 28%          | 28%         | 28%         |
| Commercial     | 17%          | 16%         | 16%         |
| Self Pay/Other | 7%           | 7%          | 8%          |
| <b>Total</b>   | <b>100%</b>  | <b>100%</b> | <b>100%</b> |

*Source: Missouri Baptist Sullivan Hospital*

## SUBSTANCE ABUSE

Data for smoking, other tobacco use, prescription and illicit drug abuse, and alcohol abuse were included in the secondary data review for substance abuse. Overall tobacco use, alcohol and drug abuse are higher among Crawford County residents when compared with state and national data, with the exception of residents over the age of 18. Due to the prevalence of substance abuse in the region, it is likely that this age group is underreporting substance use.

| Smoking / Tobacco Use                       | Crawford Co | Status | MO    |
|---|-------------|--------|-------|
| Current Cigarette Smoker ('11)              | 38.9%       | ●      | 23.0% |
| Former Cigarette Smoker ('11)               | 19.6%       | ●      | 24.2% |
| Current Smokeless Tobacco User ('11)        | 7.3%        | ●      | 4.4%  |
| Current Use of Other Tobacco Products ('11) | 4.3%        | ●      | 4.9%  |

Source: Missouri County Level Study 2011 - Tobacco Use for MO Residents

| In 2011, Believe Cigarette Smoking Leads to the Following Conditions: | Crawford Co | MO    |
|---|-------------|-------|
| Heart attack  | 77.1%       | 77.7% |
| Stroke  | 79.2%       | 73.8% |
| Low-birth weight  | 83.5%       | 86.6% |

Source: Missouri County Level Study 2011 - Tobacco Use for MO Residents

| Drug Use & Abuse   | Crawford Co | Status | MO   | U.S.  | HP<br>2020 |
|--|-------------|--------|------|-------|------------|
| Adults who Drink Excessively ('10)                         | 14.5%       | ●      | -    | 14.5% | 25.3       |
| Liquor Store Density (per 100,000 pop) ('10)               | 12.1        | ●      | -    | 10.4  | -          |
| ER Visit for Alcohol/Substance Abuse (per 1,000 pop) ('10) | 3.4         | ●      | 3.1  | -     | -          |
| Alcohol Abuse ER Visits (per 1,000 pop) ('10)              | 1.9         | ●      | 2.3  | -     | -          |
| Substance Abuse ER Visits (per 1,000 pop) ('10)            | 1.9         | ●      | 1.4  | -     | -          |
| Alcohol Abuse Inpatient Admits (per 10,000 pop) ('10)      | 10.9        | ●      | 10.4 | -     | -          |
| Substance Abuse Inpatient Admits (per 10,000 pop) ('10)    | 11.6        | ●      | 8.5  | -     | -          |

Sources: HCI (US Census Bureau County Business Partners, County Health Rankings), MICA

|                     |                    |                    |
|---------------------|--------------------|--------------------|
| ● Better than MO/US | ● Similar to MO/US | ● Worse than MO/US |
|---------------------|--------------------|--------------------|

According to the 2011 Behavioral Health Profile for Crawford County:

- 67.1% of youth believe that it would be easy to get cigarettes and 54.1% have friends who smoke.
- 63.0% of youth believe that it would be easy to get alcohol and 66.75% have friends who drink alcohol.
- 21.8% of youth believe it would be easy to get other drugs such as cocaine, methamphetamine, and ecstasy.

| Current Substance Abuse for Grades 6-12 (30-Day Use) | Crawford Co | Status | MO    |
|--|-------------|--------|-------|
| Cigarettes   | 19.1%       | ●      | 13.7% |
| Alcohol  | 24.0%       | ●      | 19.8% |
| Binge**  | 15.5%       | ●      | 11.4% |
| Marijuana  | 10.8%       | ●      | 9.4%  |
| Inhalants  | 4.5%        | ●      | 3.0%  |
| Rx Abuse   | 10.5%       | ●      | 6.7%  |
| OTC Abuse  | 5.3%        | ●      | 4.8%  |

\*\* 5+ drinks in a single occasion

Source: 2012 Crawford County Behavioral Health Profile

| Current Substance Abuse for Ages 18+ (30-Day Use) | Region | Status | MO    |
|---|--------|--------|-------|
| Cigarettes  | 34.8%  | ●      | 30.4% |
| Alcohol   | 46.0%  | ●      | 53.8% |
| Binge**   | 24.9%  | ●      | 25.8% |
| Marijuana   | 4.8%   | ●      | 5.6%  |
| Illicit Drug excluding marijuana                  | 3.9%   | ●      | 3.9%  |

\*\* 5+ drinks in a single occasion

Source: 2012 Crawford County Behavioral Health Profile

|                |               |
|----------------|---------------|
| Better than MO | Similar to MO |
| ●              | ● ●           |

Missouri Baptist Sullivan Hospital operates an inpatient medical stabilization program for adults suffering from substance abuse. This program, called New Vision, receives between 75 and 128 calls per month for patients seeking treatment.

- Average monthly admissions range from 20-30 depending on bed availability and physician coverage.
- At least 90% of cases treated are due to opiate, prescription medication and/or heroin use
- Despite the reputation for meth use in the area, less than 5 calls per month are from someone seeking treatment for meth.

Below are New Vision patient volume statistics from 2009 through 2012:

|                | '09 | '10 | '11 | '12 | Chg ('09-'12) |
|----------------|-----|-----|-----|-----|---------------|
| Patient Volume | 93  | 244 | 282 | 282 | 189           |

*Source: Missouri Baptist Sullivan Hospital New Vision Program*

## DENTAL SERVICES

There is a lack of dental services available in Crawford County for low income patients, especially middle aged men with no insurance.

| Local Dental Center          | Accept Medicare/Medicaid? | Accept Healthcare USA? | Discounts/Financing   |
|------------------------------|---------------------------|------------------------|---|
| Sullivan Family Dentistry    | No                        | Yes                    | 20-30% discount for low income patients, no financing options, refer noninsured to Crider |
| Barry Brace & Associates     | No                        | No                     | Interest rate financing, refer low income to Crider Health Center                         |
| Affordable Dentures          | Limited Coverage*         | No                     | Can apply for Care Credit, pull a tooth for \$39-\$80 if first time dentures wearer       |
| Crider Health Center (Union) | Limited Coverage*         | No                     | Most Sullivan dental centers refer low-income patients here, do not accept any adults     |

\*Only accept children and pregnant women on Medicaid.

*Source: Phone conversations with local providers*

According to Missouri Baptist Sullivan Hospital Emergency Department data, 6.9% (n=611) of the top 75 Emergency Department visit diagnoses at were related to dental care in 2012, including abscesses, caries and infections. The number was slightly lower in 2011 (5.9%) but 7% in 2010. Many residents without insurance utilize the Emergency Department for dental issues due to the lack of dental services for these patients in Crawford County.

| Dental Care  | Crawford<br>Co | Status | MO   | U.S. |
|--|----------------|--------|------|------|
| Dentist Rate (per 100,000 pop) ('07)                               | 12.0           | ●      | -    | 30.0 |
| ED Visits for Disorders of Teeth & Jaw (per 1,000 adults) ('10)    | 15.4           | ●      | 10.2 | -    |
| ED Visits for Disorders of Teeth & Jaw (per 1,000 pop <15) ('10)   | 1.4            | ●      | 2.1  | -    |
| ED Visits for Disorders of Teeth & Jaw (per 1,000 pop 15-24) ('10) | 20.4           | ●      | 16.4 | -    |
| ED Visits for Disorders of Teeth & Jaw (per 1,000 pop 25-44) ('10) | 38.2           | ●      | 22.0 | -    |
| ED Visits for Disorders of Teeth & Jaw (per 1,000 pop 45-64) ('10) | 5.0            | ●      | 4.6  | -    |
| ED Visits for Disorders of Teeth & Jaw (per 1,000 pop 65+) ('10)   | 0.5            | ●      | 0.8  | -    |

Source: HCI (County Health Rankings), MICA

## MENTAL HEALTH

There is a lack of beds for those ages 18 – 49 requiring inpatient psychiatric care, including stabilization and medication review. Lack of health insurance coverage prevents many from seeking the care they need. There are no shelters in the immediate area for women who are escaping domestic abuse. In addition, there are few psychiatrists practicing in Crawford County. Thus, a high rate of patients with serious mental health concerns present to the Emergency Department.

| Mental Health  | Crawford Co | Status | MO  | U.S. | HP 2020 |
|--|-------------|--------|-----|------|---------|
| ER Visits for Mental Disorders (per 1,000 pop) ('10)                       | 15.2        | ●      | 11  | -    | -       |
| ER Visits for Anxiety-Related Disorders (per 1,000 pop) ('10)              | 5.9         | ●      | 2.8 | -    | -       |
| ER Visits for Affective Disorders (per 1,000 pop) ('10)                    | 4.0         | ●      | 1.9 | -    | -       |
| ER Vists for Schizophrenia and Related Disorders (per 1,000 pop) ('10)     | 0.6         | ●      | 0.5 | -    | -       |
| ER Visits for Dissociative and Personality Disorders (per 1,000 pop) ('10) | 5.4         | ●      | 3.1 | -    | -       |
| ER Visits for Other Mental Conditions (per 1,000 pop) ('10)                | 2.8         | ●      | 2.1 | -    | -       |

Source: MICA

|                     |                    |                    |
|---------------------|--------------------|--------------------|
| ● Better than MO/US | ● Similar to MO/US | ● Worse than MO/US |
|---------------------|--------------------|--------------------|

According to data from the Missouri Baptist Sullivan Hospital Emergency Department, 3.8% (n=339) of the top 75 Emergency Department visit diagnoses at MBSH in 2012 were related to mental health disorders, including anxiety, depression and suicidal ideation. The number was slightly higher in 2011 (4.0%) but about the same (3.7%) in 2010.

| Mental Health   | Crawford Co | Status | MO   | U.S. | HP 2020 |
|---|-------------|--------|------|------|---------|
| Age-Adjusted Death Rate due to Suicide (per 100,000 pop) ('09)                  | 17.2        | ●      | 15.2 | -    | 10.2    |
| Age-Adjusted Death Rate due to Self-Inflicted Inj (per 100,000 pop 15-19) ('09) | 16.7        | ●      | 9.1  | -    | -       |
| Age-Adjusted Death Rate due to Self-Inflicted Inj (per 100,000 pop 20-34) ('09) | 22.6        | ●      | 15   | -    | -       |
| Age-Adjusted Death Rate due to Self-Inflicted Inj (per 100,000 pop 35-64) ('09) | 22.8        | ●      | 18   | -    | -       |
| Poor Mental Health Days ('10)   | 4.9         | ●      | -    | 3.4  | -       |

Sources: HCI (MO Dept. of Health & Senior Services, County Health Rankings), MICA

|                     |                    |                    |
|---------------------|--------------------|--------------------|
| ● Better than MO/US | ● Similar to MO/US | ● Worse than MO/US |
|---------------------|--------------------|--------------------|

According to the Behavioral Health profile for Crawford County, in 2011 students reported the following regarding their mental health:

- 14.3 % considered suicide in the last year
- 10.3% made a plan to commit suicide
- 1.8% actually attempted suicide and were injured as a result

In state fiscal year 2011, 372 Crawford County residents received treatment for serious mental illness at publicly-funded facilities. The decline in the number of individuals served in 2011 is not considered to be due to a lack of need, but is more a reflection of the decline in available resources.

| Psychiatric Disorders    | Patients Served |            | Chg<br>('10-'11) |
|--------------------------|-----------------|------------|------------------|
|                          | '10             | '11        |                  |
| Adjustment Disorder      | 15              | 86         | 71               |
| Anxiety Disorder         | 0               | 128        | 128              |
| Developmental Disorder   | <5              | <5         | -                |
| Impulse Control Disorder | 61              | 51         | -10              |
| Mood Disorder            | 218             | 266        | 48               |
| Psychotic Disorder       | 45              | 48         | 3                |
| <b>Total*</b>            | <b>542</b>      | <b>372</b> | <b>-170</b>      |

*\* Number of patients served does not add to total due to data availability and patients with multiple psychiatric diagnoses.*

*Source: Crawford County Behavioral Health Profile*



## PEDIATRICS / INFANT AND MATERNAL HEALTH

Local public schools are struggling with compliance on required immunizations for low income students. Recent changes in public health department eligibility requirements for free or reduced cost immunizations are expected to create more issues in coming years. A high percentage of Crawford County students qualify for the Free Lunch Program.

A high percentage of mothers who receive early prenatal care is likely attributable to Medicaid. However, smoking during pregnancy is high among Crawford County residents.

| Pediatrics                                     | Crawford Co | Status | MO    | U.S.  | HP 2020 |
|--|-------------|--------|-------|-------|---------|
| Mothers who Received Early Prenatal Care ('09) | 89.8%       | ●      | 85.7% | -     | 77.9%   |
| Mothers who Smoked During Pregnancy ('09)      | 35.9%       | ●      | 23.8% | -     | 1.4%    |
| Preterm Births ('09)                           | 9.8%        | ●      | 11.7% | -     | 11.4%   |
| Babies with Low Birth Weight ('09)             | 6.8%        | ●      | 7.4%  |       | 7.8%    |
| Children Living Below Poverty Level ('10)      | 20.2%       | ●      | -     | 20.4% | -       |
| Students Eligible for Free Lunch Program ('09) | 46.0%       | ●      | -     | 39.9% | -       |
| Child Abuse Rate (per 1,000 children) ('09)    | 3.3         | ●      | 4.4   | -     | 8.5     |

Source: HCI (MO Dept. of Health & Senior Services, American Community Survey, US Dept. of Agriculture Food Environment Atlas)

|                     |                    |                    |
|---------------------|--------------------|--------------------|
| ● Better than MO/US | ● Similar to MO/US | ● Worse than MO/US |
|---------------------|--------------------|--------------------|

## CANCER

Secondary data indicate that a high percentage of Crawford County residents are not receiving regular cancer screenings, including pap smears, colonoscopies and mammograms.

Cancer incidence and death rates are higher in Crawford County than in Missouri and the U.S. The only exception is the breast cancer incidence rate, which is slightly lower than state and national rates.

| Cancer Screening ('11)                 | Crawford Co | Status | MO    |
|--|-------------|--------|-------|
| Women Age 40+: Never had a Mammogram   | 13.8%       | ●      | 10.0% |
| Never had a Pap Smear: Women Age 18+   | 6.0%        | ●      | 7.6%  |
| No Pap Smear Last 3 Yrs: Women Age 18+ | 36.4%       | ●      | 26.5% |
| Never had a Colonoscopy: Age 50+       | 39.9%       | ●      | 33.9% |
| Had a Colonoscopy Last 10 Yrs: Age 50+ | 43.0%       | ●      | 38.1% |

Sources: HCI (MO Dept. of Health & Senior Services, County Health Rankings, National Cancer Institute)

| Cancer Type     | Metric (per 100,000 pop) | Crawford | Status | MO    | U.S.  | HP 2020 |
|-----------------|--------------------------|----------|--------|-------|-------|---------|
| All Cancer      | Incidence Rate ('09)     | 519.4    | ●      | 468.9 | 466.0 | -       |
|                 | Death Rate ('09)         | 224.1    | ●      | 191.4 | 189.0 | 160.6   |
| Breast          | Incidence Rate ('09)     | 108.7    | ●      | 121.9 | 116.7 | -       |
|                 | Death Rate ('09)         | 36.3     | ●      | 24.9  | 23.4  | 20.6    |
| Prostate        | Incidence Rate ('09)     | 145.0    | ●      | 132.9 | 145.6 | -       |
|                 | Death Rate ('09)         | 37.6     | ●      | 22.7  | 24.9  | 21.2    |
| Colorectal      | Incidence Rate ('09)     | 65.7     | ●      | 49.2  | 48.5  | 38.6    |
|                 | Death Rate ('09)         | 19.5     | ●      | 17.6  | 17.9  | 14.5    |
| Lung & Bronchus | Incidence Rate ('09)     | 102.3    | ●      | 79.5  | 74.6  | -       |
|                 | Death Rate ('09)         | 79.8     | ●      | 60.2  | 57.3  | 45.5    |

Sources: HCI (MO Dept. of Health & Senior Services, County Health Rankings, National Cancer Institute)

|                   |                  |                  |
|-------------------|------------------|------------------|
| Better than MO/US | Similar to MO/US | Worse than MO/US |
| ●                 | ●                | ●                |

## CHRONIC CONDITIONS

There is a high prevalence of chronic conditions other than cancer among Crawford County residents when compared with state and national rates. Conditions of concern for Crawford County include diabetes, asthma, COPD, heart disease, stroke, high cholesterol and high blood pressure. Death rates are high for stroke and heart disease. Many of these conditions could be improved or managed through better nutrition, more exercise and tobacco cessation.

| Chronic Condition   | Metric   | Crawford Co | Status | MO    | U.S.  |
|---------------------|--|-------------|--------|-------|-------|
| Diabetes            | Adults with Diabetes ('11)   | 17.3%       | ●      | -     | 10.7% |
|                     | ER Visits for Diabetes Mellitus (per 1,000 pop) ('10)                | 2.2         | ●      | 1.7   | -     |
|                     | Diabetic Screening: HbA1C (Medicare patients) ('09)                  | 83.4%       | ●      | -     | 83.7% |
| Respiratory Disease | Adults with Current Asthma ('11)                                     | 11.0%       | ●      | 9.6%  | -     |
|                     | Death Rate - Chronic Lower Resp Disease (per 100,000 pop) ('10)      | 53.9        | ●      | 57.3  | -     |
|                     | ER Visits for COPD (per 1,000 pop) ('10)                             | 9.9         | ●      | 5.6   | -     |
| Heart Disease       | High Cholesterol Prevalence (Age 35+) ('11)                          | 51.3%       | ●      | 44.5% | -     |
|                     | High Blood Pressure Prevalence (>140/90, % of pop) ('11)             | 39.9%       | ●      | 33.5% | -     |
|                     | Death Rate - Cerebrovascular Disease (Stroke)(per 100,000 pop) ('10) | 60.4        | ●      | 47.3  | -     |
|                     | Death Rate - Heart Disease (per 100,000 pop) ('10)                   | 302.4       | ●      | 206.8 | -     |
|                     | ER Visits for Heart and Circulation (per 1,000 pop) ('10)            | 23.9        | ●      | 17.4  | -     |
|                     | ER Visits for Heart Disease (per 1,000 pop) ('10)                    | 17.3        | ●      | 12.8  | -     |








Source: HCI (MO Dept. of Health & Senior Services, County Health Rankings), MICA, MO 2011 Co Level Study

|                     |                    |                    |
|---------------------|--------------------|--------------------|
| ● Better than MO/US | ● Similar to MO/US | ● Worse than MO/US |
|---------------------|--------------------|--------------------|

## OBESITY / HEALTHY LIFESTYLES

Unhealthy lifestyle choices such as poor diet and sedentary lifestyle, as well as the built environment, contribute to conditions such as obesity. In 2011, 63.7% of Crawford County residents were classified as either “overweight” or “obese.”

It should be noted that Sullivan is a local hub for grocery shopping and dining for smaller surrounding communities. While fast food density is low in rural Crawford County, just across the Franklin County line in Sullivan there is a high concentration of fast food restaurants.

| Healthy Lifestyles  | Crawford Co | Status  | MO    | U.S.  | HP<br>2020 |
|---|-------------|---|-------|-------|------------|
| Adult Fruit and Vegetable Consumption ('11)                 | 10.0%       |    | 11.4% | -     | -          |
| Adults who are Obese ('11)                                  | 33.4%       |    | 32.9% | -     | 30.6%      |
| Adults who are Overweight ('11)                             | 30.3%       |    | 34.6% | -     | -          |
| Adults who are Sedentary ('09)                              | 29.4%       |   | 30.6% | -     | 32.6%      |
| Low-Income Preschool Obesity ('10)                          | 22.9%       |  | -     | 14.0% | -          |
| Poor Physical Health Days ('10)                             | 6.7         |  | -     | 3.7   | -          |
| Self-Reported General Health Assessment: Poor or Fair ('10) | 19.4%       |  | -     | 16.0% | -          |

Source: HCI (MO DHSS, County Health Rankings, US Dept. of Agriculture Food Environment Atlas)

| Physical Activity Measures ('11)        | Crawford Co | Status | MO    |
|---|-------------|--------|-------|
| No Leisure Time for Physical Activity   | 32.2%       | ●      | 23.7% |
| Use Walking Trails, Parks & Playgrounds | 39.0%       | ●      | 44.4% |
| Use Sidewalks in Their Neighborhood     | 22.6%       | ●      | 53.7% |
| Have Roads with Shoulders for Biking    | 11.2%       | ●      | 31.6% |

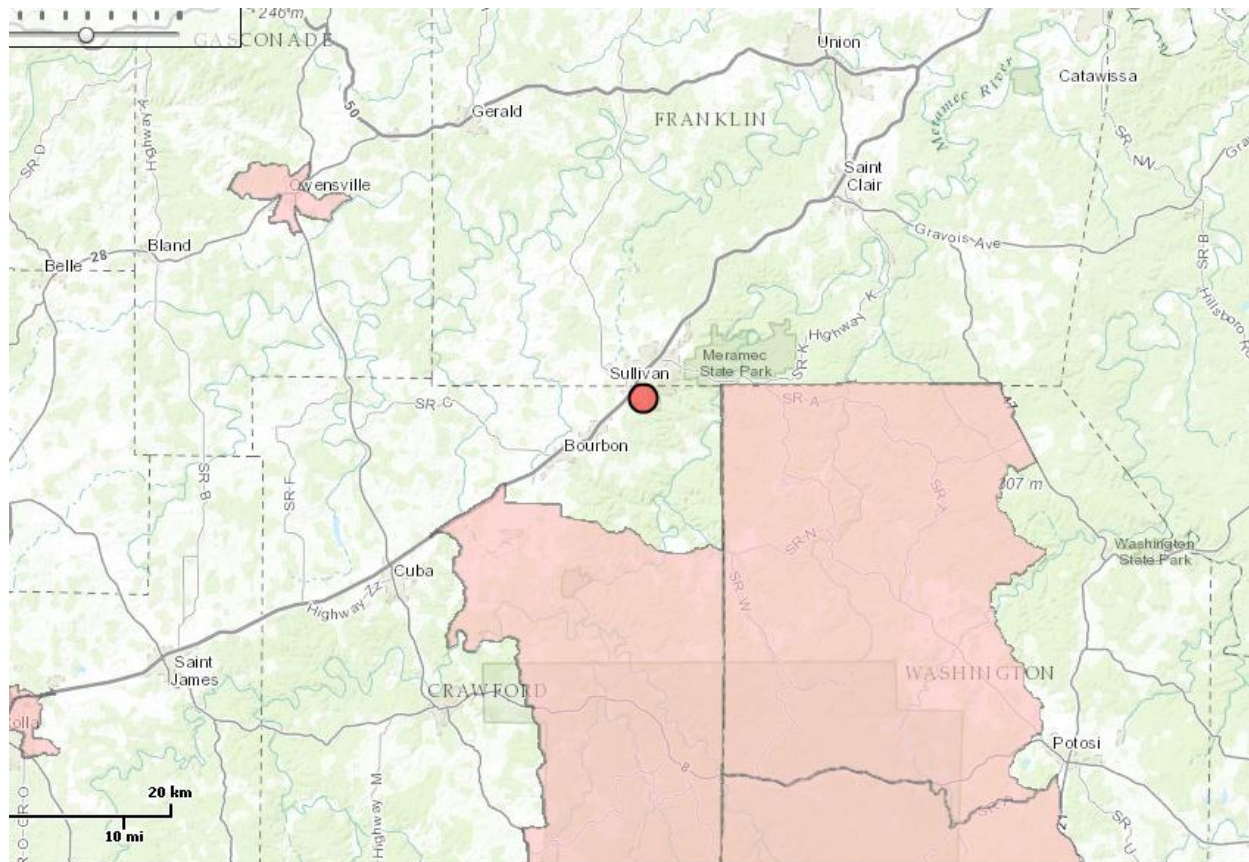
Source: MO 2011 County Level Study

| Healthy Lifestyles  | Crawford Co | Status | MO | U.S. |
|---|-------------|--------|----|------|
| Farmers Market Density (per 1,000 pop) ('11)              | 0.0         | ●      | -  | 0.02 |
| Grocery Store Density (per 1,000 pop) ('09)               | 0.13        | ●      | -  | 0.21 |
| SNAP Certified Stores (per 1,000 pop) ('10)               | 0.7         | ●      | -  | 0.9  |
| Fast Food Restaurant Density (per 1,000 pop) ('09)        | 0.42        | ●      | -  | 0.57 |
| Households without a Car and >1 Mile from a Grocery Store | 3.4%        | ●      | -  | 2.6% |
| Low-Income and >1 Mile from a Grocery Store ('10)         | 1.9%        | ●      | -  | 6.2% |
| Recreation and Fitness Facilities (per 1,000 pop) ('09)   | 0.04        | ●      | -  | 0.07 |

Source: HCI (US Dept. of Agriculture Food Environment Atlas)

|                     |                    |                    |
|---------------------|--------------------|--------------------|
| ● Better than MO/US | ● Similar to MO/US | ● Worse than MO/US |
|---------------------|--------------------|--------------------|

According to the United States Department of Agriculture, a food desert is defined as a low-income census tract where a substantial number or share of residents has low access to a supermarket or large grocery store. As pictured on the map below in red, the southeast portion of Crawford County qualifies as a food desert.



Source: 2013 USDA Food Access Research Atlas

## **IV. PRIORITIZATION OF HEALTH NEEDS**

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### ***A. INTERNAL WORK GROUP PRIORITIZATION MEETINGS***

The Internal Work Group communicated via e-mail and met four times to analyze primary and secondary data and complete the final priority ranking for Missouri Baptist Sullivan Hospital's CHNA. BJC's Community Benefit Manager attended each Internal Work Group Meetings as a resource person for the team.

#### **MEETING 1**

Missouri Baptist Sullivan Hospital's Internal CHNA Work Group met initially in the fall of 2012 to select participants to invite to the external focus groups in January and February 2013.

#### **MEETING 2**

At the second Internal Work Group meeting, the assessment leader and Community Benefit Manager provided additional clarification on the CHNA prioritization process. Focus group results and access to the Healthy Communities Institute (HCI) website were shared with the Internal Work Group. Each team member was asked to review the primary focus group data on their own and then create his or her own list of the 10 most important health issues in Crawford County, based on the data review, experience working with the Crawford County population and level of concern. Team members were asked to bring this list to the third Internal Work Group Meeting.

#### **MEETING 3**

During its third meeting, the Internal Work Group created a preliminary health priority ranking. The assessment leader used nominal group technique to record each team member's top ten health priorities on a board in front of the group. The team then collaborated to consolidate this large list of priorities by topic area. When this process was complete, the Internal Work Group had a list of 12 priority health issues for Crawford County. Each team member was given a card and asked to privately rate each of the 12 health issues on a scale from 1 (low) to 5 (high), based on level of concern. Results were tallied on the board in front of the team, and ranked from the highest score to lowest score. The Internal Work Group's preliminary ranking is listed below in descending order, starting with the top priority issue:

1. Pediatric Psychiatry
2. Mental Health
3. Specialty Care
4. Obesity / Healthy Lifestyles
5. Substance Abuse
6. Dental Care
7. Cancer

8. Chronic Disease (not including cancer and obesity related illnesses)
9. Access to Care
10. Medication Assistance
11. Urgent Care
12. Air Quality

The Internal CHNA Team wanted to gather further input from physicians and hospital leadership. After the meeting, leadership and physicians were given the top 5 health topics from the team's preliminary ranking and asked to rank these 5 topics on a scale of 1(low) to 5 (high) based on seriousness of the health issue.

## MEETING 4

Prior to the final Internal Work Group Meeting, the assessment leader collected surveys from hospital leadership and employed hospital physicians. Results were tallied separately for each group. The assessment leader also presented the Internal Work Group with Priorities MICA rankings for Crawford County for both diseases and risk factors from the Missouri Department of Health and Senior Services. MICA priority rankings (shown below) were generated without the selection of any specific criteria.

| <b>Prioritization of Selected Diseases and Conditions in Crawford County</b> |                             |                     |
|--|-----------------------------|---------------------|
| <b>Sex: Both Sexes, Race: All Races, Age Group: All Ages</b>                 |                             |                     |
| <b>Disease/Condition</b>   | <b><a href="#">Rank</a></b> | <b>Total Weight</b> |
| <b>Chronic Obstructive Pulmonary Disease (COPD)</b>                          | <b>1</b>                    | <b>324.5</b>        |
| <b>Heart Disease</b>   | <b>2</b>                    | <b>322.5</b>        |
| <b>Motor Vehicle Accidents</b>   | <b>3</b>                    | <b>294.5</b>        |
| <b>Alcohol- and Substance-Related</b>  | <b>4</b>                    | <b>291.0</b>        |
| <b>Lung Cancer</b>   | <b>5</b>                    | <b>269.0</b>        |
| <b>Stroke/Other Cerebrovascular Diseases</b>                                 | <b>6</b>                    | <b>266.5</b>        |
| <b>Diabetes</b>  | <b>7</b>                    | <b>265.0</b>        |
| <b>Falls</b>   | <b>8</b>                    | <b>264.0</b>        |
| <b>Arthritis/Lupus</b>   | <b>9</b>                    | <b>253.0</b>        |
| <b>Suicide and Self-Inflicted Injury</b>                                     | <b>10</b>                   | <b>251.5</b>        |
| <b>Pneumonia and Influenza</b>   | <b>11</b>                   | <b>249.0</b>        |
| <b>Infant Health Problems</b>  | <b>12</b>                   | <b>244.0</b>        |

*Source: Priorities MICA (2013)*



## Prioritization of Selected Risk Factors in Crawford County

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

| Risk Factor                                   | Rank | Total Weight |
|---|------|--------------|
| Mother Overweight                             | 1    | 56.5         |
| Smoking                                       | 2    | 56.5         |
| No Exercise                                   | 3    | 55.5         |
| Obese (>30 BMI)                               | 4    | 54.5         |
| No Mammography age 40 and older               | 5    | 52.5         |
| No Cervical Cancer Screening age 18 and older | 6    | 51.5         |
| Out-of-Wedlock Births                         | 7    | 50.5         |
| High Blood Pressure                           | 8    | 50.5         |
| High Cholesterol age 35 and older             | 9    | 49.5         |
| Smoking During Pregnancy                      | 10   | 48.5         |
| No Health Insurance for ER Visits             | 11   | 48.0         |
| Child Abuse/Neglect                           | 12   | 39.5         |

Source: Priorities MICA (2013)

Because the team was working with rankings from 5 different sources, and each ranking used different terminology, the Internal Work Group decided to color code health issues from each individual ranking by topic to visualize trends.

### Health Priority Rankings (Color coded by category)

| Rank | Focus Group        | MICA Diseases        | MICA Risk Factors    | MBSH Internal Team    | MBSH Leadership | MBSH Physicians |
|------|--------------------|----------------------|----------------------|-----------------------|-----------------|-----------------|
| 1    | Access             | COPD                 | Mother Overweight    | Pediatric Psych       | Substance Abuse | Pediatric Psych |
| 2    | Dental Care        | Heart Disease        | Smoking              | Mental Health         | Mental Health   | Specialty Care  |
| 3    | Mental Health      | Motor Vehicle Acci   | Obese                | Specialty Care        | Obesity         | Mental Health   |
| 4    | Pediatrics         | Alcohol and Substa   | No Mammogram         | Obesity               | Pediatric Psych | Obesity         |
| 5    | Substance Abuse    | Lung Cancer          | No Cervical Cancer   | Substance Abuse       | Specialty Care  | Substance Abuse |
| 6    | Cancer             | Stroke/Cerebrovasc   | Out of Wedlock birth | Dental                |                 |                 |
| 7    | Health Literacy    | Diabetes             | High Blood Pressure  | Cancer                |                 |                 |
| 8    | Chronic Conditions | Falls                | High Cholesterol 35  | Chronic Disease       |                 |                 |
| 9    | Obesity            | Arthritis/Lupus      | Smoking During Pre   | Access                |                 |                 |
| 10   | Smoking            | Suicide and Self-Inf | ER - No Health Insur | Medication Assistance |                 |                 |
| 11   |                    | Pneumonia and Infl   | Child Abuse/Neglect  | Urgent Care           |                 |                 |
| 12   |                    | Infant Health        | Low Birth Weight     | Air Quality           |                 |                 |

The Internal Work Group collaborated through open discussion to create the following color coded categories:

| Health Category        | Explanation   |
|------------------------|---|
| Access to Care         | Includes issues and risk factors related to accessing medical treatment, including lack of health insurance, limited availability of services and inability to afford care or treatment.                                  |
| Air Quality            | Includes pollution and indoor air quality.  |
| Cancer                 | Includes incidence rates, death rates, screenings and treatment for all types of cancer.  |
| Chronic Disease        | Includes COPD, asthma, arthritis/lupus, and all other chronic diseases <u>except</u> cancer, cardiovascular disease, obesity and diabetes.  |
| Dental Care            | Includes limited availability of dental care and all dental health issues.  |
| Health Literacy        | Includes patient's ability to read and understand health information, including doctor's instructions, health terminology, medication instructions, etc.  |
| Healthy Lifestyles     | Includes both diseases and risk factors impacted by nutrition and fitness, including obesity and overweight, diabetes, high blood pressure, high cholesterol, heart disease and stroke.                                   |
| Infant/Maternal Health | Includes all risk factors and outcomes related to the health of pregnant mothers and children up to 1 year in age.  |
| Infectious Disease     | Includes sexually transmitted diseases, pneumonia and influenza.  |
| Mental Health          | Includes suicide, self-inflicted injury, suicidal ideation, depression, bipolar disorder, autism, anxiety, developmental disorders, schizophrenia and other adult mental disorders. Pediatric psychiatry is not included. |
| Pediatric Care         | Includes risk factors for at risk youth, availability of pediatricians and pediatric care. Pediatric psychiatry is not included.  |
| Pediatric Psychiatry   | Includes limited availability of psychology and psychiatry services for pediatric patients.   |
| Public Safety          | Includes falls, unintentional injuries, motor vehicle accidents, domestic violence, rape, child and elder abuse and neglect, and crime.   |
| Substance Abuse        | Includes cigarette smoking, other tobacco use, alcohol abuse, prescription drug abuse, illicit drug use and limited resources available for alcohol and substance addiction treatment and recovery.                       |

A detailed description of the methodology used by the Internal Work Group to assign weighted values to each health topic and calculate the final CHNA health priority rankings is included in Appendix F of this report.

## ***B. FINAL CHNA HEALTH PRIORITY RANKING***

The priority health need areas identified by external community experts, the hospital's Internal Work Group and through secondary data review were assigned a weighted score based on their ranking and the number of times each topic was mentioned.

The end result is Missouri Baptist Sullivan Hospital's final health priority ranking for Crawford County (listed in order from highest to lowest priority):

1. Healthy Lifestyles
2. Substance Abuse
3. Access to Care
4. Mental Health
5. Cancer
6. Pediatric Psychiatry
7. Chronic Disease
8. Public Safety and Dental Care
9. Infant and Maternal Health
10. Pediatric Care
11. Health Literacy
12. Infectious Disease
13. Air Quality

## V. IMPLEMENTATION PLAN

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### A. ISSUES TO BE ADDRESSED BY MISSOURI BAPTIST SULLIVAN HOSPITAL

Missouri Baptist Sullivan Hospital's leadership team was approached with the final CHNA Priority Ranking and asked for guidance on which issues MBSH is able to address through community benefit programs, considering time, staffing, feasibility and available community and hospital resources.

The hospital's leadership team decided to address the top 5 needs in the Health Priority Ranking, with the exception of substance abuse.

### **HEALTHY LIFESTYLES**

#### **1. Nutrition Education and Outreach**

##### **Rationale:**

Lifestyles that include balanced nutrition and healthy weight have been proven to reduce the risk of conditions such as diabetes, cardiovascular disease, obesity, cancer and stroke (Source: CDC). In Crawford County, incidence rates for diabetes, cancer and heart disease are higher than state and national rates, and 63.7% of the population is considered "overweight" or "obese" (Source: HCI). There is a need to promote healthier lifestyle choices in the community to reduce the prevalence and impact of chronic conditions related to nutrition and weight.

In response to this need, the hospital has formed a partnership with several local organizations called the Healthy Sullivan Coalition. The purpose of this coalition is to improve health in the Sullivan community through education and outreach about healthy lifestyle choices. In order to do this, it is necessary to make healthy options available, accessible, affordable and safe. Along with accessibility, it is also important to increase knowledge and skills to help the target population achieve greater self-efficacy in choosing or preparing healthy meals. This includes assisting low income community members access fresh produce through the USDA Supplemental Nutrition Assistance Program (SNAP).

The number and type of healthy lifestyle programs implemented by the Healthy Sullivan Coalition will be determined based on needs and interests in the community on a year by year basis. Educational programs will be implemented by subject matter experts, including hospital clinicians, health educators, master gardeners, University of Missouri Extension educators, etc. Potential program topics include: nutrition (general or disease specific), gardening, food preservation, meal preparation, taste testing and healthy grocery shopping.

**Program Goals:**

1. Increase local access to and consumption of fresh fruits and vegetables.

**Program Objectives:**

1. Collect data from the 2013 Sullivan Farmers Market season to establish a baseline average number of fresh fruit and vegetable vendors per week at the Sullivan Farmers Market.
2. Between 2014 and 2016, increase the average number of fresh fruit and vegetable vendors each year at the Sullivan Farmers Market from the previous year's average.
3. By the beginning of the 2015 market season, implement a SNAP payment option at the Sullivan Farmers Market to promote use of the market by low income individuals.
4. In 2013, establish a baseline of knowledge gained in nutrition, gardening and cooking class participants using pre- and post-test results.
5. Between 2014 and 2016, increase the percentage of nutrition, gardening and cooking class participants who show an increase in knowledge from pre-test results to post-test results each year from the previous year's percentage.

**Action Plan:** Healthy Sullivan Coalition Outreach Programs

Missouri Baptist Sullivan Hospital will partner with the organizations listed below as part of the Healthy Sullivan Coalition to achieve program goals and objectives:

- City of Sullivan
- Sullivan School District
- Sullivan Area Chamber of Commerce
- Meramec Community Mission and Food Pantry

The hospital's health educator will facilitate Healthy Sullivan Coalition meetings and provide technical assistance to coalition partners. Missouri Baptist Sullivan Hospital will promote coalition programs through advertising in local newspapers, newsletters, radio ads, flyers, signage and billboards. The hospital will assist coalition partners in implementation of healthy lifestyle programs by offering its facilities for programs, sharing its clinical expertise, and providing financial resources through a Missouri Foundation for Health grant. These resources include signage, supplies and equipment. In addition, the hospital will assist with policy development for coalition projects. Finally, the hospital will assist in program evaluation by tracking data needed to measure program objectives, completing all grant interim and financial reports, and developing pre- and post-test measures for coalition sponsored programs.

To meet Objectives 1, 2 and 3, coalition partners will collaborate to implement the following program:

- Sullivan Farmers Market: the City of Sullivan will provide a location for the market, the hospital will fund and promote the program, and the Sullivan Area Chamber of Commerce will manage the weekly operations of the market. Partners have collaborated in 2013 to draft by-laws to govern Sullivan Farmers Market operations.

The baseline average number of fresh fruit and vegetable vendors at the Sullivan Farmers Market is currently 1 per week. Healthy Sullivan Coalition partners will collaborate to increase this number through policy development and implementation, communication with the local media, recruiting, etc. The coalition will also research options for an electronic benefit transfer (EBT) scanner or other payment system for community members receiving assistance through the federal Supplemental Nutrition Assistance Program (SNAP). This option will help low income families access fresh produce from the Sullivan Farmers Market by 2015, as indicated in the program objectives.

To meet Objectives 3 and 4, coalition partners will collaborate to implement the programs listed below:

- Community Teaching Garden: the City of Sullivan will provide a location and labor to construct the garden, the hospital will fund and promote utilization the garden, and the Sullivan Area Chamber of Commerce will manage the volunteers and operations for the garden each growing season. This space will be used for education and increasing community access to garden space.
- Gardening, Nutrition and Cooking Classes: Knowledge and skill based programs will be implemented based on input from coalition partners and the community. Coalition partners will work together to find facilities, instructors and curricula for programs. The hospital will fund, promote and evaluate programs.
- Health Loaning Library: The hospital will purchase and store nutrition teaching aids that can be used for educational programs and displays in community settings.

## **Evaluation**

All educational programs will be evaluated with a pre- and post-test completed by participants to measure any increase in knowledge for program objectives. The coalition will also track the number of programs implemented and the number of participants reached to evaluate program impact.

## **2. Obesity-related Disease Screenings and Education**

### **Rationale:**

In 2011, 17.3% of adults in Crawford County had diabetes, 51.3% of adults over 35 had high cholesterol, 39.9% of the population had high blood pressure, and 63.7% of the population was considered “overweight” or “obese.” In addition, the rates of ER visits for stroke, heart disease

and diabetes among Crawford County residents were significantly higher Missouri's rates. Death rates for stroke and heart disease were also higher than state rates (Source: HCI).

Fortunately, these serious health issues can be positively impacted by proper nutrition, regular physical activity and maintaining a healthy weight. The rates above, coupled with lower income and insured rates in Crawford County, prove there is a community need for free cardiovascular and diabetes screenings. Such screenings allow for detection of these health issues in low income individuals who may not have a primary care physician. They also provide a teachable moment and opportunity for follow up between clinicians and those at risk for or suffering from diabetes and cardiovascular disease.

Because of high rates of obesity and obesity-related illness and limited access to free screenings, Missouri Baptist Sullivan Hospital will continue to implement an annual Community Health and Wellness Fair. Free screening programs offered at the health fair are needed so that community members can know their numbers and make necessary lifestyle changes to support good health.

#### **Program Goals:**

1. Reduce obesity-related diseases in Crawford County through screenings and education.

#### **Program Objectives:**

1. MBSH will continue to hold a Community Health and Wellness Fair at Sullivan High School each year.
2. By May 15, 2014, adopt a policy to be implemented at the 2014 Community Health and Wellness Fair to follow up individuals whose free screening results are abnormal.

#### **Action Plan: Annual Community Health and Wellness Fair**

Each November, Missouri Baptist Sullivan Hospital partners with the local school district to implement a Community Health and Wellness Fair. This event is well advertised to the public and usually draws approximately 500 community members for free health screenings, flu shots, educational displays, presentations, etc.

Obesity-related screenings offered include blood glucose, blood pressure, lipid panel and body mass index (BMI). The hospital will also have educational booths with clinical dietitians, cardiac nurses, physical therapists, personal trainers and health educators. These professionals will administer screenings and provide information and follow up on how nutrition, weight and exercise impact obesity-related illness.

A policy for following up on abnormal obesity-related screening results is currently under development for implementation in 2014. This will help the hospital establish a baseline and measure success of its screenings.

#### **Evaluation:**

Missouri Baptist Sullivan Hospital is currently in the process of creating a policy to provide follow up with individuals who receive abnormal screening results at the annual Community Health and Wellness Fair. This policy will increase the effectiveness of free obesity-related screenings and outline measures for evaluating success.

Hospital staff will also track the number and type of educational booths and the number of encounters at free booths and screenings offered at the Community Health and Wellness Fair each year.

### **3. Physical Activity Education and Outreach**

#### **Rationale:**

Lifestyles that include regular physical activity have been proven to reduce the risk and negative impact of diabetes, cardiovascular disease, obesity, cancer and stroke (Source: CDC). Prevention and management of such conditions can increase overall health and quality of life.

The percentage of Crawford County residents battling these conditions is high when compared to state percentages. In 2011, 32.2% of Crawford County residents reported they had no leisure time for physical activity, which was significantly higher than the state percentage. While 53.7% of Missouri residents in 2011 reported using sidewalks in their neighborhoods, only 22.6% of Crawford County residents reported utilizing neighborhood sidewalks. This gap is partly due to the rural geography of Crawford County. In 2011, only 11.2% of residents reported having roads with shoulders for biking, compared with 31.6% of Missouri residents (Source: MO 2011 County Level Study).

In 2011 and 2012, the City of Sullivan replaced or improved many of the city's roads and sidewalks. The Healthy Sullivan Coalition wants to utilize this asset to encourage safe use of the city's streets and sidewalks by pedestrians and bicyclists.

#### **Program Goals:**

1. Increase physical activity by making Sullivan, Missouri a safe walkable, bikeable community.

#### **Program Objectives:**

1. By May 2014, establish a baseline of how many students walk or bike to participating schools.
2. Between 2014 and 2016, increase the number of students who walk or bike to participating schools by 1% from the previous year.
3. In 2013, establish a baseline of knowledge gained in bike and pedestrian safety class participants using pre- and post-test results.
4. Between 2014 and 2016, increase the percentage of bike and pedestrian safety class participants who show an increase in knowledge from pre-test results to post-test results each year from the previous year's percentage.



4. Between 2014 and 2016, provide at least one educational booth promoting free bike and pedestrian safety outreach programs at the annual Community Health and Wellness Fair.

#### **Action Plan: Healthy Sullivan Coalition Outreach Programs**

Missouri Baptist Sullivan Hospital will partner with the organizations listed below as part of the Healthy Sullivan Coalition to achieve program goals and objectives:

- City of Sullivan
- Sullivan School District
- Sullivan Area Chamber of Commerce
- Meramec Community Mission and Food Pantry

The hospital's health educator will facilitate Healthy Sullivan Coalition meetings and provide technical assistance to coalition partners. Missouri Baptist Sullivan Hospital will promote coalition programs through advertising in local newspapers, newsletters, radio ads, flyers, signage and billboards. The hospital will assist coalition partners in implementation of healthy lifestyle programs by offering its facilities for programs, sharing its clinical expertise, and providing financial resources through a Missouri Foundation for Health grant. These resources include signage, supplies and equipment. In addition, the hospital will assist with policy development for coalition projects. Finally, the hospital will assist in program evaluation by tracking data needed to measure program objectives, completing all grant interim and financial reports, and developing pre- and post-test measures for coalition sponsored programs.

To meet Objectives 1 and 2, coalition partners will collaborate to implement the following program:

- Walking School Bus: A walking school bus is a program in which trained adults walk students to school along designated routes. The Sullivan School District will survey school families, examine current bus routes, recruit volunteers and host trainings for this program. The hospital will promote the program, assist the school with policy development to support the program, and provide funds for volunteer background checks and program supplies. The City of Sullivan will assist in designing walking and biking route maps. The city will also provide input on which routes and sidewalks are safest for the walking school bus.

The Sullivan School District will establish a baseline for how many students walk or bike to participating schools during the spring 2014 semester. If additional schools choose to participate, a baseline will be established for each school as they enter the program. Pilot Walking School Bus days began during the 2013 Sullivan School District Summer School program. Additional pilot days will be implemented during the fall 2013 school semester. Full implementation of the Walking School Bus program will begin in the fall of 2014, after necessary research, planning and training is complete during the spring 2014 school semester.

To meet Objectives 3, 4 and 5, coalition partners will collaborate to implement the following program:

- Bike and Pedestrian Safety Programs and Trainings: The number and type of bike and pedestrian safety education programs will be determined by the Healthy Sullivan Coalition based on needs and interests in the community on a year by year basis. Implementation of these programs will begin in the fall of 2013. Educational programs will be implemented by subject matter experts, including hospital clinicians, health educators, police officers, certified bicycle safety instructors, etc.

#### **Evaluation:**

Each year, walking and biking data will be collected by the Sullivan School district to measure progress toward the program's objectives.

All educational programs and trainings will be evaluated with a pre- and post-test to measure learning outcomes for program objectives. The coalition will also track the number and type of programs implemented and the number of participants reached to evaluate program impact.

### **ACCESS TO CARE**

#### **Rationale:**

Several factors contribute to lower access to health care in rural areas like Crawford County, including geography, fewer primary care providers and health care facilities per capita and a lower income population. In 2011, 31.1% of Crawford County residents between the ages of 18 and 64 could not get needed medical care in the last 12 months. This percentage is higher compared to Missouri's percentage of 23.7 in 2011. Also in 2011, 12% of Crawford County residents reported that they had no insurance coverage. This percentage is also higher when compared to the state percentage for no insurance in 2011, which is 8.9%. Assistance is needed for low income, uninsured or underinsured patients to access needed health services, medical equipment and prescription medication (Source: HCI).

In response to these issues, the Missouri Baptist Sullivan Hospital (MBSH) Foundation initiated CAMP in 2011. CAMP stands for Community Assisting Medical Patients, and as the name suggests, this fundraiser is a community undertaking. Local groups and businesses from the community form teams, who hold a variety of fundraisers throughout the community. Individual teams can designate funds to help a specific set of patients – for example cancer or heart disease patients, or can contribute to the general fund for patients with any kind of diagnosis.

Funds raised by CAMP are managed by the MBSH Foundation Board. Half of funds raised each year through the Foundation Fundraising Committee are used for projects within MBSH. The other half of funds raised go into a restricted account for CAMP to help local patients with

medical expenses. The hospital manages the administrative aspects of this outreach program, which include planning meetings, processing donations and requests for assistance, dispersing funds to vendors, following up with applicants, etc.

Missouri Baptist Sullivan Hospital has its own team that raises funds for CAMP separately from fundraisers sponsored by other community organizations. From 2011-2012, CAMP raised a total of \$45,000. During this time, \$21,304.91 has been used to help 38 patients. CAMP is a great example of the community coming together to help its own. With continued community support, CAMP is becoming a staple of public service in our community.

#### **Program Goals:**

1. Improve local resident's ability to access and receive health care.

#### **Program Objectives:**

1. Between 2014 and 2016, continue to provide funds for approved medical expenses for at least 10 patients per year through CAMP.
2. Between 2014 and 2016, the hospital will raise at least \$5,000 per year to improve local resident's ability to access and receive health care through CAMP assistance.
3. Maintain existing financial counseling program to assist low income patients in signing up for eligible financial aid programs.
4. Between 2014 and 2016, provide access to 300 free flu shots per year at MBSH's Community Health and Wellness Fair.

#### **Action Plan: Community Assisting Medical Patients (CAMP)**

Patients from the communities located in Missouri Baptist Sullivan Hospital's primary service area who meet the qualifications for financial assistance can request up to \$500 to help with bills for durable medical equipment, pharmacy costs, or other health care related expenses. Requests are processed primarily through Missouri Baptist Sullivan Hospital's Social Services department. A physician order must be submitted for the needed service, and funds are paid directly to the vendor of the equipment or service.

#### **Action Plan: Financial Assistance Program**

Missouri Baptist Sullivan Hospital will also address the needs and disparities related to accessing health care through maintenance of its free Financial Assistance Program, which assists over 100 low income, underinsured or uninsured patients per month enroll in financial assistance programs for which they are eligible.

#### **Action Plan: Annual Community Health and Wellness Fair**

Missouri Baptist Sullivan Hospital will utilize the same annual Community Health and Wellness Fair held at Sullivan High School to provide community access to 300 free flu shots. Currently, there are no other organizations which provide free flu shots in the Sullivan community or surrounding area. This event is well advertised in Crawford County, and usually draws about 500 participants each year.

#### **Evaluation:**

Hospital staff process all CAMP requests, track the number of applicants, the amount of donations received each year, the value and type of assistance provided, and the dollar amount of assistance provided to low income community members. This information will be used to measure progress toward the programs objectives.

The hospital's staff and contract financial counselors track the number of encounters with patients through the Financial Assistance Program on a monthly basis, as well as the level of financial assistance these patients are eligible to receive.

The hospital's Infection Prevention department will track and record the number of free flu shots given each year at the Community Health and Wellness Fair.

## **MENTAL HEALTH**

#### **Rationale:**

Limited mental health resources exist locally, and few psychiatrists practice in Crawford County. Low income, underinsured and uninsured community members have trouble accessing needed psychiatric services and medications due to cost and availability. While the hospital operates an inpatient geriatric psychiatry program, there is a lack of beds available for patients under the age of 50 requiring inpatient psychiatric treatment.

In 2010, the rate of ER visits in Crawford County due to mental disorders was 15.2 (per 1,000), which is higher than Missouri's rate of 11. In 2009, age-adjusted death rate due to self-inflict injury for ages 15-19 in Crawford County was 16.7 (per 100,000), which is significantly higher than Missouri's rate of 9.1. Death rates due to self-inflicted injury for ages 20-34 and 35-64 are also higher when compared with Missouri rates (Sources: HCI, MICA).

In response to the lack of mental health services in its community, Missouri Baptist Sullivan Hospital partnered with Lifespan Counseling, LLC in 2013 to provide a free grief counseling support group.

#### **Program Goals:**

1. Increase and support community resources for mental health.

#### **Program Objectives:**

1. Between 2014 and 2016, maintain existing mental health support group program, holding at least one free support group per year at Missouri Baptist Sullivan Hospital.
2. By May 15, 2014, develop a plan to evaluate the success of annual support groups and track progress.

#### **Action Plan: Mental Health Support Group**

The hospital provides the location for support groups and helps advertise this free service, and Lifespan Counseling, LLC provides a licensed counselor to conduct the support group sessions at no cost to participants. The hospital will commit to providing space for at least one mental health support group per year. This service is not limited to the topic of grief support if other needs and opportunities arise.

#### **Evaluation:**

Missouri Baptist Sullivan Hospital will create an evaluation plan by May 15, 2014 to measure change or improvement in individuals who participate in its free support groups. Missouri Baptist Sullivan Hospital will track the number and type(s) of mental health support group(s) offered each year. Lifespan Counseling, LLC will track the number of participants at these support groups and assist with gathering data for evaluation.

## **CANCER**

#### **Rationale:**

Cancer outcomes can be positively impacted by early detection and treatment. There is a need to raise awareness about cancer prevention and cancer screenings, as well as a need to help low income, underinsured or uninsured community members access cancer screenings and treatments. While CAMP for a Cause and the MBSH Financial Assistance Program are available to help patients to access medications, treatments and doctor's visits, this program focuses on providing free cancer screenings and education at the hospital's annual Community Health and Wellness Fair.

Missouri Baptist Sullivan Hospital will continue to implement an annual Community Health and Wellness Fair for its low income community. Free cancer screening programs offered at the health fair are needed so that community members can know their risk and receive timely follow up and treatment.

#### **Program Goals:**

1. Promote early detection of cancer in a low income community through screenings and education.

#### **Program Objectives:**

1. MBSH will continue to hold a Community Health and Wellness Fair at Sullivan High School each year.
2. By May 15, 2014, adopt a policy to be implemented at the 2014 Community Health and Wellness Fair to follow up individuals whose free cancer screening results are abnormal.

**Action Plan: Annual Community Health and Wellness Fair**

Missouri Baptist Sullivan Hospital will utilize the same annual Community Health and Wellness Fair held at Sullivan High School to provide community access to cancer screenings. This event is well advertised in Crawford County, and usually draws about 500 participants each year.

Missouri Baptist Sullivan Hospital provides free mammograms, prostate-specific antigen (PSA) screenings, and prostate exams at its annual Community Health and Wellness Fair. To meet Objective 2, the hospital will examine its current screening program and create a plan to improve it through follow up with patients with cancer or cancer risk.

**Evaluation:**

Hospital staff will track the number and type of free cancer screenings performed at the annual Community Health and Wellness Fair to measure progress toward program objectives.

A policy for following up on abnormal cancer screening results is currently under development for implementation in 2014. This will help the hospital establish a baseline and measure success of its screenings.

## **PUBLIC SAFETY**

**Rationale:**

While public safety was ranked number eight <sup>in</sup> the CHNA Health Priority Ranking, Missouri Baptist Sullivan Hospital has chosen to maintain its presence at community events sponsored by non-profits who cannot afford to pay for first aid and athletic training services. The hospital is the only local organization that provides this community benefit.

**Program Goal:**

1. Increase and promote public safety at community events.

**Program Objectives:**

1. Between 2014 and 2016, continue to provide free first aid and athletic training services each year at 100% of Sullivan High School home football games.
2. Maintain a presence at other non-profit community events to provide free first aid services, including but not limited to local picnics, fairs, etc.

**Action Plan: Provide First Aid Services at Community Events**

Missouri Baptist Sullivan Hospital will continue to provide emergency medical technicians, paramedics, personal trainers or other clinical staff at Sullivan High School home football games and other community events to administer free first aid services.

**Evaluation:**

Staff providing first aid and personal training services at community events will track and report the number and type of events, as well as the number of individuals who receive the services.

## ***B. ISSUES THAT WILL NOT BE ADDRESSED BY MISSOURI BAPTIST SULLIVAN HOSPITAL***

### **SUBSTANCE ABUSE**

Missouri Baptist Sullivan Hospital operates an adult medical stabilization program called New Vision for alcohol and opiate addiction. This service is billed through insurance. At the current time, the hospital does not possess the staff and resources needed to offer free behavioral health services to the community. The hospital is exploring opportunities to partner with other organizations to expand the free resources available in the future because of the great need for these services in Crawford County.

### **PEDIATRIC PSYCHIATRY**

Missouri Baptist Sullivan Hospital currently has insufficient resources and facilities to address this need. There are a limited number of practicing psychiatrists in the area, which makes addressing this need especially challenging. Organizations are in place to address mental health issues in children, although some of these organizations are in neighboring communities:

- Child Advocacy Center (CAC)
- Court Appointed Special Advocates (CASA)
- Crider Center
- St. Louis Children's Hospital

### **CHRONIC DISEASE**

Missouri Baptist Sullivan Hospital will address obesity related illness, diabetes and cardiovascular disease through its Healthy Lifestyles education, screenings and outreach. For CHNA purposes, these diseases were categorized under Healthy Lifestyles (see table on page 31) during the CHNA priority ranking process because they can be impacted through proper nutrition and regular physical activity. All other chronic conditions are categorized under Chronic Disease. The hospital also offers monthly lectures on a variety of topics, which sometimes include other chronic disease.

### **INFANT/MATERNAL HEALTH**

Missouri Baptist Sullivan Hospital currently has insufficient resources to address the socioeconomic factors and other risk factors that contribute to poor infant and maternal health outcomes. However, the hospital is currently exploring the possibility of providing free childbirth education classes in the future.



**DENTAL CARE**

Missouri Baptist Sullivan Hospital does not provide dental services. Patients seen in its emergency department for dental caries are referred to local dental providers. However, Crawford County lacks providers who accept uninsured or underinsured patients. The hospital realizes that lack of dental services for low income, underinsured or uninsured community members is a significant need. Unfortunately, the hospital does not have the resources, staffing or community support to address this need at the present time.

**PEDATRICS**

While Missouri Baptist Sullivan Hospital recently hired a staff pediatrician who accepts Medicaid patients, there are few other pediatricians in the area. The hospital does not have sufficient resources to expand its pediatric program at this time. Patients in need of services unavailable in Sullivan can be referred to St. Louis Children's Hospital.

**HEALTH LITERACY**

While Missouri Baptist Sullivan Hospital does not have sufficient resources for a formal health literacy program for patients, the hospital is currently looking into ways it can increase awareness about health literacy issues among its physicians and staff.

**INFECTIOUS DISEASE**

Missouri Baptist Sullivan Hospital does address infectious disease each year at its Community Health and Wellness Fair by giving administering free flu shots. The hospital also takes great care and pride in taking measures to prevent infections among its patients. However, the hospital lacks sufficient resources and community partnerships at this time to create an outreach program to address this need in a community setting.

## VI. SPECIFIC INPUT FROM THE CRAWFORD COUNTY DEPARTMENT OF HEALTH

**Health Department Representative:** Kim Wood Smith

**Title/Department Name:** Administrator, Crawford County Health Department

**Source of Need Information:** Written feedback obtained on January 8, 2013

**Public Health Department Identified Need #1:** High rates of smoking and diseases that are attributed to it

Because of limited resources, Missouri Baptist Sullivan Hospital will not be addressing this need at this time.

**Public Health Department Identified Need #2:** Lack of access to health services, especially those who make too much money to qualify for Medicaid but not enough to afford health insurance

Missouri Baptist Sullivan Hospital will address this issue by supporting CAMP for a Cause, a community effort that raises money to pay for needed medical expenses for those who cannot afford their care. The anticipated impact of this program is to pay for services for those who might not otherwise receive them.

It will measure its effectiveness by tracking the number of dollars that are raised and the number of patients who are supported.

The hospital will also support a free Financial Assistance Program to assist low income individuals enroll in financial assistance programs for which they are eligible. The anticipated impact is to identify programs for which individuals are eligible that they might not otherwise be aware.

They will measure the effectiveness of this program by tracking the number of individuals whom they support through this program.

**Public Health Department Identified Need #3:** Lack of public transportation to health services

This need will not be addressed by Missouri Baptist Sullivan Hospital because it is beyond the scope of services that the hospital provides.

**Public Health Department Identified Need #4:** Mental health issues

Missouri Baptist Sullivan Hospital will address this need by partnering with a local counseling center to provide free grief counseling for those in need. The hospital will also commit to provide space for at least one mental health support group per year.

The anticipated impact of this activity is to provide access to support groups to those who might not otherwise have them available. They will measure its impact by tracking the number

and types of mental health support groups that are offered each year.

## **VII. APPENDICES**

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### **APPENDIX A**

#### **BJC WORK GROUP LEADERS**

- Manager, BJC Market Research
- Director of Community Affairs, BJC HealthCare
- Community Benefits Manager, BJC HealthCare Communications
- Senior Planning Associate, BJC Strategic Planning
- Manager, Child Advocacy Outreach Program, St. Louis Children's Hospital
- Director, Child Advocacy and Outreach, St. Louis Children's Hospital

## APPENDIX B

### EXTERNAL FOCUS GROUP PARTICIPANTS & OBSERVERS

#### PARTICIPANTS

- |                   |  |
|-------------------|--|
| • Doris Hallam    | Lifespan Counseling Center (Sullivan)          |
| • Susie Howell    | Lifespan Counseling Center (Sullivan)          |
| • Cheryl McDowell | Parents as Teachers, Sullivan                  |
| • Bill Patt       | Steelville Ambulance District                  |
| • Lori Rego       | Sullivan Area Chamber of Commerce              |
| • Lee Ritter      | Parents as Teachers, Sullivan                  |
| • Liz Sabatino    | Meramec Community Mission (Sullivan)           |
| • Kim Wood Smith  | Crawford County Health Department              |
| • Franky Todd     | Public Administrator, Crawford County          |
| • Tanya Voss      | Asst. Superintendent, Sullivan School District |

#### OBSERVERS

- |   |   |
|---|---|
| 14. Angela Chambers (focus group facilitator) | BJC Market Research / BJC CHNA Work Group |
| 15. Mandy Gilman                              | MBSH New Hope                             |
| 16. Karley M. King                            | BJC HealthCare / BJC CHNA Work Group      |
| 17. Tony Schwarm                              | MBSH President                            |
| 18. Dr. Ravi Saripalli                        | BJC Medical Group                         |
| 19. Emily Zelch                               | MBSH Community Outreach                   |

**APPENDIX C****CRAWFORD COUNTY NEEDS ASSESSMENT WORKSHEET**

1. In your opinion, what are the three greatest health needs or challenges that exist within the Crawford County population?

1.)

2.)

3.)

2. To your knowledge, what resources are currently available in Crawford County for addressing each one of them? Who/what organization is trying to address them?

1.)

2.)

3.)

3. In your opinion where is the largest gap between an existing need and available services in Crawford County?

## APPENDIX D

### RESOURCES AVAILABLE (IDENTIFIED BY EXTERNAL FOCUS GROUP)

| <b><u>Need</u></b>  | <b><u>Resources</u></b>   |
|---|---|
| <b>Obesity in adults and children:</b>  | Crawford County Health Nurse  |
| - nutrition education: not enough understanding about what is a healthy diet  | Local physicians<br>Chamber of Commerce   |
| - healthy foods are also more expensive   | Schools<br>Missouri Baptist Mission<br>St. Louis Care Food Bank Coalition   |
|   |   |
| <b>Access</b>   |   |
| - to preventive health and maintenance services   | Head Start offers some resources as well as PAT   |
| - access to specialists such as orthopedics, cardiologists, geriatric medicine  | The elderly must get to St. Louis to see specialists.<br>– SMTS (Medicaid Transportation) available to Sullivan or Rolla<br>- patients must be helicoptered to Rolla and Washington counties for emergency ortho care |
| - access to health insurance especially for those who work for small business<br>- some people make too much for Medicaid but still can't afford health insurance |   |
| - There is a need for weekend, after-hours and urgent care.   | No known weekend, urgent or after-hours care in Sullivan or Crawford county<br>- the ER is overwhelmed by non-urgent cases, taking resources away from true emergencies   |
| - The cost of prescription medications is prohibitive for some people. This is especially an issue for those who require insulin supplies/pump supplies.          | Medicaid or Part D? No one seems to meet the need. St. Vincent DePaul (escript), Salvation Army (Mission), MoBap CAMP; nothing for pump supplies  |
|   |   |
| <b>Substance Abuse</b>  |   |
| - especially meth   | Seabrook House<br>Gateway Substance Abuse<br>Best Rehab Centers (all are local but hard to find when looking them up)   |
|   |   |
| <b>Dental Care</b>  | No identified resources for low income families   |
|   |   |
| <b>Mental Health</b>  |   |
| - issues among adults and children, especially depression and bipolar disorder  |   |
| - Need available beds and responsible care for stabilization and medication review  | New Hope: only for adults 55+; beds not always available; no beds for those 18 – 54 in Crawford county  |

|                                 |  |
|---------------------------------|--|
| - A safe house for abused women | Alive in Union; nothing in Crawford County |
|---------------------------------|--|

|   |   |
|---|---|
| <b>Health Care Needs of Children</b>  |   |
| - Children are not getting their immunizations because parents cannot afford it.  | Health department will no longer give shots if you have health insurance. |
|   |   |
| <b>Communication</b>  |   |
| - There is inconsistent communication between health care agencies and guardians. Health providers are not obtaining proper authorization from guardians before treating or transferring a patient. |   |
| <b>Healthful mindset</b>  |   |
| Individuals do not understand why it is important to make healthy choices and the consequences that result from their behaviors.  |   |
| <b>Lack of local trauma capabilities</b>  |   |
| - results in diversion away from local hospitals  |   |
| <b>Smoking</b>  |   |
| - contributes to so many other chronic conditions   |   |



## APPENDIX E

### FEEDBACK ON GREATEST GAPS BETWEEN NEEDS AND AVAILABLE RESOURCES

There is a lack of knowledge and understanding of what programs and services are available locally and how to access them. (3)

Those who need health education do not want to hear it. How do we get the right message to the right people? How do we create the case for change? (2)

Addressing mental health issues

Urgent care

Orthopedics – there is none in Crawford County. Patients must go elsewhere.

Lack of health insurance

## APPENDIX F

### PRIORITIZATION PROCESS: METHODOLOGY FOR CALCULATING WEIGHTED VALUES AND ESTABLISHING FINAL HEALTH PRIORITY RANKINGS

After categories were established and color coded, the Internal Work Group assigned a weighted value (2-13) to each row of the Health Priority Rankings table. The highest weighted value (13) was assigned to health topics ranked number one, and the lowest weighted value (2) was assigned to health topics ranked number twelve. Weighted values were then multiplied by the number of mentions for each health topic in that row.

For example, items given a number 1 ranking (row 1) were given the weighted value of 13. Access to Care was mentioned once in row one, so the weighted value of 13 was multiplied by 1 for a weighted score of 13 for access. Pediatric Psychiatry was mentioned twice in row one, so the weighted value of 13 was multiplied by 2 for a weighted score of 26. This process was repeated for each row of the table. Weighted scores from all rows were then tallied by health topic, giving a final weighted score for each health topic.

#### Weighted Value Calculations by Health Topic

| Row Number on Table | Weight | Access Mentions | Weighted Score | Dental Mentions | Weighted Score | Mental Mentions | Weighted Score | Pediatrics Mentions | Weighted Score | Substance Mentions | Weighted Score | Cancer Mentions | Weighted Score | Health Literacy Mentions | Weighted Score | Chronic Disease Mentions | Weighted Score | Nutrition/Fitness/Weight Mentions | Weighted Score | Public Safety Mentions | Weighted Score | Infectious Disease Mentions | Weighted Score | Infant/Mother Mentions | Weighted Score | Pediatric Psych Mentions | Weighted Score | Air Quality Mentions | Weighted Score |
|---------------------|--------|-----------------|----------------|-----------------|----------------|-----------------|----------------|---------------------|----------------|--------------------|----------------|-----------------|----------------|--------------------------|----------------|--------------------------|----------------|-----------------------------------|----------------|------------------------|----------------|-----------------------------|----------------|------------------------|----------------|--------------------------|----------------|----------------------|----------------|
| 1                   | 13     | 1               | 13             | 0               | 0              | 0               | 0              | 0                   | 0              | 1                  | 13             | 0               | 0              | 0                        | 0              | 1                        | 13             | 1                                 | 13             | 0                      | 0              | 0                           | 0              | 0                      | 0              | 2                        | 26             | 0                    | 0              |
| 2                   | 12     | 1               | 12             | 1               | 12             | 2               | 24             | 0                   | 0              | 1                  | 12             | 0               | 0              | 0                        | 0              | 0                        | 0              | 1                                 | 12             | 0                      | 0              | 0                           | 0              | 0                      | 0              | 0                        | 0              | 0                    | 0              |
| 3                   | 11     | 1               | 11             | 0               | 0              | 2               | 22             | 0                   | 0              | 0                  | 0              | 0               | 0              | 0                        | 0              | 0                        | 0              | 2                                 | 22             | 1                      | 11             | 0                           | 0              | 0                      | 0              | 0                        | 0              | 0                    | 0              |
| 4                   | 10     | 0               | 0              | 0               | 0              | 0               | 0              | 1                   | 10             | 1                  | 10             | 1               | 10             | 0                        | 0              | 0                        | 0              | 2                                 | 20             | 0                      | 0              | 0                           | 0              | 0                      | 0              | 1                        | 10             | 0                    | 0              |
| 5                   | 9      | 1               | 9              | 0               | 0              | 0               | 0              | 0                   | 0              | 3                  | 27             | 2               | 18             | 0                        | 0              | 0                        | 0              | 0                                 | 0              | 0                      | 0              | 0                           | 0              | 0                      | 0              | 0                        | 0              | 0                    | 0              |
| 6                   | 8      | 0               | 0              | 1               | 8              | 0               | 0              | 0                   | 0              | 0                  | 0              | 1               | 8              | 0                        | 0              | 0                        | 0              | 1                                 | 8              | 0                      | 0              | 0                           | 0              | 1                      | 8              | 0                        | 0              | 0                    | 0              |
| 7                   | 7      | 0               | 0              | 0               | 0              | 0               | 0              | 0                   | 0              | 0                  | 0              | 1               | 7              | 1                        | 7              | 0                        | 0              | 2                                 | 14             | 0                      | 0              | 0                           | 0              | 0                      | 0              | 0                        | 0              | 0                    | 0              |
| 8                   | 6      | 0               | 0              | 0               | 0              | 0               | 0              | 0                   | 0              | 0                  | 0              | 0               | 0              | 0                        | 0              | 2                        | 12             | 1                                 | 6              | 1                      | 6              | 0                           | 0              | 0                      | 0              | 0                        | 0              | 0                    | 0              |
| 9                   | 5      | 1               | 5              | 0               | 0              | 0               | 0              | 0                   | 0              | 0                  | 0              | 0               | 0              | 0                        | 0              | 1                        | 5              | 1                                 | 5              | 0                      | 0              | 0                           | 0              | 1                      | 5              | 0                        | 0              | 0                    | 0              |
| 10                  | 4      | 2               | 8              | 0               | 0              | 1               | 4              | 0                   | 0              | 1                  | 4              | 0               | 0              | 0                        | 0              | 0                        | 0              | 0                                 | 0              | 0                      | 0              | 0                           | 0              | 0                      | 0              | 0                        | 0              | 0                    | 0              |
| 11                  | 3      | 1               | 3              | 0               | 0              | 0               | 0              | 0                   | 0              | 0                  | 0              | 0               | 0              | 0                        | 0              | 0                        | 0              | 0                                 | 0              | 1                      | 3              | 1                           | 3              | 0                      | 0              | 0                        | 0              | 0                    | 0              |
| 12                  | 2      | 0               | 0              | 0               | 0              | 0               | 0              | 0                   | 0              | 0                  | 0              | 0               | 0              | 0                        | 0              | 0                        | 0              | 0                                 | 0              | 0                      | 0              | 0                           | 2              | 4                      | 0              | 0                        | 1              | 2                    | 0              |
| TOTALS              |        | 8               | 61             | 2               | 20             | 5               | 50             | 1                   | 10             | 7                  | 66             | 5               | 43             | 1                        | 7              | 4                        | 30             | 11                                | 100            | 3                      | 20             | 1                           | 3              | 4                      | 17             | 3                        | 36             | 1                    | 2              |
| Final Weighted Rank |        | 3               |                | 8               |                | 4               |                | 10                  |                | 2                  |                | 5               |                | 11                       |                | 7                        |                | 1                                 |                | 8                      |                | 12                          |                | 9                      |                | 6                        |                | 13                   |                |

The final step in establishing the top priority health issues in Crawford County was ranking health topics by their final weighted scores, from highest score (highest priority) to lowest score (lowest priority).

In the Weighted Value Calculations by Health Topic table above, the grey columns show the weighted scores for each topic by row.