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2014-2016 COMMUNITY HEALTH NEEDS ASSESSMENT

In cooperation with Messmer and Eitmann Foundation, Gasconade County Health Department, Montgomery County Heath Department, and Gasconade County R-1 Schools

Executive Summary

Hermann, Missouri was established in 1837 by some settling Germans. It is a rural river city along the banks of the great Missouri River. The town does bring in a lot of tourism especially during the heritage months of Oktoberfest and MaiFest. The town boasts many wineries, good eats, and quaint shops along Main Street. Hermann is considered to be quite beautiful and is filled with rolling hills, trees, and many winery vineyards. There are over 150 buildings on the National Register of Historic Places. The population of Hermann is about 2,435 people with a median age of 44.9 years, reported from the last census in 2011 (City-data.com, 2011).

This Community Health Needs Assessment (CHNA) began in April of 2013 and is on a recurrent 3 year cycle. The key partners involved are Hermann Area District Hospital, Gasconade County Health Department, Gasconade County R-1 School District, Messmer and Eitmann Foundation, and Montgomery Health Department. The sources utilized for public health input are the local county health departments. The process used to seek input from the medically underserved, chronically ill and low-income populations was a survey method (distributed at the county health departments, HADH clinics, and member mailing lists). The survey was developed by Missouri Ozarks Community Action (MOCA) members.

Missouri Hospital Association was utilized to provide the secondary data tables and maps for the appendix and portions of written analysis with comparison to the state wide data. Other sources used for the secondary data search were Missouri Department of Health and Senior Services MICA database and Missouri Department of Mental Health Division of Alcohol and Drug Abuse. Some of the data obtained came from the Missouri County Level Study done in 2011 and sited in the included reference sheet.

The process used for primary data collection was a Missouri Ozarks Community Action survey that was sent out January 6, 2013. The survey results were analyzed and prioritized. The primary results were compared to the secondary data collection. The three most important health issues identified by the members using this secondary and primary data search were; smoking cessation, alcohol use, and obesity. The results were prioritized as to which needs are most important for the members to try and address with the available resources. The members discussed the results and used a priority decision matrix to help determine the most important health need for the community. After several meetings, discussions, and debate the group chose obesity as the health need that would be addressed in this CHNA. An implementation plan and outcomes measurement was adopted. The implementation plan consisted of a community wellness program called Smart Start to promote physical activity and nutrition. The program will run quarterly at the Fitness Source and a quarterly report will be shared with partners giving aggregate participation and BMI/weight loss. For questions concerning this CHNA or for future involvement, please contact Matt Siebert or Dan McKinney at 573-486-2191.

CEO          Dan McKinney  Date  07/25/2016
Board President  Mat Reidhead  Date  07/25/2016
Community Health Needs Assessment: Community Defined

Geography

The Hermann Area District Hospital (HADH) was organized as the first hospital district in Missouri. Construction of the hospital was completed in 1968. For the last 49 years an elected, volunteer board of directors has provided the leadership necessary to support a combination of community health care services. The board is composed of 6 elected officials from any of the 6 hospital districts. The hospital is a 24 bed Critical Access Hospital. The primary service area of HADH is approximately 15,000 rural residents within the hospital district and when including the secondary service area of Owensville and Montgomery City are approximately 40,000 rural residents. The service area represents about 250 square miles (See appendix 1 for map of service area). The hospital district was formed by court order in May of 1963. The “Hermann Area Hospital District” embraces a territory described as; that portion of the Gasconade County R-1 School District in Franklin County, Missouri, lying west of a North and South Section line running directly through the village of Etlan in Franklin County (having ZIP code , Missouri; and Richard and Roark Townships and that portion of Boeuf and Boulware Townships embraced by the Gasconade County R-1 School District in Gasconade, County, Missouri, including the following towns and cities: Hermann, Gasconade, Morrison, Berger, Bay and Stony Hill, all being located within the aforementioned district and being in the state of Missouri. A list of the counties that are included in the HADH service area are; Gasconade, Montgomery, Franklin, Osage, Callaway, and Warren. The zip codes associated with the primary service area are as follows; 65041 (Hermann), 65069 (Rhineland), and 65061 (Morrison). The hospital’s secondary service area includes Missouri zip codes 63014 (Berger), 63363 (New Florence), 65066 (Owensville), 63361 (Montgomery City), 65014 (Bland), 63351 (Jonesburg) and 65062 (Mount Sterling) (MHA Hospital Industry Data Institute (HIDI), Hospital Inpatient Reports 2003-2005, and Hospital records).

The District operates four rural health clinics: Associated Medical Arts in Montgomery City, Owensville Medical Clinic in Owensville, Hermann Medical Arts and Southwest Medical Clinic in Hermann. The four RHCs are currently averaging over 50,000 patient visits annually. The rural health clinics operate under the same federal ID number as the hospital. These clinics offer 11 family practice providers to our communities.

Services provided by HADH include acute care, emergency care, long-term care, outpatient clinic services, community health outreach and education, community physical therapy and fitness, transportation, imaging, laboratory, surgery, respiratory therapy and home health. Our average daily census is 3 acute patients, 8 skilled care patients and 1.5 long term care patients. Over 12,000 outpatient visits are provided and there are 3,700 emergency room visits annually. Our annual budget is $15 million. HADH completed a $14 million renovation to modernize and update our facilities in 2009. Improvements included new patient rooms, new outpatient clinic area, new and expanded emergency department and renovated surgery, laboratory, radiology, rehabilitation and dietary areas. More information about our organization may be found on our website at HADH.org as well as an electronic copy of this report.
Population

The majority of the population in our geographic area is represented in the table below and shows the two main counties of our service area: Gasconade and Montgomery, which is broken down by year and age group. This makes up 27,438 residents of the total estimated 40,000 rural residents in our service area. From the graph below roughly 50% of the population is 45 and over. The elderly population of 65 and older represents over 20% of the two major counties.

<table>
<thead>
<tr>
<th>Age</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>Total for Selection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 15</td>
<td>5,193</td>
<td>5,113</td>
<td>5,097</td>
<td>5,019</td>
<td>20,422</td>
</tr>
<tr>
<td>15 to 24</td>
<td>3,217</td>
<td>3,086</td>
<td>3,012</td>
<td>2,927</td>
<td>12,242</td>
</tr>
<tr>
<td>25 to 44</td>
<td>6,103</td>
<td>5,961</td>
<td>5,879</td>
<td>5,823</td>
<td>23,766</td>
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<tr>
<td>45 to 64</td>
<td>7,964</td>
<td>7,968</td>
<td>8,122</td>
<td>8,163</td>
<td>32,217</td>
</tr>
<tr>
<td>65 and over</td>
<td>5,105</td>
<td>5,255</td>
<td>5,348</td>
<td>5,506</td>
<td>21,214</td>
</tr>
<tr>
<td>All ages</td>
<td>27,582</td>
<td>27,383</td>
<td>27,458</td>
<td>27,438</td>
<td>109,861</td>
</tr>
</tbody>
</table>

Source: [http://health.mo.gov/data/mica/mica/population](http://health.mo.gov/data/mica/mica/population)

Other Health services within the community:

Other health services available within the primary service area include, Mercy Clinic in New Haven, SSM Health Medical Group-Family Medicine Clinic in Montgomery, and Capital Region Clinic of Owensville. There are two nursing homes, Stone Bridge Hermann and Stone Bridge Owensville in the primary service area. The following hospitals are also competing for inpatient and outpatient volumes in the secondary service areas: Mercy Hospital in Washington, MO, Boone Hospital in Columbia, MO, Capital Region Medical Center in Jefferson City, MO, University Hospital in Columbia, MO and SSM Health St. Mary’s Hospital-Audrain in Mexico, MO.
Community Health Needs Assessment: Process

In April of 2013, the Assistant Administrator of Ancillary Services and Marketing Director of HADH began working on the Community Health Needs Assessment. It was determined that some background education and assistance was needed prior to meeting with the community partners. During the initial data collection process, secondary data searches were performed by MHA and data was obtained on the current service area. The secondary data was shared at the first member meeting to help identify the top three community health needs.

The process used for primary data collection was a Missouri Ozarks Community Action survey that was sent out January 6, 2013. The survey details are specified below. This survey was a collaboration between the following:

Missouri Ozarks Community Action (MOCA)
County Health Departments: Camden, Crawford, Gasconade, Miller, Phelps/Maries
Hermann Area District Hospital
Phelps County Regional Medical Center
Medical Missions for Christ
Heartland Independent Living Center

Community Health Needs Assessment: Input from Community
Missouri Ozarks Community Action, Inc. (MOCA)
This assessment is to be used to aid in identifying the needs of specific counties and communities, as well as the needs of the low-income population within each county, and to be used in developing future programs to address these needs. The survey encompassed areas of employment, housing, transportation, health/dental care, education, and various other areas outlined below. The full results of this survey can be seen using the MOCA link on page 36 of this paper.

This report includes information derived from standard local, state, or national sources on:

- Nutrition
- Free and Reduced Lunch Program
- Supplemental Nutrition Assistance Program (SNAP) (formerly Food Stamp Program)
- Number of Food Pantries
- Number of Farmer's Markets
- Women, Infants, and Children (WIC) Program
- Senior Nutrition Centers
- Households Receiving SNAP by Poverty Status
- Income
- Income Levels
- Temporary Assistance for Needy Families (TANF)
- Free and Reduced Lunch Program
- Supplemental Nutrition Assistance Program (SNAP) (formerly Food Stamp Program)
- Earned Income Tax Credit
- Social Security Administration Benefits
- Employment
- Current Unemployment
- Unemployment Change
- Top Employers
- Household Income
- Wages
- Living Wage
- High School Graduation Rate
- Child Care Costs
- Child Care Facilities
- Child Care Wait List
- Commuter Travel Patterns, 2007 - 2011
- Thirteen Month Unemployment Rates
- Five Year Unemployment Rate
- Education
- Public School Districts
- Colleges, Universities and Trade Schools
- Educational Attainment
- Veterans - Educational Attainment
- Adult Literacy
- Child Care Costs
- Child Care Facilities
- Children with Disabilities Receiving Services
- First Step Program
- Housing
- Housing Units
- Homeowners
- Housing Age
- Foreclosures
- Vacancy Rates
- Overcrowded Housing
- Number of Unsafe, Unsanitary Homes
- Fair Market Rent
- Housing Affordability
- Homeless Children
- Health Care
- Federally Qualified Health Centers
- MO HealthNet Providers
- Medicare and Medicaid Providers
- Federally Qualified Health Center (FQHC) Wait List
- Physicians
- MO HealthNet Recipients
- Dentists
- Persons Receiving Medicare
- Uninsured Population
- Causes of Death
- Teen Births
- Infant Health
- Child Abuse and Neglect
- Licensed Professional Counselors
- Nurses
- Population Profile
- Population Change
- Age and Gender Demographics
- Race Demographics
- Households
- Families
- Poverty
- Poverty Rate Change
- Seniors in Poverty
- Households in Poverty
- Juvenile Court Referrals
- Domestic Violence
- Violent Crime
- Property Crime
- Veterans, Age and Gender Demographics
Secondary Data Search: MHA
Health Concerns for the Community Served by the Hermann Area District Hospital: Evidence from Missouri Hospital Discharges Between July 1, 2012 and June 30, 2013

HADH Community Health Needs Assessment
Population health in Missouri is falling behind the rest of the United States. The United Health Foundation currently ranks Missouri 42nd out of 50 in overall health status. The study listed smoking, obesity and sedentary life styles among the challenges facing Missourians. The community served by Hermann Area District Hospital (HADH) faces these same challenges. The health of HADH’s community is further complicated by an aging population with higher rates for chronic diseases and lower socioeconomic status.

The map below depicts hospital utilization rates for the state and HADH’s service area by ZIP code. The primary service area includes Hermann (65041), Rhineland (65069) and Morrison (65061). The secondary service area includes Berger (63014), Jonesburg (63351), Montgomery City (63361), New Florence (63363), Bland (65014), Mount Sterling (65062) and Owensville (65066). Utilization rates are calculated by ZIP code of residence for all inpatient and emergency department discharges from a Missouri hospital between July 1, 2012 and June 30, 2013, the latest available at the time of this Community Health Needs Assessment. The utilization rate is based on the estimated population for 2013. Population estimates are from the Nielsen Claritas Population Estimates, 2013.

**Map 1- Unique Users by ZIP**

The statewide utilization rate is 400 visits for every 1,000 residents. The utilization rate in HADH’s primary service area is almost 30 percent higher—516 visits per 1,000 residents. Primary service area residents visited a hospital 18,221 times during the one year period including 2,989 emergency department visits. HADH had a total of 17,943 visits including 3,205 emergency department visits. HADH served 5,761 unique patients.
At-Risk Populations

At-risk populations include individuals for whom it is challenging to access or pay for healthcare as well as individuals with above average healthcare needs. For this analysis three at-risk populations were identified based on information provided in the hospital discharge records—low socioeconomic status, medically-underserved and chronically ill. These categories were selected because individuals in these categories often require additional medical care compared to their peers.

The medically underserved population was identified as individuals who reported that they were uninsured during any encounter with a Missouri hospital during the study period—July 1, 2012 to June 30, 2013. The medically underserved population comprises 14.3 percent of the state population, 10.8 percent of the population in HADH’s primary service area and 14.5 percent of patients at HADH. Low socioeconomic status patients were identified by Medicaid enrollment. They accounted for 14.8 percent of the statewide patient population, 9.7 percent of HADH’s service area population, and 17.9 percent of patients at HADH. Chronically ill patients were identified using ICD-9 diagnosis codes from all hospital records for discharges that occurred during the study period. A patient is considered to be chronically ill if they were diagnosed with any of the following conditions: cancer, diabetes, heart disease, hypertension, stroke, atherosclerosis, COPD, asthma, liver disease, kidney disease or arthritis. This group included 48.9 percent of the state population, 55.4 percent of the primary service area population and 56.8 percent of patients at HADH.

Graph 1 - Percentage of Unique Patients Belonging to an At-Risk Population

Graph 2 – Average Charges for At-Risk Populations

Chronic Conditions
Patients were identified as chronically ill if they were diagnosed with any of the following conditions during any visit between July 1, 2012 and June 30, 2013—cancer, diabetes, heart disease, hypertension, stroke, atherosclerosis, COPD, asthma, liver disease, kidney disease or arthritis. The map below shows the state distribution of chronic illness. Graph 3 shows that the HADH service area has higher rates for all chronic conditions except COPD, kidney disease and asthma.

Map 2- Chronic Illness by ZIP

Graph 3
The distribution of chronic illness by age group is shown in graph four. Compared to the rest of the state, chronic conditions were more prevalent among the elderly within HADH’s primary service area. Individuals under age 25 living in the primary service area were less likely to have a chronic disease than adults living elsewhere in the state.

**Graph 4- Percentage of Unique Patients with Chronic Illness by Age**

Individuals with more chronic conditions require more frequent healthcare visits and more expensive treatments. Graphs five and six show the additional resources required as the number of chronic conditions increased for all patients in HADH’s primary service area. Individuals with eight or more chronic conditions had seven times the utilization rate of patients with only one chronic condition. Patients with two or more chronic conditions represent less than 30 percent of the population but account for over 75 percent of total charges.

**Graph 5**

**Graph 6**
Health Behaviors

The United Health Foundation study which ranked Missouri 42nd in overall population health used survey data collected through the Behavioral Risk Factor Surveillance System. The survey showed that over 30 percent of Missouri’s population is obese, 25 percent smoke and 19 percent reported drinking excessively in the past 30 days. These estimates place Missouri 39th in obesity rates, 42nd in smoking rates and 33rd in binge drinking. Health behaviors among all Missouri patients, HADH patients and patients living in the primary service area were measured using diagnosis codes from all discharge records from a Missouri hospital between October 1, 2011 and June 30, 2013. While this methodology underestimates the population rate for these behaviors, it provides an unbiased comparison between the state, the primary service area and the patient population of HADH. Graph seven shows that the negative health behaviors are lower in the primary service area. However, patients treated at HADH are more likely to smoke, abuse alcohol or be obese than the primary service area population.

Graph 7- Rates of Health Behaviors Among Unique Patients

Smoking
Patients who smoke are almost twice as likely to be uninsured, are more likely to have low SES and over 50 percent more likely to have at least one chronic condition. On average, total annual charges for smokers are more than 3 times higher than total annual charges for non-smokers.

Graph 8

Graph 9
Alcohol Abuse
According to ICD-9 diagnosis codes captured in Missouri hospital discharge data, alcohol abuse rates are lower in the HADH service area than in the rest of the state—2.4 percent vs. 3.1 percent. However, in the HADH community, annual healthcare charges for patients who abuse alcohol are almost three times greater than for patients who do not abuse alcohol. Patients who abuse alcohol are significantly more likely to be medically underserved, to have low SES and to be chronically ill. Alcohol abuse is especially prevalent among the medically underserved and chronically ill populations.

![Graph 10](image1.png)

**Graph 10**
At-Risk Populations and Alcohol Abuse
- Medically Underserved: 33.0%
  - Alcohol Abuse: 10.2%
  - Other Patients: 22.3%
- Low SES: 9.3%
- Chronically Ill: 71.3%
  - Alcohol Abuse: 55.1%

**Graph 11**
Average Charges per Visit and Alcohol Abuse
- Alcohol Abuse: $6,371
- Other Patients: $2,261

Obesity
The obesity rate among HADH’s patients is higher than the statewide obesity rate. Obese patients are significantly more likely to be chronically ill. Rates of chronic illness are higher among obese patients than they are for any other population.

![Graph 12](image2.png)

**Graph 12**
Obesity and At-Risk Populations
- Medically Underserved: 11.6%
  - Obese: 10.8%
  - Not Obese: 9.5%
- Low SES: 9.7%
- Chronically Ill: 85.0%
  - Obese: 53.3%

**Graph 13**
Average Charges per Visit and Obesity
- Obese: $4,920
- Not Obese: $2,169
I. Community Health Needs Assessment: Findings

The Missouri Ozarks Community Action (MOCA) survey results were analyzed and prioritized. The primary results were compared to the secondary data collection. The three most important health issues identified by the members using this secondary and primary data search were; smoking cessation, alcohol use, and obesity.

The MOCA survey started January 6, 2013 and ran until March 14, 2014. A link to the full results is provided in Appendix c. There were a total of 237 individuals and of those individuals, 181 finished the survey. This is a finish rate of 76.4%. The survey was somewhat long which may have contributed to a lower finish rate percentage.

The majority of those taking the survey were female at 75% and the remaining 25% of the respondents were male. Most of the respondents were in the age range of 22 to 60 (83.1%). From the survey results it was found that overeaters anonymous was the second largest support group at 21.7%, with the number one group being grief counseling at 47.8%. The next largest support group was alcoholics anonymous at 13%. Of those surveyed 26.3% reported that their health was only fair or poor. The majority of respondents marked that they exercised less than 4 to 5 times a week. More specifically, 55.7% exercise less than 4 to 5 times a week and 24.2% did not exercise at all. Forty one percent of the respondents reported the primary reason for inactivity was that activity choices were not appealing and another thirty seven percent said that it was too expensive, while fourteen percent were unaware of physical activity opportunities in the area. A minority of respondents (7.7%) said that transportation was the primary reason for inactivity. Respondents reported that they had the following diagnoses: stroke 1.6%, high cholesterol 15.6%, coronary heart disease 3.6%, arthritis 16.1%, diabetes 9.9%, high blood pressure 24.5%, and finally obesity 14.1%. Of the total surveyed 17.7% smoke. When respondents were asked if they ate 5 fruit/vegetable servings per day 48.1% said they did while 47.5% said they did not. Their spouses and children were reported to be even lower with 43.2% and 26.8% respectively not eating the recommended servings of fruits and vegetables per day. The breakdown of reasons for not meeting the recommended servings per day was too expensive (37.2%), can’t get my kids to eat them (10.8%), don’t know what some of them taste like (2%). Thirty two percent of the respondents reported that they eat 5 servings per day of fruits/vegetables.

From the MOCA survey results there are several areas that stood out as potential opportunities to help within our community. The two most relevant areas are obesity and smoking cessation. Our CHNA members met on January 15, 2014 and used a priority weighted matrix to help us choose the one area that we felt would be the most beneficial for us to do given the limited personnel and resources that we have. We wanted to choose something that we are familiar with and that we felt we could have the most impact on for the community with our limited time and resources. An example of the prioritization matrix that we used is included in Appendix d. After much discussion and a compilation of the scoring values the group decided on adult obesity as our choice.
Although it was the original intention of HADH CHNA to address the health issue of obesity with both adult and child populations, it was ultimately determined that both populations would be better served, at least initially, if they were addressed with separate programs. The Gasconade County Health Department would provide “12345Fit-tastic” educational materials to be used in the schools to help begin to address the healthy habits with younger children, while the “Smart Start” program implemented by HADH and the Fitness Source would be utilized to address the adult population of the community.

The goal of the Smart Start program was to promote and support a 2% reduction of obesity among program participants each quarter, to help the community work toward the HADH CHNA goal of lowering the overall average county population obesity rate (32.3%) to at least the average of the State of Missouri (31.1%).

It was acknowledged at the outset of the program that it would take years to have a long-term aggregate impact upon the average obesity rate in Gasconade County and, due to the small percentage of the participants in the Smart Start program (33) in relation to the number of people in the overall county population (14,901), and that realistically the change for the entire county would be marginal.

The Smart Start program began on Monday, September 16th, 2013 and continued through December 20th, 2016 for a total duration of 14 weeks. Thirty-three (33) participants initially registered for the program. Baseline measurements taken of each participant at the outset of the program, each month thereafter, and at the completion of the program were: Weight, Body Fat Percentage, and Total Inches (tape measure from 7 sites on participant’s bodies).

Obesity is classified as a body fat percentage of over 25% for men and over 32% for women. The Smart Start program did not differentiate between genders of participants in their data. The average body fat percentage among all 33 participants at the beginning of the program was 37.14%.

By the end of the second month of the program, twelve (12) of the participants had dropped out of the Smart Start program. The remaining 21 participants had lost a total of forty (40) pounds. The final measurements of the program yielded a total weight loss of 45.5 pounds, total inches loss of 115, and an average overall body fat loss of .34%.

In conclusion, the Smart Start program was successful in helping facilitate a decrease in overall weight of the participants. The challenges in the program that will need to be overcome going forward include: 1) Keeping all of the participants who sign up engaged enough to complete the program successfully, 2) Increasing the longevity of the program so the participants have the opportunity to realize an increased loss of overall body fat percentage, and 3) Documenting the gender of each participant at the beginning of their involvement would better determine whether each individual is obese, and if so, to what degree.
Community Health Needs Assessment: Dissemination Plan

Flyers for the Smart Start program were handed out at the schools and throughout the community. It was posted on the intranet and at the Fitness Source. There was a monthly newsletter that was sent to the school that highlights the Smart Start program and flyers were distributed to the health departments and on bulletin boards around the community. The Smart Start program and results were intended to be shared with the CHNA committee members quarterly, however in reality it was shared more towards the end of the cycle. The paper and findings are posted online on our hospital website for public viewing. It will also be placed on the hospital intranet. The board president signed and approved the executive summary of our CHNA.
### Initial Measurements

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<th>Month 1</th>
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<th>Month 3</th>
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<td>Body Fat %</td>
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<tr>
<td>3708</td>
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<td>32.10%</td>
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<tr>
<td>1134</td>
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<td>0227</td>
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<td>1969</td>
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<td>1973</td>
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<td>1014</td>
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<td>2101</td>
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<td>30.30%</td>
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### Appendix A

**Appendices**

**Appendix a**
Appendix b

Gasconade and Montgomery County
Demographic, Economic, and Social Characteristics
Gasconade County, Missouri:

Demographic, Economic, and Social Characteristics

U.S. Census Bureau, 2012 American Community Survey
Gasconade County, Missouri

Economic Characteristics

County Income Distribution

- Less than $15,000: 8.3%
- $15,000 to $24,999: 44.6%
- $25,000 to $34,999: 18.8%
- $35,000 to $49,999: 9.7%
- $50,000 to $74,999: 19.1%
- $75,000 to $99,999: 4.5%
- $100,000 to $149,999: 16.1%
- More than $150,000: 18.5%

Median Household Income

- Gasconade County: $40,788
- Missouri: $45,321
- Gasconade County: $51,371
- Missouri: $6,0%
- Gasconade County: 5.4%
- Missouri: 5.9%

Poverty Rates

- Children: 17.6%
- Older Adults (65+): 9.5%
- Female Headed Families: 31.8%
- Total: 18.2%

Labor Force

- Employed: 60.0%
- Armed Forces: 0.0%
- Not in labor force: 17.2%
- Unemployed: 23.6%

Employment by Sector

- Management, business, science, and arts occupations: 22.4%
- Service occupations: 28.6%
- Sales and office occupations: 11.9%
- Natural resources construction and maintenance occupations: 21.9%
- Production transportation and material moving occupations: 15.2%

Program Participation Rates

- Supplemental Security Income: Gasconade County: 1.4%, Missouri: 5.5%, United States: 2.9%
- Cash Assistance: Gasconade County: 5.5%, Missouri: 2.9%, United States: 2.6%
- Food Stamps/ SNAP: Gasconade County: 10.6%, Missouri: 14.7%, United States: 13.6%

Data Source: United States Census Bureau, 2012 American Community Survey Estimates
Gasconade County, Missouri

Highest Level of Education Attained - Adults Age 25 and Older
- Less than 9th grade
- 9th to 12th grade, no diploma
- High school graduate
- Some college, no degree
- Associate's degree
- Bachelor's degree
- Graduate or professional degree

Percent of Adults Over Age 25 with High School Diploma
- Gasconade County: 84.7%
- Missouri: 88%

Percent of Adults Over Age 25 with Bachelor's Degree or Higher
- Gasconade County: 29.1%
- Missouri: 26.4%

Speak a Language Other Than English at Home
- 21.0%

Marital Status
- Never married: 20.8% (Gasconade County), 29.9% (Missouri)
- Currently married: 54.8% (Gasconade County), 49.1% (Missouri)
- Separated: 2.0% (Gasconade County), 2.0% (Missouri)
- Widowed: 5.9% (Gasconade County), 6.5% (Missouri)
- Divorced: 11.1% (Gasconade County), 13.5% (Missouri)

Fertility Rates per 1,000*
- All Women 15-50: 65 (Gasconade County), 57 (Missouri)
- Unmarried: 57 (Gasconade County), 42 (Missouri)
- 15-19: 41 (Gasconade County), 33 (Missouri)
- 20-34: 147 (Gasconade County), 102 (Missouri)
- 35-50: 19 (Gasconade County), 20 (Missouri)

Data Source: United States Census Bureau, 2012 American Community Survey Estimates
*Source: 5 Year ACS Estimates
Gasconade County, Missouri:

Health Characteristics from the 2013 County Health Rankings

Robert Wood Johnson Foundation and the University of Wisconsin Public Health Institute
Gasconade County, Missouri

Overall Rank: 59 out of 115

Years of Potential Life Lost

- State: 8537
- County: 7905

- State: 5817

Poor Physical Health Days

- State: 4.1
- County: 5

- State: 2.5

Poor Mental Health Days

- State: 3.8
- County: 3.4

- State: 3.4

Low Birth Weight

- State: 7.6%
- County: 7.7%

- State: 6.0%

Poor or Fair Health

- State: 18%
- County: 9.8%

- State: 9.8%
Montgomery County, Missouri:

Demographic, Economic, and Social Characteristics

U.S. Census Bureau, 2012 American Community Survey
Montgomery County, Missouri

Economic Characteristics

County Income Distribution:
- Less than $15,000: 9.2%
- $15,000 to $24,999: 13.2%
- $25,000 to $34,999: 20.3%
- $35,000 to $49,999: 18.4%
- $50,000 to $74,999: 13.2%
- $75,000 to $99,999: 9.2%
- $100,000 to $149,999: 2.8%
- More than $150,000: 6.0%

Median House Hold Income:
- Montgomery County: $46,175
- Missouri: $45,821
- United States: $51,371

Unemployment:
- Montgomery County: 6.2%
- Missouri: 5.4%
- United States: 5.9%

Poverty Rates:
- Children: 22.6%
- Older Adults (65+): 9.0%
- Female Headed Families: 9.0%
- Total: 15.9%

Labor Force:
- Employed: 62.4%
- Armed Forces: 0.1%
- Not in labor force: 37.8%
- Unemployed: 5.9%

Employment by Sector:
- Management business science and arts occupations: 19.5%
- Service occupations: 19.8%
- Sales and office occupations: 22.7%
- Natural resources construction and maintenance occupations: 15.0%
- Production transportation and material moving occupations: 21.0%

Program Participation Rates:
- Supplemental Security Income: 5.4%
- Cash Assistance: 2.9%
- Food Stamps/SNAP: 13.6%

Data Source: United States Census Bureau, 2012 American Community Survey Estimates
Montgomery County, Missouri:

Health Characteristics from the 2013 County Health Rankings

Robert Wood Johnson Foundation and the University of Wisconsin Public Health Institute

[Graph showing health behaviors and outcomes rankings for Montgomery County, Missouri, compared to state and national benchmarks.]
Appendix c

MOCA Link
### Appendix d

#### Priority Matrix

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Weight</th>
<th>Scoring Values</th>
<th>Adult Smoking</th>
<th>Youth Smoking</th>
<th>Adult Obesity</th>
<th>Childhood Obesity</th>
<th>Alcohol Abuse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Available Data: Is measurable data available?</td>
<td>0</td>
<td>0, 1, 2, 3, 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population Affected: What percentage of the population does this health issue affect?</td>
<td>2</td>
<td>1, 2, 3, 4, 5, 6, 7, 8, 9, 10</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Significance / Importance: What is the seriousness of this issue? Urgency - high death rate - hospitalization - premature death rate - economic burden - impact on others?</td>
<td>3</td>
<td>1, 2, 3, 4, 5, 6, 7, 8, 9, 10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total Score** 25
HEALTH ISSUE # 1 (very specific): Adult Obesity prevalence is higher in Gasconade County (32.3%) than in Missouri (31.1%) and higher than the national benchmark (25%).

Contributing FACTORS to Health Issue #1 (including social determinants): low SES, unemployment, literacy, behavioral, genetic, uninsured, lack of family support and available low cost wellness programs.

Three Year GOAL for Improvement (written as a SMART objective): Implement a Smart Start wellness program at the community Fitness Source that will promote and support a 2% reduction of obesity among wellness program participants quarterly and by 2016 a similar reduction in the Gasconade County obesity level. Or use a nationally adopted measure through HP2020.

BUDGET for health issue #1 (consider direct and indirect costs): Budgeted time for Fitness Source staff at HADH to implement and run wellness program.

<table>
<thead>
<tr>
<th>Strategies to Achieve Goal</th>
<th>Specific Partners and Roles for each Strategy</th>
<th>Specific Actions to Achieve Strategies</th>
<th>Specific 3-year Process Measure(s) for Each Strategy</th>
<th>Specific 3-year Outcome Measures for Strategies (should align with SMART Goal for Health Issue)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implement community wellness program (Smart Start) to promote physical activity &amp; good diet.</td>
<td>School, Public Health, HADH, Messmer Foundation</td>
<td>Weekly Nutrition &amp; Exercise Tips Three &quot;Homework&quot; Plans</td>
<td>Track participation Monthly Measurements</td>
<td>Quarterly report to participating partners and participants Quarterly assessments will be anonymous aggregate data on participant BMI Compare Gasconade vs State at end of three years</td>
</tr>
</tbody>
</table>
Appendix f (Smart Start Flyer)

SMART START

Hermann
Fitness Source
HADH.org

SIGN UP TODAY!

What is Smart Start?
A three month, comprehensive nutrition and wellness program that is guided by our personal trainer, designed to give you the tools needed to live a healthier lifestyle, as well help lose unwanted weight, body fat and inches.

Program Includes:
- Weekly Nutrition & Exercise Tips
- Monthly Measurements
- 3 “Homework” Plans
- 3 Nutrition Packets
- Individualized Nutritional Analysis

<table>
<thead>
<tr>
<th>Who:</th>
<th>Anyone looking to live a healthier life!</th>
</tr>
</thead>
<tbody>
<tr>
<td>When:</td>
<td>September 15 through December 19</td>
</tr>
<tr>
<td>Cost:</td>
<td>$40.00 for 3 Months! (gym membership not included)</td>
</tr>
</tbody>
</table>

If interested contact the Hermann Fitness Source today!

Phone: (573) 486-2251
E-mail: fitnesssource@hadh.org
OR
atimmerberg@hadh.org

Hermann
Fitness Source
HADH.org

PRIZES

Exciting prizes for 1st, 2nd & 3rd place participants.
PLUS
Prizes will be given to each runner-up in measurements.
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United States Department of Commerce – Economics and Statistics Administration