McKenzie Health System
2016 Community Health Needs Assessment

A Report to the Community

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Executive Summary

This report is a primary data source that complements other primary and secondary data sources collected by McKenzie Health System for its 2016 Community Health Needs Assessment. The primary data contains information from the Thumb CHNA Collaboration Community Health Survey developed and distributed by hospitals and public health departments in Huron, Sanilac, and Tuscola counties. McKenzie Health System distributed surveys in seventeen ZIP codes in its service area and posted the survey on-line. McKenzie Health System also held a focus group of six men and one woman. They represented the following community interests: Sandusky City Council, Thumb Elite Athletics (a local gym), Sandusky Arts Council, Sandusky Police Department, Local Parent, Teacher/Education Professional, and Faith Community. Ages ranged from mid-thirties to retired. Key stakeholder interviews were held with four individuals from three key Sanilac County organizations.

The survey findings are based on the responses of 844 individuals, most of whom were female (79.6%), well educated (62.6% with some college degree), and about one-quarter (25.3%) with household incomes of $75,000 or more.

The survey covered five areas of concerns: community's health, quality of life, availability of health services, safety and environment, delivery of health services, and vulnerable populations (seniors, females, low education, and low income). It also asked about preventing access to care. Many of the concerns were about access to and availability of healthcare providers and the costs of healthcare. Youth obesity was a major concern followed by youth drug use and bullying. Quality of life concerns were related to jobs and attracting young families. Environmental concerns focused on water quality and public transportation. Major concerns for seniors included cost of medications and living options.

Like the survey respondents, the focus group identified the cost of health insurance and cost of healthcare services as top concerns. They also identified drug use and abuse among youth, and obesity/overweight as top concerns. For adults, top concerns were cancer and diabetes.

The focus group thought the major challenge facing the community were better jobs followed by improving the infrastructure, more specialty services and better transportation. They considered the developmentally and disabled adults, the elderly, the homeless and people with mental health problems to be medically underserved. The focus group suggested starting a 24/7 nurse hotline.

The stakeholders mentioned the loss of factory jobs, poor housing conditions, and a lack of public transportation. The community needed both mental health and dental service. They wanted a year round recreation/sports facility for adults and youth as well as child care facilities. Stakeholders urged providers to improve collaboration and communications, especially at the case management level.

These findings are consistent with McKenzie Health System and other local hospitals being located in a rural, medically underserved community.

Background and Overview

Background

McKenzie Health System is designated as a Critical Access Hospital (CAH). The Medicare Rural Hospital Flexibility Program (Flex Program), created by Congress in 1997, allows small hospitals to be licensed as Critical Access Hospitals and offers grants to States to help implement initiatives to strengthen the rural healthcare infrastructure.

Critical Access Hospital (CAH) Designation

A Medicare participating hospital must meet the following criteria to be designated as a CAH:

- Be located in a State that has established a State rural health plan for the State Flex Program
- Be located in a rural area or be treated as rural under a special provision that allows qualified hospital providers in urban areas to be treated as rural for purposes of becoming a CAH
- Demonstrate compliance with the Conditions of Participation (CoP) relevant to 42 CFR Part 485 Sub-part F at the time of application for CAH status
- Furnish 24-hour emergency care services 7 days a week, using either on-site or on-call staff
- Provide no more than 25 inpatient beds that can be used for either inpatient or swing bed services; however, it may also operate a distinct part rehabilitation or psychiatric unit, each with up to 10 beds
- Have an average annual length of stay of 96 hours or less per patient for acute care (excluding swing bed services and beds that are within distinct part units)
- Be located either more than a 35-mile drive from the nearest hospital or CAH or a 15-mile drive in areas with mountainous terrain or only secondary roads OR certified as a CAH prior to January 1, 2006, based on State designation as a “necessary provider” of healthcare services to residents in the area

McKenzie Health System: Mission Vision, and Values

As McKenzie Health System leads in transforming how healthcare is designed and delivered, we emphasize clinical and service excellence and promote access to affordable care. We accomplish this through the combined efforts of our healthcare team and partnerships with the community and other healthcare systems.

McKenzie Health System will improve the quality of life in our community through an integrated healthcare delivery system that is characterized by collaboration, innovation, technology and value.

The values of McKenzie Health System are:

- Respect: We treat each individual we serve and those with whom we work with professionalism and dignity.
- Integrity: We communicate openly and honestly, build trust and conduct ourselves according to the highest ethical standards.
- Accountability: We take ownership for our actions and responsibility for their outcomes.
- Compassion: We deliver extraordinary care with empathy and kindness for those we serve and to all members of the healthcare team.
- Excellence: We are continuously improving the quality of our service through a commitment to education and prudent stewardship of assets and resources.
- Teamwork: We build system effectiveness on the collective strength of everyone through open communication and mutual respect.
- Innovation: We embrace change and actively pursue progress in a fiscally responsible manner.
- Wellness: We inspire our community to achieve a healthy lifestyle.

The leaders of McKenzie Health System understand that operating a ***COMMUNITY*** hospital means striving to understand and respond to the needs of the community - you, your families, and your friends. It was with this community mindset, in 2016, that McKenzie Health System Hospital launched a Community Health Needs Assessment (CHNA).

Services offered by McKenzie Health System:

Inpatient Care
- Acute Care
- Swing Bed
- Hospitalist

Emergency Services
- Urgent & Emergent care
- Highly trained & skilled ED physicians and staff

Specialty Services
- Anesthesia
- Orthopedics
- Podiatry
- Cardiology
- Dermatology
- Gastroenterology
- Psychiatry
- Nephrology
- Neurology
- General Surgery
- Gynecology
- Ophthalmology
- Nutrition Counseling
- Allergist/Immunologist
- Pediatrics
- Internal Medicine
- Physiatrist
- Urology
- Telehealth
    - Adult Psychiatry
    - Adult Therapy

Diagnostic Imaging
- CT Scan
- CT Angiography
- Echocardiogram
- Digital mammogram
- Nuclear Medicine
- Bone Density
- Ultrasound
- X-Ray

Cardiopulmonary
- Stress testing
- EKG
- Holter Monitor
- Event Monitor
- Pulmonary Function Tests
- Home Sleep Study

Rehabilitation Services
- Inpatient & Outpatient
- Physical Therapy
- Occupational Therapy
- Speech Therapy

Surgical Services
- Inpatient and Outpatient

Laboratory
- Full Service Laboratory

Community Outreach
- Fitness Classes
- Tia Chi
- Matter of Balance
- Aqua Aerobics
- Yoga
- Senior Exercise
- Walking track
- Low Impact Exercise
- Health Lifestyles Classes
- Lunch & Learn
- Sport Physicals
- CPR Classes
- Smoking Cessation
- Diabetes Education

What is a Community Health Needs Assessment?

The first step in meeting community needs is identifying the needs. Using an objective approach helps ensure that priorities are based on evidence and accurate information. The assessment process used by McKenzie Health System included a trifecta approach of reviewing three sources of primary data. In the trifecta approach, when there are three sources of data that illustrate a need, there is a greater likelihood that addressing that need will produce a powerful impact.

Three methods were used to collect primary data:

- Surveys: Surveys were distributed to 17 ZIP codes in the hospital's service area. The survey was also posted online using www.surveymonkey.com.
- Focus Groups: The Hospital held one focus group on March 1st, 2016. Participants included six men and one woman. They represented the following community interests: Sandusky City Council, Thumb Elite Athletics (a local gym), Sandusky Arts Council, Sandusky Police Department, Local Parent, Teacher/Education Professional, and the Faith Community. Ages ranged from mid-thirties to retired. The facilitator followed a script (see Appendix E) and engaged the group in several procedures including asking participants to review and comment on a list of potential health concerns that may affect the community as a whole; using post it notes on an easel pad or wall; and group discussion/ brainstorming.
- Key Stakeholder Interviews: A county level committee selected key organizations and individuals for stakeholder interviews. Phone interviews were held with four individuals from chosen Sanilac County organizations; Michigan Department Of Health and Human Services- St. Clair/Sanilac County, Sanilac County Community Mental Health, and Sanilac Intermediate School District.

In addition to the primary data, secondary data was reviewed for comparison to state rates and across counties located in the Thumb. This data was organized into a Thumb report card. Primary and Secondary data analysis was the first component of the CHNA process. The next step in the CHNA process was a prioritization process and an implementation meeting. Once priorities were selected, there was an assessment of existing services and programs. This assessment was used to identify gaps in services and develop strategies to address the priority needs. These strategies are then organized into an implementation plan and progress will be monitored.

This is the second cycle of Community Health Assessment and Planning. The first cycle was completed in 2012-2013. The process is intended to be completed on a three year cycle that aligns with Affordable Care Act requirements. The 2016 CHNA report includes a review of the 2013 CHNA report and progress towards targets.

Why is a Community Health Needs Assessment valuable?

Most experts agree that there are many challenges facing healthcare today. Rapidly changing technology, increased training needs, recruiting medical professionals, and responding to health needs of a growing senior citizen population are just a few of the most pressing challenges. These challenges occur at a time when resources for families and healthcare providers are stretched. These conditions make the Community Health Needs Assessment (CHNA) process even more critical. A CHNA helps to direct resources to issues that have the greatest potential for increasing life expectancy, improving quality of life, and producing savings to the healthcare system.

Background and Acknowledgments

In August 2015, the Michigan Center for Rural, Hospital Council of East Central Michigan, and Thumb Rural Health Network convened a discussion group around the CHNA process in Huron, Sanilac, and Tuscola Counties. This region, often referred to as the Thumb of Michigan, includes eight hospitals and three public health departments. In December 2015, area Hospitals and Health Departments invited representatives from the Center for Rural Health (CRH), University of North Dakota School of Medicine & Health Sciences to present their method for conducting CHNAs in rural areas. At

the end of this training all the hospitals and health departments decided to collaborate using a standardized process for a regional Community Health Needs Assessment. All organizations agreed to develop and administer a survey of community members and use the same set of questions and processes for focus groups and key stakeholder interviews. Each hospital received results specific to their organization, utilizing data from their service area based on the ZIP code of survey respondents. Individual hospitals utilized findings from the survey, focus groups and key stakeholder interviews for their local CHNA. The use of a common survey instrument, focus group and interview schedules will permit aggregating the hospital data by county and by the three county Thumb regions. This will enable cooperative initiatives within counties and the region.

Needs Assessment Process

Process Overview

Steps in Process

In December 2015, the members of the Thumb CHNA Collaboration received training from the University of North Dakota on best practices in the field of Community Health Needs Assessment. Based on this training a process was developed for the Thumb Area that would allow for consistent data collection. This consistent data collection would allow for county and regional aggregation of data. In addition to the local hospital plans and activities, this process would allow for greater impact of countywide and regional projects and initiatives, based on the review of the University of North Dakota Model[1]:

- Step 1: Establish a local and regional timeline
- Step 2: Convene county teams to manage logistics of assessment activities
- Step 3: Develop and administer Survey Instrument*
- Step 4: Design and implement Community Focus Groups in local hospital communities*
- Step 5: Design and implement Key Stakeholder Interviews or county agencies*
- Step 6: Produce localized hospital reports based on survey zip code data, local focus groups, and county interview data
- Step 7: Local hospitals hold Implementation Planning Meetings
- Step 8: Local hospitals prepare a written CHNA Report and Implementation Plan
- Step 9: Production of county and regional reports
- Step 10: Convene county and regional meetings to review reports
- Step 11: Monitor progress

Timeline

* In order to utilize the trifecta model, these three data collection methods were consistent in scope and question topics.

[1] Becker, K.L. (2013). *Emerging Health Trends in North Dakota: Community Health Needs Assessments Aggregate Data Report.* Grand Forks, ND: Center for Rural Health, University of North Dakota, School of Medicine & Health Sciences.

Representing the Community and Vulnerable Populations

Define the Community Served

Sanilac County is a rural county located in the Thumb of Michigan. A population of 41,587 resides in Sanilac County. The following charts showcase characteristics of the population.

Demographic Indicator	Michigan	Huron	Sanilac	Tuscola
Population	9,909,877	32,065	41,587	54,000
% below 18 years of age	22.40%	19.60%	22.20%	21.40%
% 65 and older	15.40%	23.40%	19.50%	18.30%
%Non-Hispanic African American	13.90%	0.50%	0.50%	1.20%
% American Indian and Alaskan Native	0.70%	0.40%	0.60%	0.60%
% Asian	2.90%	0.50%	0.40%	0.40%
% Native Hawaiian/Other Pacific Islander	0.00%	0.00%	0.00%	0.00%
% Hispanic	4.80%	2.10%	3.70%	3.30%
%Non-Hispanic White (below Hispanic	75.80%	95.70%	94.10%	93.70%
% Not Proficient In English (2014)	1%	0%	0%	0%
% Females	50.90%	50.50%	50.40%	49.90%
% Rural	25.40%	89.50%	90.20%	84.20%

Education Levels

Indicator	Michigan	Huron	Sanilac	Tuscola
High School Graduation	78%	90%	87%	80%
Some College	66%	54%	52%	57%

Household Income

Indicator	Michigan	Huron	Sanilac	Tuscola
Median Household Income	$49,800	$41,700	$42,100	$43,200

Poverty Rates

Indicator	Michigan	Huron	Sanilac	Tuscola
Children in Poverty: under age 18 living in poverty	23%	21%	23%	24%
ALICE level: household above poverty level, but less than the basic cost of living for county	NA	27%	27%	22%
Poverty Rate – US Census	16.9%	15.5%	15.6%	15.3%

Unemployment

Indicator	Michigan	Huron	Sanilac	Tuscola
Unemployment	7.30%	6.80%	8.40%	8.50%

Common Occupations and Industries

- Healthcare and social assistance (22%)
- Retail trade (16%)
- Manufacturing (12%)
- Educational services (7%)
- Accommodation and food services (6%)
- Other services, except public administration (4%)
- Public administration (4%)

Uninsured rates

Indicator	Michigan	Huron	Sanilac	Tuscola
Uninsured	13%	15%	15%	14%
Uninsured adults	16%	18%	19%	18%
Uninsured children	4%	6%	6%	4%

Surveys and Focus Groups

Distribution of surveys was intentionally planned to include individuals from vulnerable population groups such as senior citizens, under-resourced families, veterans, youth and women. Data analysis included cross tabulation of results for vulnerable populations. Hospitals invited a variety of individuals that represented multiple sectors of industry, age, and health conditions for the focus group.

Vulnerable Populations Represented in Survey Findings	
Indicator	**Respondent Demographics**
Age	Respondents were asked their year of birth which was then recoded into quartiles. Of the valid cases, 23.9% were 35 or younger, 25.4% between 36 and 49, 25.0% between 50 and 60, and 25.7% were 61 or older.
Gender	Almost four-fifths (79.6%) of the respondents were female.
Children	Only 43.4% of households had children under 18
Education	One-fifth (19.2%) had a high school diploma or less, 18.2% some college, 18.9% a technical/Jr college degree, 21.4% a bachelor's degree and 22.3% a graduate or professional degree.
Employment Status	Almost three-fifths (59.6%) worked full time, 7.8% worked part time and 2.8% held multiple jobs. Retirees accounted for 15.6%.
Household income	About one-sixth (17.1%) reported incomes $24,999 or less; about one-quarter (23.0%) between $25,000 and $49,999, one fifth (21.2) between $50,000 and $74,999 and one quarter (25.3%) $75,000 or more. Over one-eighth (13.3%) preferred not to report their household income.
Health Insurance	Almost three-fifths (58.3%) had health insurance through an employer or union, 12.5% were on Medicare, and 8.4% individually purchased a plan. Only 1.9% reported not having any health insurance

Healthcare/Social Service Organizations Providing Input

Participants in stakeholder interviews were chosen based on their expertise in serving vulnerable populations and their experience with community issues. Organizations were chosen by each county level committee and varied slightly by county.

The Sanilac county committee selected three organizations for input and suggested an individual at these organizations. The individuals interviewed agreed and the Department of Human Services in Sanilac County opted to have an additional person. They provided via email, permission to use their name in a list of individuals participating in interviews but were assured that their responses would not be connected to their name.

Kay Balcer, of Balcer Consulting and Prevention Services conducted the interviews in person, and Sara Wright of Michigan Center for Rural Health took notes via phone. The interview followed a similar script as was used for the focus groups (see Appendix G). The interviewees, their titles and organizational affiliations are listed below.

Michigan Department Of Health and Human Services- St. Clair/Sanilac County
- William (Bill) Weston, Director
- Jamie Reinke, Sanilac County Program Manager (Sanilac County Only)

Sanilac County Community Mental Health
- Jim Johnson, Executive Director

Sanilac Intermediate School District
- Duane Lange, Superintendent

Consultants

During the process various consultants were utilized to manage the workflow and ensure consistency including:

- → Balcer Consulting & Prevention Services, Kay Balcer: Overall project coordination and facilitation, stakeholder interviews, template development.
- → Michigan Center for Rural Health, Crystal Barter and Sara Wright: Notetaking, and coding of focus group and interview responses.
- → Institute for Public Policy and Social Research, Michigan State University: Paper survey processing, coding of survey data, and production of statistical data for analysis.
- → Independent Consultants, Harry Perlstadt, PhD, MPH and Travis Fojtasek, PHD: Data analysis and reports.

Some hospitals also chose to contract with Balcer Consulting or Michigan Center for Rural Health for focus group facilitation, facilitation of implementation meetings, and preparation of the CHNA report and implementation plan. Questions about the CHNA project and requests for documents can be made by contacting Kay Balcer at 989-553-2927 or balcerconsulting@gmail.com.

2013 CHNA Progress

2013 CHNA Plan Progress

In 2013, the Community Health Needs assessment priorities identified by McKenzie Health System included:

- Funding for community fitness programs
- Access to physician when needed
- Promotion of health education classes
- Ear, Nose and Throat Services
- Promotion of services to surrounding towns/cities
- Community program (or emphasis) on physical activity
- Updated equipment in hospital (i.e. x-ray)
- Decreased community apathy for healthcare, nutrition and social service issues
- Longer hours/weekend hours for urgent care/walk in
- Increased transportation services (need longer hours, longer routes)
- Local dental services for adult Medicaid population
- More places for adults to exercise
- Increased visibility of programs due to promotion and reaching the right individuals
- Veterans PTSD therapy services

The following includes an update on the progress toward activities in the 2013 Implementation Plan.

- McKenzie Health System participated in a community managers committee which consisted of members from the following organizations: Sanilac County, Sanilac County Medical Care Facility, Sanilac County Intermediate School District, Sandusky Community Schools, Sanilac County Community Mental Health, City of Sandusky, Sanilac County Health Department and Sanilac County Road Commission.

- Access to specialists and extended physician office hours were identified as significant community needs. McKenzie has improved its access to specialists through Telemedicine; however, it has been difficult to recruit specialists due to the lack of volume to sustain a specialist. McKenzie Health System has extended physician office hours in several clinics and added a Saturday clinic. The primary hurdle to extending hours further or opening an urgent care clinic is the availability of healthcare providers to staff the clinic.

2016 CHNA Methodology

CHNA Methodology

Surveys:

Sample/Target Population: The Thumb CHNA Collaboration members decided to use non probability sampling, combining convenience sampling with purposive (judgmental) sampling. In a convenience sample respondents can be anyone who happens to come into contact with the researcher or has access to the survey. This could range from people on a street corner or in a mall to those who come across the survey on-line. Since each hospital used the same survey methodology, the results can be analyzed and compared. Although the findings cannot be generalized, they can point out common needs and solutions.

Table 1: Demographic highlights of Survey Respondents	
Age	Respondents were asked their year of birth which was then recoded into quartiles. Of the valid cases, 23.9% were 35 or younger, 25.4% between 36 and 49, 25.0% between 50 and 60, and 25.7% were 61 or older.
Gender	Almost four-fifths (79.6%) of the respondents were female.
Marital Status	Over two-thirds (69.9%) were married or remarried
Children	Only 43.4% of households had children under 18
Education	One-fifth (19.2%) had a high school diploma or less, 18.2% some college, 18.9% a technical/Jr college degree, 21.4% a bachelor's degree and 22.3% a graduate or professional degree.
Employment Status	Almost three-fifths (59.6%) worked full time, 7.8% worked part time and 2.8% held multiple jobs. Retirees accounted for 15.6%.
Health Sector	Approximately one-quarter (24.3%) worked for hospital, clinic or public health dept.
Race	95.3% self-identified as White/Caucasian
Household income	About one-sixth (17.1%) reported incomes $24,999 or less; about one-quarter (23.0%) between $25,000 and $49,999, one fifth (21.2) between $50,000 and $74,999 and one quarter (25.3%) $75,000 or more. Over one-eighth (13.3%) preferred not to report their household income.
Health Insurance	Almost three-fifths (58.3%) had health insurance through an employer or union, 12.5% were on Medicare, and 8.4% individually purchased a plan. Only 1.9% reported not having any health insurance
Hospitals used past 2 years	Two fifths (40.8%) used McKenzie Health System and 35.8% used Marlette Regional Hospital.
ZIP Codes	Almost one quarter (23.0%) lived in Sandusky, 17.2% in Marlette, 11.1% in Clifford and 10.7% in Croswell.

Survey Instrument and Procedures: The survey instrument contained 34 questions covering Community Assets, Community Concerns, Delivery of Healthcare and Demographic Information (see Appendix A). The survey was printed and posted online. Each county developed a distribution list identifying public locations for envelopes and surveys. Surveys were also distributed at meetings and at the end of focus groups. Printed surveys could be left in drop boxes or mailed in to the Institute for Public Policy and Social Research (IPPSR) at Michigan State University. The on-line version of the survey was posted at www.surveymonkey.com. Survey links were included in press releases and regional

promotion efforts. Links were distributed by direct email and forwarded to hospitals and service providers who could forward it to their staff and their email patient base. Surveys were entered and data sets prepared by IPPSR. Data were analyzed using the Statistical Package for the Social Sciences (SPSS) Version 20 multiple response sets frequencies and cross-tabulations.

Focus Groups:

Focus groups were conducted in a standard format across the three counties. The facilitator followed a script (see Appendix E) and engaged the group in several procedures including asking participants to review and comment on a list of potential health concerns that may affect the community as a whole; using post it notes on an easel pad or wall; and group discussion/ brainstorming. Focus group notes were recorded and coded by the Michigan Center for Rural Health (MCRH) with summaries provided for analysis.

A focus group was held on March 1, 2016 from 5-7pm at McKenzie Health System. Dinner was provided, and seven community members participated. They were invited to participate by the hospital staff.

Participants included six men and one woman. They represented the following community interests: Sandusky City Council, Thumb Elite Athletics (a local gym), Sandusky Arts Council, Sandusky Police Department, Local Parent, Teacher/Education Professional, and the Faith Community. Ages ranged from mid-thirties to retired.

Stakeholder Interviews:

The Sanilac County committee selected three organizations for input and suggested an individual at these organizations. The individuals interviewed agreed and provided consent to participate and have their name included in a list of interview participants. Individuals participating in interviews but were assured that their responses would not be connected to their name. Kay Balcer, of Balcer Consulting and Prevention Services conducted the interviews in person, and Sara Wright of Michigan Center for Rural Health took notes via phone.

The interview followed a similar script as was used for the focus groups (see Appendix G). The interviewees, their titles and organizational affiliations are listed below.

- Michigan Department Of Health and Human Services - St. Clair/Sanilac County
  - William (Bill) Weston, Director
  - Jamie Reinke, Sanilac County Program Manager (Sanilac County Only)
- Sanilac County Community Mental Health
  - Jim Johnson, Executive Director
- Sanilac Intermediate School District
  - Duane Lange, Superintendent

Secondary Data

Table 1: Major Data Sources for CHNA Secondary Data			
Public Health Statistics			
Source/ Participants	**URL or Citation**	**Dates of Data**	**Additional Descriptors**
United States Census Bureau	http://quickfacts.census.gov	2010	Includes data from the American Community Survey (5-year averages), Census Demographic profiles from the 2010 Census, and subtopic data sets.
Michigan Labor Market	http://www.milmi.org	2016	Unemployment Data
Michigan Department of Community Health	http://milmi.org/cgi/dataanalysis/?PAGEID=94	2000 to 2014	Date ranges varied by health statistic. Some statistics represent one year of data as others are looking at 3 or 5 year averages.
Michigan Behavioral Risk Factor Survey	http://www.michigan.gov/mdch/0,1607,7-132-2945_5104_5279_39424---,00.html and www.trhn.org	2003-2015	Local data available for 2003 and 2008 only. County data that is more recent was pulled from County Health Rankings
Health Resources & Services Administration (HRSA)	http://bhpr.hrsa.gov/shortage/	2016	Shortage designations are determined by HRSA.
Michigan Profile for Healthy Youth (MIPHY)	http://michigan.gov/mde/0,1607,7-140-28753_38684_29233_44681---,00.html	2014	Local data from surveys of 7th, 9th, and 11th grade students is compared to county data. State and national data using the MIPHY was not available. 9th-12th grade Youth Behavior Risk Factor survey data was used for state and national statistics.
County Health Rankings	www.countyhealthrankings.org	2005 to 2013	Includes a wide variety of statistics. Many statistics represent a combined score and reflect multiple years of data.
Kids Count	http://www.mlpp.org/kids-count/michigan-2/mi-data-book-2016	2016	Includes a variety of data from Michigan Department of Community Health, Department of Human Services, and Department of Education.
Healthcare Utilization Data			
Hospital Data CHNA	Local report in excel spreadsheet.	2007-2016	Data available on utilization of hospital services, payer/revenue sources, financial assistance programs, and transfers out of the community.
Local Ambulance Service	Local run report	2016	Includes information on reason for EMS call, demographic data, and transport location.
Individual Interviews and Focus Groups	2016 Focus group members and Key Stakeholders	2016	Results from interviews & meetings were included in survey report.

Findings

Findings

Companion documents are available for the information included in this report. The following pages summarize the key information utilized by the committee. Information has been organized into three categories (survey, focus groups and stakeholder interviews); however most of the data is inter-related.

Survey

The purpose of the Community Health Survey was to:

- Learn about the good things in the community as well as concerns in the community.
- Understand perceptions and attitudes about the health of the community.
- Gather suggestions for improvement.
- Learn more about how local health services are used by community residents.

Survey Results

Survey results for community assets and concerns are in Appendix C. The main focus of this analysis is to identify problem areas that prevent access to healthcare and the concerns of vulnerable groups—seniors, low education and low income regarding health and healthcare.

Preventing Access to Healthcare

Table 2 contains responses to Q17. Please rate how much the following issues prevent you or other community residents from receiving healthcare. Responses were on a four point scale from 1 = not a problem to 4 = major problem. Means and standard deviations were calculated for each.

The table reveals two items with means just under 2.5 between a minor and moderate problem: not enough evening or weekend hours (μ=2.46), and not enough specialists (μ=2.45). Items ranked as minor problems were not enough doctors (μ=2.21), not able to get appointment due to limited hours (μ=2.13), don't know about local services (μ=2.04), and distance from health facility (μ=2.03). The first four refer to the supply of physicians which is highly dependent on the ratio of physician per 100,000 population. Despite locations in Sandusky, Port Sanilac, Croswell and Peck, travel distance was a minor problem. This reflects the rural nature of Sanilac County, which had a population of 43,114 in 2010.[2]

[2] Population of Michigan Counties 2000 and 2010.
Available at http://www.michigan.gov/cgi/0,1607,7-158-54534-252541--,00.html

Table 2: Q17 Issues prevent receiving healthcare			
In this table, a higher mean score indicates a higher perceived problem.	**N**	**Mean**	**Std. Deviation**
Not enough evening or weekend hours	796	2.46	1.26
Not enough specialists	792	2.45	1.28
Not enough doctors	785	2.21	1.21
Not able to get appointment/limited hours	794	2.13	1.14
Don't know about local services	790	2.04	1.14
Distance from health facility	793	2.03	1.09
Not able to see same provider over time	792	1.86	1.13
Can't get transportation services	798	1.81	1.14
Not accepting new patients	787	1.73	1.13
Poor quality of care	778	1.61	0.99
Barriers to accessing veterans services	781	1.56	1.30
Concerns about confidentiality	786	1.37	0.90
Lack of disability access	783	1.31	0.88
Limited access to tele-health technology	778	1.27	1.24
I am afraid or too uncomfortable to go	762	1.27	0.94
Don't speak language or understand culture	791	1.17	0.74
I have other more important things to do	757	1.07	0.87

Table 3 contains responses to Q16: "What cost considerations prevent you or other community residents from receiving health services?" Respondents were encouraged to choose ALL that apply. Table 3 shows that the number one cost consideration preventing receiving health services was high deductible or co-pay with 38.2% of the responses. Over four-fifths (83.7%) of the respondents names this cost consideration. The second largest was not having insurance with 42.9% of all respondents followed by not affordable insurance.

Table 3. Q16 Cost considerations prevent receiving health services			
Cost considerations prevent receiving health services	**Times chosen**	**Percent times chosen**	**Percent of Respondents choosing**
High deductible or co-pays	611	37.9	84.6
No insurance	325	20.2	45.0
Not affordable Services	242	15.0	33.5
Insurance denies services	238	14.8	33.0
Providers do not take my insurance	196	12.2	27.1
Total	1612	100.0	223.3

That a vast majority (84.6%) of respondents picked high deductibles and copays, is not surprising. In theory both deductibles and copays are cost sharing devices designed to prevent policy holders from making small nuisance claims or seeking healthcare unnecessarily. The charges have to be just large enough to influence people's decisions, and not so

big as to keep people from getting the care they need. Consumers are asked to decide ahead of time between plans that have lower premiums but higher deductible which they would prefer if they are less likely to need healthcare and higher premiums but lower deductibles which they would prefer if they are more likely. Theoretically, this balances risk with cost.[3] Unfortunately the costs of premiums, deductibles and copays have steadily increased, making cost a determining factor in obtaining health insurance.

In terms of CHNA implementation, although hospitals and health departments may adjust their own copays, they have almost no ability to change insurance deductibles.

Although only 1.9% of respondents answered that they had no health insurance, 45.0% thought that not having insurance prevent themselves or community residents from receiving health services. This is more than double the Census Bureau's 2014 estimate[4] of 15.1% to 20.0% uninsured in Sanilac County. The question may reflect a concern with the costs of purchasing health insurance through healthcare.gov rather than indirectly measuring the population not having any health insurance.

Community Concerns

The concerns about the community's health included

- Awareness of local health resources and services
- Access to exercise and fitness activities
- Access to healthy food
- Assistance for low-income families

Concerns about the quality of life in the community

- Jobs with livable wages
- Attracting and retaining young families

Concerns about availability of health services

- Availability of doctors and nurses
- Availability mental health services
- Ability to get appointments

Concerns about the community's safety and environment

- Water quality (i.e. well water, lakes, rivers)
- Public transportation
- Crime and safety

Concerns about the delivery of health services

- Cost of health insurance
- Ability to retain doctors, nurses, and other healthcare professionals
- Cost of healthcare services
- Cost of prescription drugs

[3] Kunreuther, H. and Pauly, M. (2005). Insurance Decision-Making and Market Behavior. *Foundations and Trends*® in *Microeconomics*. 1:2 p 63-127.

[4] US Census Bureau 2014 Small Area Health Insurance Estimates (SAHIE) Insurance Coverage Estimates: Percent Uninsured: 2014 http://www.census.gov/did/www/sahie/data/files/F4_Map.jpg

Concerns Related to Vulnerable Populations

One purpose of the Community Health Needs Assessment is to address perceptions and concerns of and about vulnerable populations. Vulnerable populations include youth, seniors, females, low education, low income and race/ethnicity. The survey instrument asked all respondents for their concerns about youth and seniors.

Table 4 contains the top 3 concerns of all survey respondents to Q12b, the physical health for youth in your community. The top concern was youth obesity with two-fifths (40.4%) of all respondents checking it. One fourth of all respondents mentioned youth hunger and poor nutrition (25.7%) and teen pregnancy (24.3%).

Table 4. Q12b Top 3 concerns physical health in your community (youth frequencies).

Top concerns physical health in your community (youth)	Times chosen	Percent times chosen	Percent of Respondents choosing
Youth obesity	181	31.8	40.4
Youth hunger and poor nutrition	115	20.2	25.7
Teen pregnancy	109	19.2	24.3
Wellness and disease prevention, including vaccine-preventable	98	17.2	21.9
Youth sexual health (including STDs)	66	11.6	14.7
Total	569	100	127.0

Table 5 shows responses to Q13b the top 3 concerns of all survey respondents about mental health for youth in your community. The top two concerns were youth drug use and abuse and youth bullying with 49.3% and 44.8% of all respondents checking these.

Table 5. Q13b Top 3 concerns mental health substance abuse in your community (youth frequencies)

Top concerns mental health substance abuse in your community (youth)	Times chosen	Percent times chosen	Percent of Respondents choosing
Youth drug use and abuse	319	28.2	49.3
Youth bullying	290	25.6	44.8
Youth alcohol use and abuse	179	15.8	27.7
Youth mental health	152	13.4	23.5
Youth suicide	103	9.1	15.9
Youth tobacco use (including exposure to second-hand smoke,	90	7.9	13.9
Total	1133	100.0	175.1

Table 6 contains responses to Q14 the top 3 concerns of all survey respondents about senior population in your community. Over half (54.1%) of all respondents indicated that cost of medications was their chief concern about the senior population. This was followed by availability of resources to help the elderly stay in their homes (43.3%) and assisted living options (40.1%).

Table 6. Q14 Top 3 concerns about senior population in your community

Top concerns about senior population in your community	Times chosen	Percent times chosen	Percent of Respondents choosing
Cost of medications	445	18.7	54.1
Availability of resources to help the elderly stay in their homes	356	15.0	43.3
Assisted living options	330	13.9	40.1
Availability of activities for seniors	236	9.9	28.7
Transportation	222	9.3	27.0
Availability of resources for family and friends caring for seniors	206	8.7	25.1
Dementia/Alzheimer's disease	183	7.7	22.3
Long-term/nursing home care options	153	6.4	18.6
Hunger and poor nutrition	131	5.5	15.9
Cost of activities for seniors	62	2.6	7.5
Elder abuse	57	2.4	6.9
Total	2381	100.0	289.7

An additional analysis examined the top concerns of respondents who self-identified as members of vulnerable populations: low income, low education, seniors and females.

- Respondents who reported household incomes of less than $25,000 were more concerned about assistance for low income families, affordable housing and affordable dental services than respondents reporting higher incomes.
- Respondents with a high school education or less were also concerned about assistance for low income families and affordable housing than respondents with more education. In addition, they were concerned about teen pregnancy and youth bullying.
- Those 61 or older were more concerned about wellness disease prevention including vaccine preventable diseases than younger respondents.
- No significant differences were found between female and male respondents.

Focus Group

Purpose

The purpose of the focus group is to:

- Learn about the good things in the community as well as concerns in the community.
- Understand perceptions and attitudes about the health of the community.
- Gather suggestions for improvement.
- Learn more about how local health services are used by you and other residents.

Focus Group Results

The focus group schedule contained 19 questions/ topics and the complete results are in Appendix F.

Focus Group participants were provided a list of potential health concerns that may affect the community as a whole. They were asked to review and comment on whether they thought the concerns were important to their local community, and which of the concerns would be the most important to their community.

The participants initially went through a list of potential community health concerns and were asked which were of concern in their community. The number in the first column represents the number of participants who indicated it was a concern in their community. The participants then went through all perceived concerns relevant to their community and asked to pick their top 5. The number in the second column represents the number of times it appeared in the respondents' top 5 concerns.

Table 7 Top Concerns of Focus Group by Topic

Physical, Mental health, and substance abuse concerns (adults)

Concern	Number of times chosen	Number of times in top 5
Cancer	6	4
Diabetes	6	2
Dementia/Alzheimer's Disease	5	1
Obesity/Overweight	5	2
Alcohol use and abuse	5	1

Concerns about Health Services

Concern	Number of times chosen	Number of times in top 5
Extra hours for appointments, such as evenings and weekends	5	2
Cost of healthcare services	5	2
Cost of health insurance	5	1
Cost of prescription drugs	5	1

Concerns specific to youth and children

Concern	Number of times chosen	Number of times in top 5
Youth obesity	3	2
Youth hunger and poor nutrition	2	1
Youth graduating from school	2	
Not enough activities for children/youth	2	
Youth alcohol use and abuse	1	1

Concerns about the aging population

Concern	Number of times chosen	Number of times in top 5
Being able to meet needs of older population	2	1
Availability of resources to help the elderly stay in their homes	2	1
Availability of resources for family and friends caring for the elderly	2	
Long-term/nursing home care options	2	
Assisted living options	2	

The focus groups considered a number of other issues. They thought the major challenge facing the community was related to the economy, specifically having better job options in the community. This was followed by improving the infrastructure, specialty services and transportation.

Regarding health services they thought people did not use preventive services because of access problems; they are unclear about what is covered by their insurance, and a perception that they do not need preventive services.

The focus group identified four groups as being medically underserved: developmentally and disabled adults, the elderly, the homeless and people with mental health problems.

The focus group identified seven services they thought the hospital needs to add. These were after hours services, dental services, education on where to get services, free clinics, ob/gyn services, pediatric care and a 24/7 nurse hotline.

People used McKenzie because of its location and they had trust in the hospital and its staff. They went elsewhere for healthcare because they though McKenzie lacked specialty services. Some focus group members thought McKenzie had a bad reputation and people had billing issues.

Stakeholder Interview Methods

Purpose

The purpose of the stakeholder interviews is to:

- Learn about the good things in the community as well as concerns in the community.
- Assess community awareness and use of healthcare services.
- Assess availability of and need for healthcare services.
- Estimate collaboration among health organizations and providers.
- Gather suggestions for improving healthcare and removing barriers.
-

Stakeholder Interview Responses

Since only four stakeholders representing Sanilac County were interviewed, their responses are simply listed and not presented as percentages. Appendix H contains the Stakeholder's responses and suggestions.

The top concerns of the stakeholders were:

- not enough jobs with livable wages
- not enough public transportation options/cost of public transportation
- alcohol use and abuse
- Suicide, drug use and abuse (including prescription drug use)
- Not enough activities for children/youth
- Youth alcohol use and abuse
- Youth drug use and abuse (including prescription drug use).

Also mentioned was the lack of a year round recreation/sports facility like a YMCA, services for seniors, and mental health, dental services and child care facilities.

The stakeholders saw a lack of resources because it was a rural community. Specifically mentioned were transportation, loss of factory jobs, and housing conditions. They noted that no dental providers accept Medicaid and recommended that health facilities add psychological screening and psychiatric services.

Stakeholders pointed to cultural norms in rural areas, such as "if there's nothing wrong, why go to the doctor", not wanting to abuse the system and waste both their time and the provider's time, as reasons why people did not use preventive health services.

They suggested that the health related organizations should develop better integration and communication between providers, improve proactive primary care outreach and reduce unnecessary paperwork. Specifically, the stakeholders thought that law enforcement; especially the sheriff's office, emergency services and hospitals were most collaborative, followed by the county health department. Least collaborative were other local health providers such as dentists and chiropractors. The Indian Health Service and Veterans Affairs were seen as self-contained silos. The Intermediate School District was more collaborative than individual schools or school districts.

In order to facilitate the use of local health services by the community as a whole, the stakeholders proposed better transportation, financial aid for high co-pays and deductibles, and more information on what their insurance covers including eligibility. Stakeholders said better communication at the case management level, better education/ marketing on services and resources, and opening elementary school gyms for general recreation and exercise could contribute to the overall health and well-being of the community.

Secondary Data

The following Thumb Report Card illustrates how each county compares to data from the state.

Source	Indicator	Year	Michigan	Huron	Sanilac	Tuscola
CHR	Health Outcomes (county rank)			41	33	28
CHR	Length of Life (county rank)			41	51	36
CHR	Years of Potential Life Lost per 100,000	2011-2013	7,200	7,100	7,300	6,900
CHR	Age Adjusted Mortality per 100,000	2011-2013	360	350	360	350
MDCH	Heart Disease Deaths	2012-2014	199.3	203.3	233.2	196.9
MDCH	Cancer Related Deaths	2012-2014	173	176.9	164.5	176.4
MDCH	Diabetes Related Deaths	2012-2014	73.7	86.1	84.4	65.9
MDCH	Deaths due to Suicide	2010-2014	13.2	14.6	18.5	13.1
CHR	Child Mortality (under 18) per 100,000	2010-2013	50	50	40	50
CHR	Infant Mortality (under age 1) per 1000	2006-2012	7	NA	NA	NA
CHR	Quality of Life (county rank)			40	19	23
CHR	Poor Or Fair Health	2014	16%	14%	13%	13%
CHR	Average # of Poor physical health days (In past 30 days)	2014	3.9	3.5	3.4	3.5
CHR	Frequent physical distress (>14 days-past 30 when physical health was not good)	2014	12%	11%	10%	11%
CHR	Average # of Poor mental health days (In past 30 days)	2014	4.2	3.6	3.6	3.7
CHR	Frequent Mental Health distress (>14 days-past 30 when mental health was not good)	2014	13%	11%	11%	11%
PHY	7th grade students who felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities-past 12 months	2014 H-T 2010 SC	NA	20.6%	NA	35.7%

Source	Indicator	Year	Michigan	Huron	Sanilac	Tuscola
PHY	9th grade students who felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities-past 12 months	2014 H-T 2010 SC	NA	23.9%	45.0%	34.3%
PHY	11th grade students who felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities-past 12 months	2014 H-T 2010 SC	NA	19.3%	34.0%	30.3%
CHR	Low Birthweight (<2500 grams; 5lbs,8 oz)	2007-2013	8%	8%	7%	7%
MDCH	Cancer Incidence (Age Adjusted Rate)	2010-2012	471.8	441.0	356.5	436.9
MDCH	Cardiovascular Discharges Incidence (Age Adjusted-Acute Myocardial Infarction)	2011-2013	200.3	225.2	275.8	251.6
MDCH	Cardiovascular Discharges Incidence (Age Adjusted Rate-Congestive Heart Failure)	2011-2013	284.8	245.2	260.2	288.1
MDCH	Cardiovascular Discharges (Stroke)	2011-2013	226.4	218.7	207.0	225.2
MDCH	Diabetes Discharges Incidence	2011-2013	183.0	122.7	176.2	138.8
CHR	Diabetes Prevalence** (age 20+ diagnosed with diabetes, 2012)	2012	10%	11%	11%	10%
CHR	HIV Prevalence 2012) per 100,000	2012	178	18	42	26
CHR	Health Factors (county rank)			17	49	43
CHR	Health Behaviors (county rank)			16	53	41
CHR	Adult Obesity** (BMI >30)	2012	31%	31%	34%	31%
PHY	7th Grade Obesity (>95th and 85th percentile)	2014 H-T 2010 SC	NA	12.9%/13.4%	16.3%/14.3%	13%/16.8%
PHY	9th Grade Obesity (>95th and 85th percentile)	2014 H-T 2010 SC	NA	13.6%/18.4%	18%/16.9%	20.3%/18.7 %
PHY	11th Grade Obesity (>95th and 85th percentile)	2014 H-T 2010 SC	NA	15.3%/24.1%	17.1%/19%	19.3%/15.8 %
0-8	Obesity among low income children	2014	13%	12%	11%	11%
CHR	Limited Access To Healthy Foods: % of low income who don't live close to grocery store	2010	6%	11%	2%	3%

Source	Indicator	Year	Michigan	Huron	Sanilac	Tuscola
CHR	Index of factors that contribute to a healthy food environment, 0 (worst) to 10 (best).	2013	7.1	6.9	7.7	7.6
CHR	Physical Inactivity: no leisure-time physical activity.	2012	23%	28%	22%	30%
PHY	7th Grade- 60 minutes of physical activity for at least 5 of 7 past days.	2014 H-T 2010 SC	NA	24.6%	58.0%	59.5%
PHY	9th Grade- 60 minutes of physical activity for at least 5 of 7 past days.	2014 H-T 2010 SC	NA	38.4%	62.7%	66.5%
PHY	11th Grade- 60 minutes of physical activity for at least 5 of 7 past days.	2014 H-T 2010 SC	NA	26.7%	36.4%	47.6%
CHR	% of individuals in a county who live reasonably close to a location for physical activity such as parks.	2010 & 2014	84%	53%	13%	43%
CHR	Adult Smoking (every day or most days)	2014	21%	16%	18%	17%
PHY	7th Grade youth who smoked cigarettes during the past 30 days	2014 H-T 2010 SC	NA	0.9%	5.1%	2.4%
PHY	9th Grade youth who smoked cigarettes during the past 30 days	2014 H-T 2010 SC	NA	8.1%	15.7%	11.0%
PHY	11th Grade youth who smoked cigarettes during the past 30 days	2014 H-T 2010 SC	NA	21.5%	19.6%	18.7%
0-8	Live Births to Women Who Smoked During Pregnancy	2011-2013	21.6%	24.7%	26.3%	32.9%
CHR	Alcohol Impaired Driving Deaths (% of all driving deaths)	2010-2014	30%	27%	36%	39%
PHY	7th grade students who had at least one drink of alcohol during the past 30 days	2014 H-T 2010 SC	NA	4.8%	6.1%	9.3%
PHY	9th grade students who had at least one drink of alcohol during the past 30 days	2014 H-T 2010 SC	NA	24.4%	32.2%	21.2%
PHY	11th grade students who had at least one drink of alcohol during the past 30 days	2014 H-T 2010 SC	NA	48.2%	46.2%	38.6%
PHY	7th grade students who used marijuana during the past 30 days	2014 H-T 2010 SC	NA	1.4%	1.0%	3.5%

Source	Indicator	Year	Michigan	Huron	Sanilac	Tuscola
PHY	9th grade students who used marijuana during the past 30 days	2014 H-T 2010 SC	NA	6.2%	5.1%	11.3%
PHY	11th grade students who used marijuana during the past 30 days	2014 H-T 2010 SC	NA	17.8%	13.9%	21.0%
CHR	Drug Overdose Deaths: drug poisoning deaths per 100,000	2012-2014	16	NA	14	12
CHR	Drug Overdose Deaths Modeled: estimate of the number of deaths due to drug poisoning per 100,000	2014	18	6.1-8.0	12.0-14.0	12.0-14.0
CHR	Motor Vehicle Crash Deaths: traffic accidents involving a vehicle per 100,000	2007-2013	10	11	16	17
CHR	Sexually transmitted infections: diagnosed chlamydia cases per 100,000	2013	453.6	141.7	158.5	217.7
PHY	7th grade students who ever had sexual intercourse	2014 H-T 2010 SC	NA	4.5%	4.0%	9.7%
PHY	9th grade students who ever had sexual intercourse	2014 H-T 2010 SC	NA	14.4%	29.0%	17.5%
PHY	11th grade students who ever had sexual intercourse	2014 H-T 2010 SC	NA	41.3%	51.1%	43.9%
CHR	Teen Births (# of births per 1,000 female population, ages 15-19)	2007-2013	29	21	25	26
MDCH	Percent of Total Births to Mothers Age < 20	2011-2013	7.8	6.3	7.3	7.5
CHR	Insufficient Sleep: adults who report fewer than 7 hours of sleep on average	2014	38%	32%	30%	32%
CHR	Clinical Care (county rank)			48	75	71
CHR	Uninsured: <65 that has no health insurance coverage	2013	13%	15%	15%	14%
CHR	Uninsured Adults: 18 to 65 that has no health insurance coverage in a given county	2013	16%	18%	19%	18%
CHR	Uninsured Children: <19 that has no health insurance coverage	2013	4%	6%	6%	4%

Source	Indicator	Year	Michigan	Huron	Sanilac	Tuscola
CHR	Healthcare costs: price-adjusted Medicare reimbursements (Parts A and B) per enrollee	2013	$10,153	$10,391	$10,117	$10,808
CHR	Ratio of other Primary Care Providers: nurse practitioners (NPs), physician assistants (PAs), and clinical nurse specialists	2015	1,342:1	1,458:1	2,079:1	2,348:1
CHR	Dentists: ratio of the population to total dentists. Higher= less access	2014	1,450:1	2,290:1	3,470:1	2,840:1
CHR	Mental Health: ratio of the population to total mental health providers. Higher= less access	2015	450:01:00	1,280:1	670:01:00	430:01:00
HPSA	Provider Shortage Designations	Varies	NA	Primary Care Dental, Mental Health	Primary Care Dental, Mental Health	Primary Care Dental, Mental Health
0-8	Live Births to Women With Less Than Adequate Prenatal Care	2011-2013	29.9%	16.0%	29.7%	24.3%
0-8	Toddlers Ages 19-35 Months Who Are Immunized 4:4:1:3:3:1:4	2014	73.8%	73.3%	75.0%	73.9%
CHR	Preventable Hospital Stays: discharge rate for ambulatory care-sensitive conditions per 1,000 Medicare enrollees	2013	59	52	72	72
CHR	Diabetic Monitoring: Medicare enrollees ages 65-75 that receive HbA1c monitoring	2013	86%	85%	87%	83%
CHR	Mammography Screening: female Medicare enrollees ages 67-69 that receive mammography screening	2013	65%	66%	64%	64%
CHR	Social & Economic Factors (county rank)			12	35	32
CHR	High School Graduation: % of students graduated high school in four years.	2012-2013	78%	90%	87%	80%
CHR	Some College: adults ages 25-44 with some post-secondary education; no degree	2010-2014	66%	54%	52%	57%
0-8	Births to Mothers Without a High School Diploma/GED	2011-2013	13.8%	10.3%	17.0%	10.9%
KC	Children age 3-4 enrolled in preschool.	2009-2013	47.5%	57.9%	48.0%	45.5%
0-8	Change in licensed childcare providers	From 2011-2015	NA	-2	-3	-13

CHR	Unemployment: ages 16+ but seeking work	2014	7.30%	6.80%	8.40%	8.50%
Source	**Indicator**	**Year**	**Michigan**	**Huron**	**Sanilac**	**Tuscola**
CHR	Median Household Income: half the households earn more and half the households earn less than this income.	2014	$49,800	$41,700	$42,100	$43,200
CHR	Income inequality: Higher inequality ratio indicates greater division between the top and bottom ends of the income spectrum	2010-2014	4.7	4.1	3.9	3.7
CHR	Children In Single Parent Households	2010-14	34%	33%	26%	27%
CHR	Children in Poverty: under age 18 living in poverty	2014	23%	21%	23%	24%
Alice	ALICE level: households above poverty level, but less than the basic cost of living for county.	2014	NA	27%	27%	22%
census	Poverty rate- US Census	2014	16.9%	15.5%	15.6%	15.3%
0-8	Rate per 1,000 Children Ages 0-8 Who Are Substantiated Victims of Abuse or Neglect	2014	20.6	13.0	24.1	25.2
0-8	Change in rate per 1,000 Children Ages 0-8 Substantiated Victims of Abuse or Neglect	From 2010 to 2014	2.6	-6.6	4.6	6.9
0-8	Rate per 1,000 of Children Ages 0- 8 in Foster Care	2014	5.9	5.7	10.3	5.8
PHY	7th grade students who have seen students get pushed, hit, or punched one or more times during the past 12 months	2014 H-T 2010 SC	NA	62.1%	89.2%	71.6%
PHY	9th grade students who have seen students get pushed, hit, or punched one or more times during the past 12 months	2014 H-T 2010 SC	NA	57.7%	82.0%	60.9%
PHY	11th grade students who have seen students get pushed, hit, or punched one or more times during the past 12 months	2014 H-T 2010 SC	NA	51.9%	75.7%	52.0%
CHR	Violent Crime: offenses that involve face-to-face confrontation per 100,000.	2010-2012	464	123	196	177
CHR	Homicides: deaths per 100,000	2007-2013	7	NA	NA	NA
CHR	Injury Deaths: intentional and unintentional injuries per 100,000	2009-2013	61	60	70	56

Source	Indicator	Year	Michigan	Huron	Sanilac	Tuscola
CHR	Inadequate Social Support- adults	2005-10	20%	14%	20%	16%
CHR	Residential Segregation Black White: degree to which live separately in a geographic area (0 integration to 100 segregation)	2010-2014	74	NA	57	62
CHR	Residential Segregation nonwhite-white: degree to which live separately (0 integration to 100 segregation)	2010-2014	61	32	24	21
CHR	Physical Environment (county rank)			24	29	47
CHR	Air Pollution Particulate Matter: average daily density	2011	11.5	12	12.3	12
CHR	Drinking water violations: Yes=presence	FY2013-14		No	No	No
CHR	Severe Housing Problems: at least 1 of 4 problems- overcrowding, high housing costs, or lack of kitchen or plumbing	2008-2012	17%	13%	14%	14%
CHR	Driving Alone To Work: percentage of the workforce that usually drives alone to work.	2010-2014	83%	81%	77%	83%
CHR	Long Commute Driving Alone: Greater than 30 minutes	2010-2014	32%	22%	37%	42%

NOTE: The Thumb Rural Health Network Report may be beneficial in Regional conversations about need and also can shed some light as a region as to trends. This report did not include county or Michigan comparisons and therefore did not lend well to inclusion in the report card table.

Source Key

CHR- County Health Ranking
PHY- Michigan Profile for Healthy Youth
MDCH- Michigan Department of Community Health
ALICE- Asset Limited Income Constrained Employed
0-8- Birth to 8 Indicators
HPSA- Health Provider Shortage Area
AR- Alice Report
KC- Kids Count

Discussions & Limitations

Discussion

The survey identified not enough evening or weekend hours, and not enough specialists as minor to moderate problems. Minor problems included not enough doctors and not able to get appointment due to limited hours. These problems reflect the supply of physicians which is highly dependent on the ratio of physician per 100,000 population. Despite McKenzie having facilities in Sandusky, Port Sanilac, Croswell and Peck, travel distance was a minor problem. As expected the costs of healthcare including high deductibles and co-pays for health insurance and costs of prescription drugs were mentioned.

The analysis was able to separate out and give voice to vulnerable populations: seniors (58 and older), females, those with a high school education or less and those with low incomes. Since almost all respondents self-identified as White/Caucasian, no analysis was done by race/ethnicity. Respondents who reported household incomes of less than $25,000 and those with a high school education or less were concerned about assistance for low income families and affordable housing than those with higher incomes or more education. Those 61 or older were more concerned about wellness disease prevention including vaccine preventable diseases than younger respondents.

In general the focus group confirmed many of the survey findings. Being more open ended, participants thought that people are unclear about what is covered by their insurance and that the community should improve its infrastructure and local transportation services. It suggested offering more information on where to get services and starting a 24/7 nurse hotline.

The stakeholders noted how cultural norms and resources in a rural county impact the community's health and well-being including underutilization of preventive health services, a lack of year round exercise and recreational facilities open to the general population, and the need for transportation services. Also lacking were psychological screening and psychiatric services. They pointed out that no dental providers accept Medicaid.

Limitations

The survey employed a non-probability sampling, combining convenience sampling with purposive (judgmental) sampling. Surveys were available on-line and paper surveys were distributed at a variety of locations. This resulted in some skewed demographics. Respondents were disproportionately female (78.8%), had some college degree (59.9%), and one-third (32.0% had household incomes of $75,000 or more. A little over one-quarter (27.7%) worked for a hospital, clinic, or public health department. Census information on gender, education and income are grouped by census tracts which are not always congruent with ZIP codes. It is not practicable to adjust the survey responses for gender, education and income for the McKenzie Health System ZIP codes. However, this could be done at the county level.

Identified Needs & Priorities

Prioritization Process

A CHNA helps to direct resources to the issues that have the greatest potential for improving the health of the community. Successfully addressing priority issues increases life expectancy, improves quality of life, and results in a savings to the healthcare system.

Implementation Meeting

McKenzie Health System began the prioritization process by reviewing the data described in the findings section of this report. The Implementation meeting included 6 individuals: McKenzie Health System's Chief Operating Officer, Chief Financial Officer, Director of Human and Community Services, Director of Physician Office Practices, Public Relations Coordinator, and a Community Business Owner. The meeting participants reviewed the top concerns compiled from the Survey, Focus Group and Stakeholder Interviews and used a prioritization process that included analysis of issues located in multiple data sources.

Assessment of Existing Resources that Address Priorities

Identified Needs & Available Resources

The next step in the resource assessment was to group needs into categories. The categories are listed below along with the resources that are provided by the hospital and the community.

Category	Need and Related Data	Current McKenzie Health System Efforts	Current Community Efforts
Availability of Health Services Access to Healthcare	**Need** Not enough evening or weekend hours **Related Data** • Advisory Committee Perceptions • Survey Results • Focus Groups	• Saturday Clinic Hours Saturday 9am-Noon • Rural Health Clinic Monday-Friday 7:30 am – 5:30 pm • Peck Medical Center Monday 7am-6pm Tuesday 7am-4pm Wednesday 8am-4pm Thursday 8am-5pm • Lakeshore Internal Medicine Monday 9am-5pm Tuesday 8:30am-5pm Wednesday 9am-Noon Thursday 1pm-5pm Friday 9am-3pm • McKenzie Health & Wellness Monday 8am-4pm Tuesday 9am-6pm Wednesday 8am-4pm Thursday 8am-5pm Friday 8am-Noon • Croswell Clinic Monday 8am-5pm Tuesday 8am-5pm Wednesday 8am-6pm Thursday 8am-5pm Friday 9am-3pm • McKenzie Family Healthcare Monday 8am-7pm Tuesday 7am-4pm Wednesday 8am-4pm Thursday 8am-5pm Friday 7am-3pm	**County Programs** • Health Department **Local Programs** • *Deckerville Walk In Clinic* o Monday – Friday: 5pm to 7pm o Saturday and Sunday: 12pm to 5 pm o Holidays: 12pm to 5pm • *Hills & Dales After Hours Clinic-Cass City* o Monday – Thursday:5pm–9pm o Friday: 1pm – 9pm o Saturday: 9am – 2pm o Sunday: 11am – 4pm • *Huron Medical Center-Bad Axe* o Monday - Friday: 5pm - 9 pm o Saturday: 2pm- 7 pm o Sunday: 2 pm - 7 pm • *Physician Healthcare Network-Port Huron* o Monday – Friday 8am- 6 pm o Saturday 8 am - 2 pm o Sunday 9am - 1 pm • *MedExpress – Port Huron* o Monday – Sunday 8 am – 8 pm • *Lake Huron Medical Center Urgent Care-Port Huron* o Monday - Friday 7am to 7pm o Saturday 9am - 1pm o Sunday 9am - 1pm

Category	Need and Related Data	Current McKenzie Health System Efforts	Current Community Efforts

Availability of Health Services
 	
Access to Healthcare
	Need
	Not Enough Specialist
	Related Data
	• Advisory Committee Perceptions
	• Survey Results
	• Focus Groups
		Specialty Services Offered at McKenzie Health System
		• Orthopedics
		• Allergist/Immunologist
		• Pediatrics
		• Internal Medicine
		• Physiatrist
		• Podiatry
		• Cardiology
		• Dermatology
		• Gastroenterology
		• Psychiatry
		• Nephrology
		• Neurology
		• General Surgery
		• Gynecology
		• Ophthalmology
		• Nutrition Counseling
		• Urology
		• TeleHealth
		  • Adult Psychiatry
		  • Adult Therapy
			• Marlette Regional Hospital Seton Cancer Partnership
			• Seton Oncology Chemotherapy
			• Audiology
			• Ear, Nose & Throat
			• Facial Plastic Surgery

Availability of Health Services Cost Considerations	**Need** No Insurance **Related Data** • Advisory Committee Perceptions • Focus Groups • Survey Results	• Financial Assistance Program • Sliding Fee Scale for office visits • Certified Medicaid/ Medicare Counselor • Women's Health & Wellness Fund • Low/no cost Health events	**County Programs** • Health Department • Women, Infants & Children Program • Huron County Health Department's Breast and Cervical Cancer Screening Program **Local Programs** • Caring Hearts Health Clinic • PCUPS Program- Prostate Cancer Awareness • BCUPS Program- Breast Cancer Awareness

Category	Need and Related Data	Current McKenzie Health System Efforts	Current Community Efforts
Concerns about the Community's Health	**Need** Increase Awareness of local health resources and services **Related Data** • Advisory Committee Perceptions • Focus Groups • Survey Results	• Brochures • Radio Advertising • Discharge Planners • Social Worker • Health Fairs • Lunch & Learn • Healthy Lifestyle • Community Events • Social Media	**County Programs** • Senior Directory • Sanilac Great Start Collaborative Directory • 211 • Project Connect • Services Expo • Community Baby Shower • Senior Fair **Local Programs** • Child Abuse Prevention Council – Baby Pantry • Baby Panty-Sandusky & Croswell • Great Start Collaborative • MSU Extension WEBSITE • Sanilac County Great Start Collaborative • Health Department Chamber of Commerce
Concerns about the availability of Health Services	**Need** Availability of Mental Health Services **Related Data** • Advisory Committee Perceptions • Focus Groups • Survey Results • Stakeholder Interviews	• Telehealth Services o Tele-psychology o Tele-therapy • Suicide Support Group •	**County Programs** • Community Mental Health • Crisis Line • Health Department **Local Programs** • Thumb Area Counseling Services • Lakeshore Therapy • Millie Patterson, LMSW, CAADC • Senior Life Solutions • Substance Abuse • Multiple independent counseling agencies throughout the county

Category	Need and Related Data	Current McKenzie Health System Efforts	Current Community Efforts
Concerns about the delivery of health services	**Need** Cost of Health Insurance **Related Data** • Advisory Committee Perceptions • Survey Results • Focus Group	• Financial Assistance Program Sliding Fee Scale for office visits • Certified Medicaid/Medicare Counselor • Low/no cost health events	**County Programs** • Health Department • Women Infant and Children Services • Immunizations Local Programs • Caring Hearts Health Clinic
Concern about physical health in your community (Youth)	**Need** Youth Obesity **Related Data** • Advisory Committee Perceptions • Survey Results • Focus Group	• Play Smart Program • Healthy Lifestyle Topics • Free Walking Track o Monday-Friday 5-7pm	**County Programs** • School Lunch Programs **Local Programs** • Thumb Elite Athletics- after school program • Diamond Trail • Open Gyms • Local Splash Pads • Parks
Concerns about mental health, substance abuse in your community	**Need** Youth Drug Abuse **Related Data** • Advisory Committee Perceptions • Survey • Stakeholder Interviews • Focus Groups	• Oxy-Free Emergency Room	**County Programs** • Sanilac County Sheriff and local police **Local Programs** • Chance to Change counseling and drug testing services • Narcotics Anonymous • DARE Program in Schools • Alcoholics Anonymous
Concerns about senior population in our community	**Need** Availability of Resources for Friends and Family Caring for the Elderly **Related Data** • Advisory Committee Perceptions • Stakeholder Interviews • Focus Groups	• Geriatric Program • Community Care Coordinator • Preventative Care Coordinator	**County Programs** • **Local Programs** • Senior Fair • Senior Directory • Respite care/hospice for dementia patient family members • Building Ties • Alzheimer Association • Sliding fee scale • Human Development Commission Home care • Adult Day Programs • Local Support groups for Dementia caregivers

Category	Need and Related Data	Current McKenzie Health System Efforts	Current Community Efforts
Concerns about the aging population	**Need** Availability of Resources to keep Elderly in their Home **Related Data** • Advisory Committee Perceptions • Survey Results • Stakeholder Interviews • Focus Groups	• Senior Exercise • Matter Of Balance • Geriatric Program • Community Care Coordinator • Preventative Care Coordinator • Senior Directory	**County Programs** • Region VII Area Agency on Aging and Huron County Council on Aging • Sanilac County Council on Aging • Blue Water Center for Independent Living • Subsidized Housing Assistance • Human Development Commission **Local Programs** • Meals on Wheels • Assisted Living a. MRH Hannah Wolfe Retirement b. Stonegate Village c. Autumnwood of Deckerville • Home Care Services • Building Ties • SOS Program • Medicaid Waiver Program
Stakeholder Interviews Top Concern	**Need** Not Enough Public Transportation options/cost of public transportation **Related Data** • Advisory Committee Perceptions • Stakeholder Interviews • Focus Group	• Family in Need assistance program	**County Programs** • DHS Medicaid Transportation assistance **Local Programs** • Sanilac Transportation Corporation • Sandusky Taxi • Human Development Commission • CrosLex Taxi
Physical, Mental Health, and Substance Abuse concerns (Adult)	**Need** Adult Obesity **Related Data** • Advisory Committee Perceptions • Focus Group	• Free Diabetes Education class • Community Fitness Classes • Healthy Lifestyle workshops • Lunch & Learn • LiveSmart Webpage & Campaign • During patient exams providers record BMI and provide education on weight management • Free Walking Track Monday-Friday 5-7PM	**County Programs** • MSU Extension Diabetes Program • Community Mental Health –Fitness Program **Local Programs** • Weight Watchers – Croswell & Deckerville • TOPS Group • Thumb Elite Athletics • Fitness Edge • ER Fitness • Lakeview Hills Gym • Get Serious Fitness • School Walking Tracks- CrosLex • Diamond Trail • Career Center Exercise Classes • VFW-Peck Exercise Classes

Written CHNA Report and Implementation Plan

- The CHNA report was completed in draft form in September 2016. The final report was reviewed and posted to the McKenzie Health System website at http://www.mckenziehealth.org/ in October 2016.
- The Implementation Plan will be posted to the www.mckenziehealth.org website with final approval by the Board of Directors by February 2017.

Additional Documents (Available Upon Request)

- Appendix A - Survey Instrument
- Appendix B - McKenzie Survey Demographics
- Appendix C - Survey Results of Community Assets and Concerns
- Appendix D - Cross Tabulation Age, Gender, Education, Income
- Appendix E - Focus Group Script
- Appendix F - Focus Group Questions & Results
- Appendix G - Stakeholder Interview Script
- Appendix H - Stakeholder Interview Questions & Results

McKenzie Health System Community Health Implementation Plan

Background

Community Health Needs Assessment (CHNA)

Process

In December 2016, the members of the Thumb CHNA Collaboration received training from the University of North Dakota on best practices in the field of Community Health Needs Assessment. Based on this training, a process was developed for the Thumb Area that would allow for consistent data collection for county and regional aggregation of data. In addition to the local hospital plans and activities, this process would allow for greater impact of countywide and regional projects and initiatives. The process was developed based review of the University of North Dakota Model[5]:

- Step 1: Establish a local and regional timeline
- Step 2: Convene county teams to manager logistics of assessment activities
- Step 3: Develop and administer Survey Instrument
- Step 4: Design and implement Community Focus Groups in local hospital communities
- Step 5: Design and implement Key Stakeholder Interviews or county agencies
- Step 6: Produce localized hospital reports based on survey zip code data, local focus groups, and county interview data
- Step 7: Local hospitals hold Implementation Planning Meetings
- Step 8: Local hospitals prepare a written CHNA Report and Implementation Plan
- Step 9: Produce county and regional reports
- Step 10: Convene county and regional meetings to review reports
- Step 11: Monitor Progress

The assessment process used by McKenzie Health System included a trifecta approach of reviewing three sources of primary data. In the trifecta approach, when there are three sources of data that illustrate a need, there is a greater likelihood that addressing that need will produce a powerful impact. Primary data was collected using surveys, focus groups, and key stakeholder interviews. In addition to the primary data, secondary data was reviewed for comparison to state rates and across counties located in the Thumb.

CHNA Priorities

The CHNA process was followed by a prioritization process and implementation meeting. The CHNA priorities to be addressed are listed below.

- Not enough provider evening or weekend hours
- Not enough specialists
- No insurance
- Increase awareness of local health resources and services
- Jobs with livable wages
- Crime and Safety
- Availability of mental health services
- Cost of health insurance
- Youth obesity
- Youth drug abuse
- Availability of resources for friends and family caring for the elderly
- Availability of resources to keep the elderly in their homes
- Not enough public transportation options/cost of public transportation
- Adult obesity

[5] Becker, K.L. (2013). Emerging Health Trends in North Dakota: Community Health Needs Assessments Aggregate Data Report. Grand Forks, ND: Center for Rural Health, University of North Dakota, School of Medicine & Health Sciences.

Implementation Plan

Category	New or Expansion Strategies Under Consideration	Lead Person/Group	Status/Progress of Strategies Under Consideration
Not enough provider evening or weekend office hours	• Create subgroup to evaluate 24/7 nurse hotline and opening a clinic for nights and weekends • Review current hours and patient load to increase evening and weekend hours by hiring new providers or offering additional hours to current providers	• McKenzie VP of Operations • McKenzie Director of Healthcare Practices	

Not enough specialists	• Gain certification for Dental Services at each McKenzie Health System provider clinics
	• Investigate feasibility of Infusion Clinic
	• Establish Telehealth
	  ◦ Pediatric Neurology
	• Increase Telehealth
	  ◦ Adult Psychiatry
	  ◦ Adult Therapy
	• Research the number of patients referred out to other specialty providers to determine the need for specific specialists
	• Research possible specialists to incorporate into the system i.e.:
	  ◦ Endocrinology
	  ◦ Oncology
	  ◦ Orthopedist
	  ◦ Ear, Nose & Throat
		• McKenzie VP of Operations
		• McKenzie Director of Healthcare Practices	

No Health Insurance	• Increase awareness of Medicare/Medicaid counselor program • Increase awareness of Financial Assistance Program and Sliding Fee Scale Program	• McKenzie VP of Finance • McKenzie Director of Patient Financial Services	
Increase awareness of local health resources and services	• Work with local media to publicize current resources & services • Distribute electronic copy of resource directory to area agencies to post on their websites • Post resource directories on website • Collaborate with Michigan State University (MSU) Extension on pilot referral program to promote through all MHS Clinics for all services offered by MSU Extension	• McKenzie Public Relations Coordinator	

Implementation Plan

Category	New or Expansion Strategies Under Consideration	Lead Person/Group	Status/Progress of Strategies Under Consideration
Jobs with livable wages	• Hospital Representative is working with the State Initiative Rising Tide Project	• McKenzie Public Relations Coordinator • Rising Tide Committee Representative	
Availability of Mental Health Services	• Expand number of Tele -psychiatrists appointment times • Expand number of Tele-therapy appointment times • Review patient /family process to access services • Investigate possibility of separate Emergency Room "psych" room with more privacy • Coordinate with local counseling services to create a "roadmap" for care • Build awareness of current mental health resources	• McKenzie VP of Operations • McKenzie Director of Human Services	
Concerns about crime & safety	• Collaborate with local law enforcement regarding public concern of this issue	• McKenzie Public Relations Coordinator • Local Law Enforcement	
Cost of Health Insurance	• Develop strategies to increase awareness of Financial Assistance Policy and Sliding Fee Scale program • Develop a plan to increase referral to Medicare/Medicaid Counselor	• McKenzie VP of Finance • McKenzie Director of Patient Financial Services	
Youth Obesity	• Review Play Smart data and expand program to each McKenzie Health System Clinic • Reevaluate the Community Fitness programs to incorporate child centered activities • Renew and establish partnerships with local /countywide gyms • Continue collaboration with Great Start Collaborative • Increase awareness and build parent participation • Collaborate with local schools to create a plan to address this issue	• McKenzie Public Relations Coordinator • McKenzie Director of Healthcare Practices	

Implementation Plan

Category	New or Expansion Strategies Under Consideration	Lead Person/Group	Status/Progress of Strategies Under Consideration
Youth Drug Abuse	• Collaborate with local law enforcement • Reestablish parent oriented workshop about youth drug issues • Create a workshop with CEU's for physicians, nurses and social workers. Involve Chance to Change, Great Start Collaborative, Community Mental Health and local law enforcement	• McKenzie Director of Human Services • McKenzie Public Relations Coordinator	
Availability of Resources for Friends and Family Caring for the Elderly	• Investigate and review "Parent Care" within the hospital setting • Add links to MHS website incorporating current services available • Increase Provider and Care Coordinator awareness of available resources	• McKenzie Public Relations Coordinator • McKenzie Director of Human Services • McKenzie Director of Healthcare Practices	
Availability of Resources to Keep Elderly in their Home	• Add links to McKenzie Health System website incorporating current services available • Coordinate workshop for retirement planning to address housing, etc. • Increase Provider and Care Coordinator awareness of available resources	• McKenzie Public Relations Coordinator • McKenzie Director of Human Services • McKenzie Director of Healthcare Practices	
Not Enough Public Transportation	• Since survey was initiated, Sandusky Taxi services have been established. This has improved the situation. • The Advisory Committee believes this is currently being address for the population size we serve. No further action will be taken at this time.	• McKenzie Public Relations Coordinator	
Adult Obesity	• Increase social media posts to focus on healthy lifestyle articles and tips • Investigate coordination with local gyms to provide discount for obese or overweight patients & families • Include local weight loss support groups such as TOPS and Weight Watchers on the McKenzie Health System website with links for ease of access • Investigate partnership to provide regular series of healthy cooking classes for adults and children	• McKenzie Public Relations Coordinator	