2016 COMMUNITY HEALTH NEEDS ASSESSMENT



Improving the Health of Our Communities

Crawford, Oscoda, and Roscommon Counties



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Introduction and Mission Review

From October 2015 through March 2016, a comprehensive Community Health Needs Assessment was conducted by Munson Healthcare Grayling Hospital in collaboration with District Health Department #10, the AuSable Free Clinic, the Roscommon County Human Services Collaborative Body, Oscoda County Human Services Coordinating Council, the Crawford County Collaborative, and other community agencies, to identify significant health issues in Crawford, Roscommon and Oscoda counties. This 2016 Community Health Needs Assessment (CHNA), which was adopted by the Board of Trustees on June 7, 2016, incorporates requirements of the Patient Protection and Affordable Care Act of 2010. This assessment process is an extension of the previous CHNA that was published in 2012. Special attention was given to the poor and underserved in our service area, in keeping with the heritage of the Grayling Hospital, and the Mission of Munson Healthcare:

Munson Healthcare and its partners work together to provide superior quality care and promote community health.

The CHNA includes collection and review of the most recent secondary data from local, state and federal sources, as well as stakeholder, provider and community input. The Community Health Needs Assessment is a valuable tool for planning, and will be used to help the Grayling Hospital, as well as its community partners, to identify and prioritize health issues, and work to develop and implement action plans, and pursue funding opportunities. With limited resources and significant community needs, we are challenged to steward our resources as we work together to improve the health of our communities, improve access to care and reduce health disparities, so that we provide the greatest benefit to all residents in the most cost effective manner possible.

Munson Healthcare Vision:

We will be the first choice for local health care because of our commitment to caring for the whole person and our expertise in providing the right care, at the right time, in the right place.

Following the completion of the CHNA, the health issues and priorities identified will be reviewed and a new implementation plan that will be used by the Grayling Hospital and others will be developed for the next three years.

Munson Healthcare's Mission and Grayling Hospital's vision is central to the commitment to our community. The Community Health Needs assessment is not a static document, it is a dynamic document and will provide data we can to use to measure our progress and its implementation plan will serve as a foundation to improve the health and wellness of our communities. This is a long-term commitment. New data will be available and we will continue to learn more about our community. We express our gratitude to all who participated in this process, and we invite you get involved in community health improvement initiatives.

Retrospective Review of the 2012 Community Health Needs Assessment

The following is a listing of the needs identified in the 2012 Community Health Needs Assessment:

- Programs and advocacy for the uninsured
- Access to primary care
- Maternal and Child Health
- Obesity Prevention
- Chronic Disease Management and Prevention/ Education
- Advocacy re: Substance Abuse Services and Mental Health Services

Munson Healthcare Grayling Hospital focused on developing or supporting initiatives to address access to primary care and programs and advocacy for the uninsured, maternal and child health, and nutrition, physical activity and weight status. Munson Healthcare Grayling Hospital's focus on providing senior services and chronic disease management is part of our daily commitment to providing the most compassionate and highest quality health care possible.



Access to Primary Care and Programs and Advocacy for the Uninsured

In 2012 the percentage of persons below the poverty level was higher than the Michigan rate of 14.8%, in all three counties, with Roscommon County the highest at 22.0%. The poverty rates remain higher than the Michigan rate with increases in Crawford and Oscoda counties and a slight decrease in Roscommon County. Median incomes continue to be below the Michigan average of \$48,471 in all three counties, with Crawford at \$39,982, Oscoda at \$33,942, and Roscommon at \$34,765. The numbers of uninsured have improved through the expansion of Medicaid in 2014 with the Healthy Michigan Plan, which offers access to health insurance for adults age 19-64 whose incomes are up to 133% of the Federal Poverty Level. As of February 2016, 3704 people in the three county area have enrolled in the Healthy Michigan Plan. Enrollment for Crawford County was 1,071, for Oscoda County was 604, and for Roscommon County was 2,029. Another 1,707 adults age 18-64, who incomes are 138-400% of the Federal Poverty Level were able to enroll for Health Insurance through the Federal Health Insurance Marketplace, 504 for Crawford County, 331 for Oscoda County and 872 for Roscommon County. The hospital continues to have dedicated staff and participates in outreach efforts, in collaboration with the AuSable Free Clinic, the local health departments and staff at Mid-Michigan Health to assist individuals with insurance enrollment. Many patients have shared stories of how insurance coverage has provided them with care that had been delayed due to lack of resources.

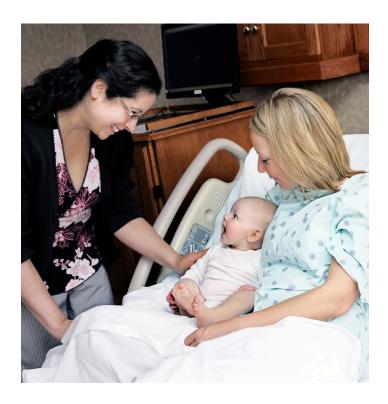
As noted in 2012, the County Health Rankings and other information on social determinants of health help us to better understand health status as directly reflective of the ability of a household to provide health insurance, coverage, pay for healthy foods and health care, and the opportunity to gain access to a healthier lifestyle. With an increased number of individuals

who are insured, access to primary care providers and medical specialty providers continues to be a challenge for our communities. All three counties are designated as medically underserved areas and health professional shortage areas. In both Roscommon and Oscoda counties the population to primary care physician ratio continues to be higher than the Michigan ratio of 1240:1. Oscoda County is currently served by only one physician and two nurse practitioners who provide primary care. Crawford County is lower than the Michigan population to primary care physician ratio at 1,070:1. Since 2012, Munson Healthcare Grayling Physician Network has grown to employ 2 pediatricians, 4 Family Practice physicians, 2 Family Practice OB physicians 7 Nurse Practitioners, 2 Physicians Assistants, 2 Internal Medicine physicians, and 1 Internal Medicine/Pediatrics physician on its primary care staff. Recruitment efforts for primary care providers continue. Travel to see a provider also can be a problematic in a rural community. High levels of poverty and limited public transportation that covers large geographic areas make it difficult for some to access care.

The AuSable Free Clinic, located in Grayling, is financially supported through Grayling Hospital community benefit funding and continues to provide medical care and case management, as well as the Medication Access program, for those who are uninsured or underinsured. The Clinic has been very active in providing health insurance enrollment assistance for the Free Clinic patients, and over time has decreased the number of patients who rely on the Clinic to receive care, because they now have insurance and a primary care provider. The Clinic is looking for ways to reach out to patients in the three county service area, knowing that in remote rural areas recruitment of providers and transportation are barriers.

Maternal and Child Health

In 2012, the trend of single parent households had risen to the surface as a significant issue impacting community health. This continues to be a concern, while the Michigan average is 34%, Roscommon is higher at 45% than the Michigan average and Crawford County at 33% and Oscoda County at 29% are below the average. The percentage of Medicaid births continues to be significantly higher than Michigan (43.6%) in all three counties, Crawford 69.6%, Oscoda 53.8% and Roscommon 74.1%.



Although improvements have been seen, the teen pregnancy rate continues to be higher than the Michigan rate in all three counties. The percentage of women who smoke while pregnant has decreased from the rates noted in the 2012 CHNA in in all three counties, but continues to be higher than the Michigan rate. Births with adequate prenatal care improved in all counties, but remain a concern as Oscoda county is only at 58.1%. The percentage of low birth weight babies improved in Roscommon Counties, and is lower than the Michigan rate of 8.4%, but in Crawford and

Oscoda and Crawford Counties the rate remains higher at 9.1% and 9.2%. Excessive weight gain while pregnant also exceeds the Michigan rate of 46.4% in Crawford County and Roscommon counties. Munson Healthcare Grayling Hospital is a member of both the 21 county regional Perinatal Initiative and Maternal Smoking Coalition, which are working to address barriers and improve the health of pregnant women and their children. The Grayling Hospital offers prenatal nutrition, child birth preparation and breast feeding classes and support. Outreach at community health fairs and Neighborhood and Project Connect events continues, and work with our colleagues at the public health departments continues to try to improve self -care during pregnancy and improve breastfeeding rates. The Grayling Hospital continues our commitment to provide obstetric care to our three county area as one of nine birthing hospitals in the northern 21 county region of Michigan after hospitals in West Branch, Cheboygan, and Clare closed their OB units. Munson Healthcare Grayling Physician Network recently added two OB nurse care managers to serve high risk OB patients, facilitating appropriate referrals to other health care providers and connections to needed community resources, as well as coaching women through health related challenges during their pregnancy. In response to the unmet need for mental health services for this population, Munson Healthcare Grayling Physician Network is providing behavioral health services to women and children through the Michigan Child Collaborative Care (MC3) program in collaboration with Northern Lakes Community Mental Health. A grant from Blue Cross Blue Shield is currently funding this work. In addition, two MSW prepared Social Workers have also been added to the Munson Healthcare Grayling Physician Network staff, specifically to address the psychological needs of these women and children. This is an initial step in expanding access to behavioral health services in our service area; currently a Psychiatric Mental Health Nurse Practitioner is actively being recruited.

Nutrition, Physical Activity and Weight Status: Chronic Disease and Related Risk Factors

In 2012 smoking, overweight, obesity, and physical inactivity, all risk factors for chronic disease, were noted as significant concerns and mirrored what was being seen in all of the state of Michigan. Adult smoking continues to be a significant concern, with all three counties exceeding the Michigan percentage of 22%. Obesity rates exceed state percentages as well. Physical inactivity rates improved in Oscoda and Roscommon Counties, while the rate declined in Crawford, all were at or above the Michigan rate of 23%. Prenatal nutrition classes are now offered at no charge to address healthy weight gains during pregnancy. The Hospital joined the MHA Michigan Healthy Foods Hospital Campaign and removed its fryers and is offering more health conscious choices. The hospital's Community Health department makes healthy nutrition choices and physical activity a part of its messaging at all community events.

Fitness opportunities can be a challenge with cold Northern Michigan winters, especially for those who cannot get outside. There are limited opportunities for free or low cost indoor activity. The Hospital supports two weekly Senior Exercise Programs at the Crawford County Council on Aging. The Hospital Employee Wellness Committee has encouraged participation in the District Health Department's Fitness Challenges as well as offering reduced rates to use the Cardiac Rehab and Outpatient Rehabilitation fitness facilities.

The Collaborative Bodies in each of the counties have increased awareness of these risk factors as they relate to chronic disease. The County Health Rankings Data was used as a call to action in each county to initiate the discussion of establishing or re-establishing health coalitions to work together, using the collective impact model to improve the health of the residents of Crawford, Oscoda and Roscommon Counties.

Summary Observations from the 2016 Community Health Needs Assessment

Executive Summary

The 2016 Community Health Needs Assessment has identified the following health problems and issues as the highest priority needs, through a comprehensive process of data collection and analysis, and gathering input from community members, as well as healthcare and human service providers from Crawford, Roscommon and Oscoda counties. Social Determinants of Health: income and employment, educational levels, housing and transportation, and a higher percentage of the population being age 65 and older or disabled, all present significant challenges to our rural communities.

Access to Health Care

Access to primary care continues to be an issue facing our three county area. Although many more residents in our area have obtained health care insurance through the Healthy Michigan Plan and the Health Insurance Marketplace, barriers to access remain. With all three counties designated as medically underserved and health professional shortage areas, provider shortages, in addition to limited public transportation options, lack of knowledge on where to access care, as well as difficulties individuals have paying for co-pays, deductibles, and medications continue to provide on-going challenges in our area. Continued work is needed to reach those who still do not have health insurance and assist with education regarding enrollment options. As more people obtain health insurance coverage, education is necessary regarding where to access care, as well as responsibilities and benefits.

Chronic Disease

The percentage of the population in three county area 65 years and older is significantly larger than that of Michigan. The risks of many chronic diseases increase as people grow older. Cardiovascular disease, cancer, diabetes and chronic lower respiratory disease rates are higher than Michigan rates. Also of interest was the percentage of the population with any disability, which is significantly higher than the state average in all three counties. Opportunities exist to educate the community regarding advance care planning as it relates to medical care in advanced stages of chronic disease.

Dental Health

Lack of access to dental care continues to be an issue facing our three county area. Provider shortages and as well as limited

access to dental care for adults without dental insurance and those adults who have obtained dental coverage through the Healthy Michigan Plan continue to be barriers to access. Travel to dental clinics located outside of the three county area can also be problematic. Participants in the FY 2015 Community survey listed no dental insurance and cost of dental care as two of the biggest problems they are having in getting health care services.

Healthy Lifestyles

Physical inactivity, as well as obesity, modifiable risk factors for chronic disease remain a concern. Access to affordable healthy foods was a concern not only of the community members, but also the Health and Human Service Providers. Increased opportunities for physical activity is an area that was identified to help make residents healthier.

Maternal, Infant, and Child Health

The percentage of Medicaid paid births exceeds the Michigan rate in all three counties, the highest being Roscommon County at 74.1%. The rates of teen pregnancy, smoking while pregnant, low birth weights and excessive weight gain during pregnancy are areas that continue to be of concern. The number of children living in poverty, and who are eligible for free and reduced price school lunch, significantly exceeds state rates in all three counties, with Roscommon county being of most concern. Rates of child abuse and neglect are also higher in the three county area than in Michigan. The number of children living in single parent households in Crawford and Roscommon counties exceeds the Michigan rate. Physical inactivity, increased electronic device screen time and poor nutritional habits of middle school and high school age students, as self-reported in the Michigan Profile for Healthy Youth, are also of concern.

Mental Health

A lack of mental health providers continues to be a significant barrier to obtaining mental health services, with all three counties having a higher population to mental health provider ratio than the state rate. The MiPHY data reports a significant number of middle school and high school students who reported symptoms of depression and making a plan about how they would commit suicide. Lack of access to behavioral health providers and mental health issues were listed in the top ten most important health problems in the "What Matters to You?" community survey. Mental health issues were listed as the third most important community health issue on the provider survey. Increasing behavioral health awareness and response to behavioral health issues was identified during the Community Conversations as one of the actions that could be taken to move closer to our vision of a healthy community.

Substance Abuse

Preventing drug abuse and excessive alcohol use increases people's chances of living long, healthy and productive lives. Substance Abuse was listed as the number one most important community health problem by community members responding to the "What Matters to You?" community survey. On the provider survey it was listed as the second most important community health problem. Alcohol-impaired deaths continue to exceed the Michigan average all three counties. The 2013-2014 MiPHY data suggests reported use of alcohol, marijuana, and unprescribed pain medication as areas of concern.

Tobacco Use

Tobacco use is the single most preventable cause of disease, disability, and death in the US. Adult smoking rates are higher than the Michigan rate in all three counties. The rates of women smoking while pregnant continue to be much higher than the Michigan rate in all three counties. The mortality rate for Chronic Lower Respiratory Disease is higher in all three counties than the state of Michigan average. In the United States, tobacco smoke is a key factor in the development and progression of COPD as well as heart disease and heart attack, and cancer. In the regional MiPHY data for Crawford, Ogemaw, Oscoda and Roscommon counties it was reported that 3% of the middle school students and 10.7% of the high school students smoked cigarettes during the last 30 days. Tobacco and E-Cigarette use was identified as one of the most important community health problems in both the provider and community surveys.

Community Description

Profile of Service Area

Grayling Hospital is located on the AuSable River in the heart of scenic northern Michigan serving the residents of Crawford, Oscoda and Roscommon counties, in addition to many tourists and second-home owners. The organization has 71 licensed inpatient beds, a 39-bed skilled nursing/ long-term care unit, an active emergency department, and five physician offices located in Grayling, Prudenville and Roscommon.

The Grayling Physician Network consists of employed medical providers specializing in family medicine, internal medicine, OB/GYN, pediatrics, general surgery, orthopedic surgery, and urology. With over 35 employed providers and specialists, and community health centers in three locations, Grayling, Prudenville and Roscommon, the Grayling Physician Network works to improve the health of our communities by providing vital health services to everyone through all stages of life.

As shown on the service area map, the hospital is located in Grayling, which is the county seat of Crawford County

Crawford County

Crawford County is located in the north central Lower Peninsula of Michigan. The county is composed of six townships: Grayling Township, Frederic Township, Maple Forest Township, Lovells Township, South Branch Township, and Beaver Creek Township. Also located in Crawford County is the City of Grayling, which is the county seat. Crawford County has a land area of 556 square miles and an estimated population of 13,745 in 2014. Its population density is 25.3 people per square mile, and is designated as 73% rural by the US Census Bureau. Crawford County is designated a Health Professional Shortage Area (HPSA) and Medically Underserved Population Area (MUA).

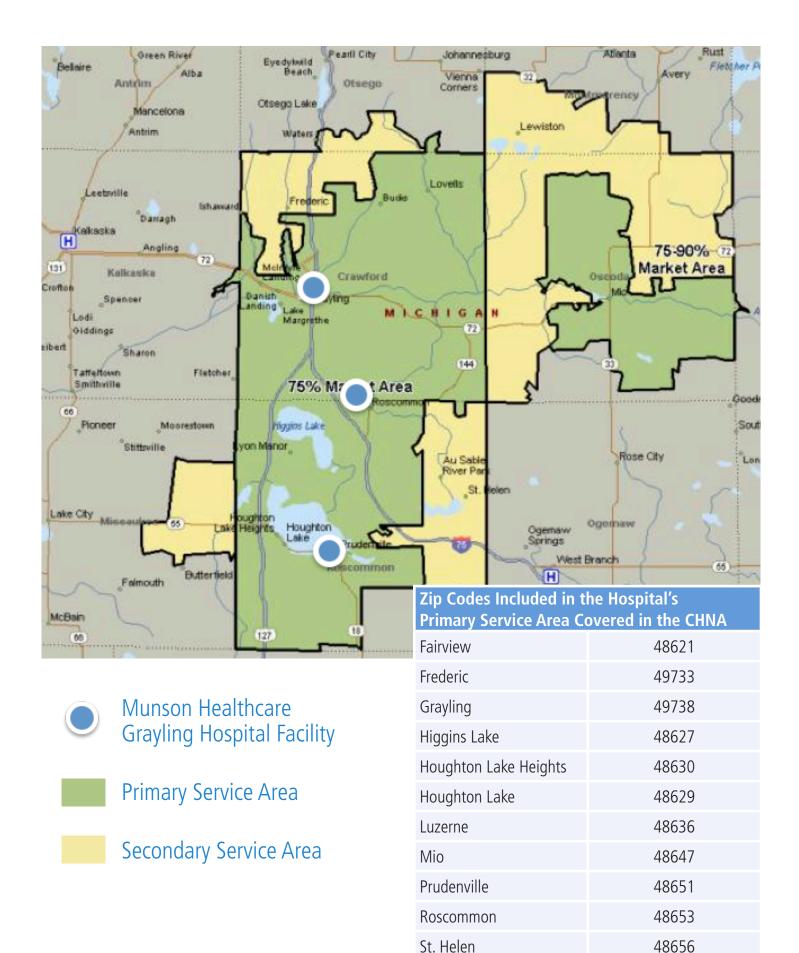
Oscoda County

Oscoda County is located east of Crawford County. Mio is the county seat. Oscoda County has 6 townships. Mio, Fairview, Luzerne and Comins are communities located within Oscoda County. Oscoda County has a land area of 566 square miles and an estimated population of 8,371 in 2014. Its population density is 15.3 people per square mile, and is designated as 100 % rural by the US Census Bureau. The AuSable River runs throughout the entire County. There are over 2,000,000 plus acres of State and Federal land, which is more than any other county in Michigan. Oscoda County is the smallest county in Michigan. Oscoda County is designated a Health Professional Shortage Area (HPSA) and Medically Underserved Population Area (MUA).

Roscommon County

Roscommon County is located south of Crawford County. The village of Roscommon is the county seat. Roscommon County has 11 townships. The largest communities are Roscommon, Houghton Lake, Prudenville and St. Helen. Roscommon County has a land area of 520 square miles and an estimated population of 23,955 in 2014. Its population density is 47.1 people per square mile, and is designated as 66% rural by the US Census Bureau. Houghton Lake, the largest inland lake in Michigan is located in Roscommon County. Higgins Lake and Lake St. Helen are also located in Roscommon County making tourism one of the county's largest industries. Roscommon County is designated a Health Professional Shortage Area (HPSA) and Medically Underserved Population Area (MUA).

The number of persons per square mile in these counties is much less than in Michigan. Crawford, Roscommon and Oscoda Counties have long been areas of high poverty, low incomes, and unemployment. This problem is due largely to the lack of high paying, year-round employment for local residents. The counties in the Grayling Hospital's service area are known as recreation and retirement destinations. The counties' high quality of life, including an abundance of unspoiled rivers, streams, lakes and vast forest area, has helped sustain the local economy.



Data Collection Approaches

Methodology

The process of completing the Community Health Needs Assessment requires gathering data from both primary and secondary sources. Health specific data, as well as data that outline the social determinants of health have been included. Sources of secondary data include:

- U.S. Census Bureau
- American Community Survey
- Michigan Department of Community Health
- Michigan Behavior Risk Factor Surveillance System
- County Health Rankings
- Michigan Profile for Healthy Youth (MiPHY)
- District Health Department #10
- District Health Department #2
- Central Michigan Health Department
- Small Area Income and Poverty Estimates (SAIPE) 2012
- Michigan League for Public Policy
- 2-1-1 Northeast Michigan

Community Participation Strategies – Primary Data Collection

In collaboration with District Health Department #10 and the Health Department of Northwest Michigan, two separate surveys were created. The "What Matters To You Community Survey" was distributed to community members. The "Health Care Provider Survey" was distributed health care providers, including both physicians and mid-level providers, as a part of a regional Community Health Needs Assessment initiative to collect data.

Health Care Provider Survey

The Survey was distributed to area physicians and mid-level providers. A total of 23 providers participated in the survey.

"What Matters to You" Community SurveyThe Surveys were widely distributed throughout the three county area with the help of the Crawford County Commission on Aging and Senior Center, the Roscommon

County Senior Centers in Houghton Lake, Roscommon and St. Helen, the Oscoda County Senior Center, District Health Departments #10 and #2, Central Michigan District Health Department, Michigan Works, Crawford AuSable School District and the Human Service Collaboratives of Crawford, Oscoda, and Roscommon counties. Surveys were also distributed to the participants of the Project Connect event in Prudenville. The survey was also sent to all Human Service Collaborative Networks to share with staff and clients within the 3 county region. Both paper and online versions of the survey were available. A total of 796 residents from Crawford, Oscoda and Roscommon counties participated in the survey.

FY 15 Community Surveys

In FY 15, a Community Survey was distributed with emphasis on the poor and underserved populations of our counties. Surveys were distributed at the AuSable Free Clinic, the Baby and Toddler Closet in Grayling, the Crawford County Commission on Aging and Senior Center, the Roscommon County Senior Center in Houghton Lake, the Oscoda County Senior Center, to first OB patients, District Health Department #10 and at the Project Connect event in Prudenville. Community Survey data for Oscoda County from District Health Department # 2's Community Health Needs Assessment was also shared for inclusion in this CHNA. A total of 252 residents completed the surveys: 135 from Crawford County, 94 from Roscommon County, 20 from Oscoda County, and 3 from counties outside the 3 county area. Many of the guestions aligned with the "What Matters to You" survey. Information from guestions that weren't specifically addressed will be included in this assessment.

Community Conversations

Among three Community Conversations that were open to the public and advertised in the three counties, 58 community members and representatives from local health departments, hospitals and other health care providers, social service agencies, schools, business, and government participated. These conversations centered on the question, "What can we do in our County to move closer to our vision of a healthy community?" Participants identified actions for making these counties healthier places to live, work, and play. Results will be discussed in "Findings from the Community Input Process".

Michigan Profile for Healthy Youth (MiPHY) 2013-2014

The MiPHY is an online student health survey offered by the Michigan Departments of Education and Community Health to support local and regional needs assessment. The MiPHY provides student results on health risk behaviors including substance use, violence, physical activity, nutrition, sexual behavior, and emotional health in grades 7, 9, and 11. The survey also measures risk and protective factors most predictive of alcohol, tobacco, and other drug use and violence. A limitation of the data is that the survey covered only 3 of 10 districts in Crawford, Oscoda, and Roscommon county region.

Findings from the Community and Health Data

Demographics

The population of all three counties continues to decrease, with the largest change in Oscoda County. The percentage of persons 65 years and older continues to increase, and is higher than the Michigan average, while the percentage of persons under 5 years and under 18 years continues to see a small decrease and is lower than the Michigan average. The median age in all three counties is significantly higher than Michigan's median age of 40.4 years.

	Crawford	Oscoda	Roscommon	Michigan	Source
Population	13,745	8,371	23,955	9,909,877	US Census Bureau, 2014 estimate
Population, % change	-2.3%	-3.1%	-2.0%	0.3%	US Census Bureau, April 1, 2010 to July 1, 2014
Persons under 5 years	4.1%	4.5%	3.7%	5.8%	US Census Bureau, 2014
Persons under 18 years	18.0%	18.8%	15.1%	22.4%	US Census Bureau, 2014
Persons 65 years and over	24.0%	26.1%	30.0%	15.4%	US Census Bureau, 2014
Female persons	49.6%	48.7%	50.1%	50.9%	US Census Bureau, 2014
Median Age	48	50	53	40.4	Michigan League for Public Policy Fact Sheet 2014

	Crawford	Oscoda	Roscommon	Michigan	Source
Race: White	96.7%	97.2%	96.7%	79.9%	US Census Bureau, 2014
Race: Black or African American	0.8%	0.3%	0.6%	14.2%	US Census Bureau, 2014
Race: American Indian and Alaska Native	0.7%	0.9%	0.7%	0.7%	US Census Bureau, 2014
Race: Asian	0.5%	0.1%	0.6%	2.9%	US Census Bureau, 2014
Two or more races	1.3%	1.5%	1.3%	2.3%	US Census Bureau, 2014
Hispanic or Latino	1.8%	1.4%	1.5%	4.8%	US Census Bureau, 2014

All three counties are predominantly White, with very low census counts of frican Americans, American Indian, Asian and Hispanic or Latino populations.

Key Social & Economic Factors

According to the US Census Bureau, median household incomes are lower than the Michigan average in all three counties, and the unemployment is higher than the Michigan average in all three counties. The median income in Crawford County is approximately 17.5% lower than the state average, Oscoda County 30%, and Roscommon County 28.25% lower. The percentage of population with any disability is higher than the state average of 13.9% in all three counties with Crawford at 21.1%, Oscoda 21.9% and Roscommon at 25.2%. Addressing the issues related to those with disabilities is a growing concern.

Vehicle Access – No Vehicle Available

It is estimated in the three county service area that 6.2% of Crawford, 7.2% of Oscoda and 6.2% of Roscommon households have no vehicles, compared to Michigan at 8.0%. These large rural counties also have limited public transportation options. (US Census Bureau 2010-2014 Community Survey 5-Year Estimates)

Family Structure

The percentage of married couple family households in Crawford County is 54.9%, Oscoda County is 53.7% and Roscommon is 45.8%, compared to Michigan at 48.0%.

The percentages of widowed residents in Crawford County is 2.8% males and 11.0% females, in Oscoda County is 4.5% and 11.3%, and in Roscommon is 5.1% and 15.2%, are all higher compared to Michigan at 2.7% and 9.5%. The percentage of households with children under 18 years old is 23.1% in Crawford, 21.2% in Oscoda, and 18.8% in Roscommon, all less than the Michigan average of 30.6%. The percentage of households with one or more people over 65 years and over exceeds the Michigan average of 26.7% in all three counties with Crawford at 35.9%, Oscoda 39.8% and Roscommon at 41.5%.

Education

The rates of high school graduation for residents Crawford, Oscoda and Roscommon are lower than the state average of 89.3%. The rates of obtaining a bachelor's degree or higher is significantly lower than the Michigan rate of 26.4% in all three counties. Lower educational level can adversely affect health outcomes.

	Crawford	Oscoda	Roscommon	Michigan	Source
Median household income	\$39,982	\$33,942	\$34,765	\$48,471	US Census Bureau 2010-2014 American Community Survey
Unemployment	9.4%	12.0%	11.3%	7.3%	Bureau of Labor Statistics, as provided by Michigan League for Public Policy, 2014
Population with any disability	21.1%	21.9%	25.2%	13.9%	US Census Bureau 2010-2014 American Community Survey

	Crawford	Oscoda	Roscommon	Michigan	Source
High school graduate or higher	84.80%	81.90%	85.40%	88.70%	US Census Bureau 2008-2012 American Community Survey
Bachelor's degree or higher	15.20%	9.60%	14.50%	25.50%	US Census Bureau 2008-2012 American Community Survey

Poverty

Age related poverty statistics are higher in all three counties of the service area than the Michigan average. The percentage of families below poverty level is lower than the Michigan average in Crawford County. Medicaid paid births and the number of children insured by Medicaid are higher in all three counties than the state average. Participation in WIC, free and reduced price school lunch, and the SNAP program are higher in all three counties to help meet the needs of those families who are economically stressed.

	Crawford	Oscoda	Roscommon	Michigan	Source
Families below poverty level	10.3%	13.2%	15.3%	12.1%	US Census Bureau 2010-2014 American Community Survey
Poverty: all ages	16.5%	20.5%	20.7%	16.2%	US Census Bureau and Small Area Income and Poverty Estimates (SAIPE), as provided by Michigan League for Public Policy, 2014
Poverty: ages 0-17	28.4%	31.9%	34.4%	22.6%	US Census Bureau and Small Area Income and Poverty Estimates (SAIPE), as provided by Michigan League for Public Policy, 2014
Poverty: ages 5-17	26.1%	29.6%	32.9%	20.8%	US Census Bureau and Small Area Income and Poverty Estimates (SAIPE), as provided by Michigan League for Public Policy, 2014
Medicaid paid births	71.8%	65.2%	73.1%	43.9%	Michigan Department of Health and Human Services, as provided by Michigan League for Public Policy, 2013
Children ages 0-18 insured by Medicaid	47.3%	49.3%	59.9%	39.2%	Michigan Department of Health and Human Services, as provided by Michigan League for Public Policy, 2014
WIC	67.0%	76.4%	75.3%	52.0%	Michigan Department of Health and Human Services, as provided by Michigan League for Public Policy, 2014
Children eligible for school free and reduced price lunch	57.5%	64.3%	66.5%	46.7%	Michigan Department of Education, as provided by Michigan League for Public Policy, 2014
Food Stamp/SNAP benefits in the past 12 months	29.5%	31.6%	40.3%	26.0%	Michigan Department of Health and Human Services, as provided by Michigan League for Public Policy, 2014

Key Community Health Factors

Access to Care

The percentage of adults without insurance is estimated to be above the state average of 13% in all three counties. The percentage of children without insurance also is estimated to be above the state average of 4% in all three counties. Collaborative outreach efforts have resulted in reducing the number of uninsured person age 19-64 at 133% of the Federal Poverty Level through enrollment in the Healthy Michigan Plan and those from 138-400% of the FPL in Marketplace Insurance plans. With shortage of primary care providers, dentists and mental health providers in the service area, access to care remains a challenge.

	Crawford	Oscoda	Roscommon	Michigan	Source
Uninsured adults	14%	18%	16%	13%	County Health Rankings 2016
Uninsured children	5%	7%	5%	4%	County Health Rankings 2016
Primary care physicians	1,070:1	2,090:1	3,000:1	1,240:1	County Health Rankings 2016
Dentists	3,440:1	4,190:1	2,180:1	1,450:1	County Health Rankings 2016
Mental health providers	920:1	2,090:1	1,140:1	450:1	County Health Rankings 2016
Healthy Michigan Plan County Enrollment	1071	604	2029	635,665	MI State Progress Report February 2016
Marketplace Enrolled	504	331	872	345,804	Health Insurance Marketplace Plan Selections by County 2016 Open Enrollment Period Nov. 1, 2015 — Feb. 1, 2016

Cancer Incidence and Mortality

Lung cancer exceeds the Michigan rate in all three counties. Smoking is a significant risk factor for lung cancer. The incidence rate for prostate cancer is higher than the state average in Roscommon County, and incidence of colorectal cancer is higher than the state average in Oscoda County. Cancer is the second leading cause of death in Crawford, Oscoda, and Roscommon counties, exceeding the Michigan rate in all three counties.

	Crawford	Oscoda	Roscommon	Michigan	Source
All Cancer*	428.6	414.5	509.1	478.0	Michigan Department of Health and Human Services, 2008-2012
Prostate*	47.6	41.4	69.1	67.6	Michigan Department of Health and Human Services, 2008-2012
Lung and Bronchus*	80.0	83.5	89.4	69.1	Michigan Department of Health and Human Services, 2008-2012
Breast*	35.8	36.0	59.3	65.4	Michigan Department of Health and Human Services, 2008-2012
Colorectal*	29.9	56.9	42.2	42.5	Michigan Department of Health and Human Services, 2008-2012
Cancer Mortality Rate*	174.0	195.9	195.1	173.3	Michigan Department of Health and Human Services, 2008-2012

^{*} Age adjusted rates per 100,000 population

Cardiovascular Disease

Hospital discharges for Myocardial Infarction (Heart Attack) are higher in all three counties than the Michigan average, while hospital discharges for stroke is lower than the state average rate in all three counties. Cardiovascular disease is the leading cause of death in the three county area and in Michigan. The Cardiovascular Disease mortality rate exceeds the Michigan rate in both Oscoda and Roscommon counties. Better management of risk factors and chronic disease, coupled with early identification of stroke and heart attack symptoms and timely treatment can lead to decreases in the mortality rate.

	Crawford	Oscoda	Roscommon	Michigan	Source
Hospital Discharges -Acute Myocardial Infarction*	287.9	263.9	267.3	204.4	Michigan Department of Health and Human Services, 2011-2013
Hospital Discharges -Congestive Heart Failure *	267.9	311.5	296.0	289.9	Michigan Department of Health and Human Services, 2011-2013
Hospital Discharges – Stroke*	219.9	229.5	207.0	229.9	Michigan Department of Health and Human Services, 2011-2013
Mortality Rate Cardiovascular Disease*	239.9	344.5	304.9	253.0	Michigan Department of Health and Human Services, 2012-2014
Mortality Rate Heart Disease*	188.1	275.1	267.1	199.3	Michigan Department of Health and Human Services, 2012-2014
Mortality Rate Stroke*	43.1	58.5	29.4	37.1	Michigan Department of Health and Human Services, 2012-2014
Hyperlipidemia: Medicare Population	45.4%	38.0%	53.4%	45.3%	Center for Medicare & Medicaid Services, 2012
Hypertension:Medicare Population	51.7%	50.1%	59.0%	57.3%	Center for Medicare & Medicaid Services, 2012

^{*} Age adjusted rates per 100,000 population



Obesity and Physical Activity

The percentage of adult obesity reported in the 2016 County Health Rankings data was 32% for Crawford, 33% for Oscoda and 32% for Roscommon County, an increase for both Crawford and Oscoda County, and all exceeding the Michigan rate of 31%.

The 2013-2014 MiPHY reports data on overweight and obesity for students in the 7th, 9th and 11th grade. Approximately 20% of 7th grade students and 17% of 9th grade students were reported as overweight, while only 31.7% of the middle school students and 32.8% of the high school students were physically active more than an hour per day. Eighteen to 31% of the students reported watching three or more hours of TV or used a computer for something that was not related to school work for three or more hours on an average school day. Poor nutritional habits were also reflected in the MiPHY data.

Obesity and Physical Activity (continued)

Food Environment Index is a measure which is a composite measure of Food Insecurity and Access to Healthy Foods. Food insecurity is the percentage of the population who did not have access to a reliable source of food during the past year. The percentage of children experiencing food insecurity is higher than the state rate in all three counties. Lacking constant access to food is related to negative health outcomes such as weight-gain and premature mortality. Limited access to healthy foods is the percentage of the population who are low income (less than 200% of the Federal Poverty Level) and do not live close to a grocery store (in a rural area it is defined as living less than 10 miles from a grocery store). There is strong evidence that residing in a food desert is correlated with a high prevalence of overweight, obesity, and premature death. (County Health Rankings 2016)

People who are at a healthy weight and have regular physical activity are less likely to develop risk factors for chronic disease such as high blood pressure and dyslipidemia. They are also less likely to develop chronic diseases, such as Type 2 diabetes, heart disease, osteoarthritis, and some cancers. Women at a healthy weight are less likely to experience complications during pregnancy. (Healthy People 2020)

	Crawford	Oscoda	Roscommon	Michigan	Source
Adult obesity	30%	30%	33%	32%	County Health Rankings 2014
(BMI > 30)	32%	33%	32%	31%	County Health Rankings 2016
Physical inactivity	24%	23%	25%	23%	County Health Rankings 2016
Access to Exercise Opportunities	94%	92%	95%	84%	County Health Rankings 2016
Food Environment Index	7.1	7.3	6.4	7.1	County Health Rankings 2016
Food Insecurity	15%	18%	17%	16%	County Health Rankings 2016
Childhood Food Insecurity	24.9%	29.2%	29.7%	20.9%	Feeding America 2013
Limited Access to Healthy Foods	7%	*	9%	6%	County Health Rankings 2016

2013-2014 MiPHY survey results: Percentage of students who	7th	9th	11th
are obese (at or above the 95th percentile for BMI by age and sex)	16.4%	16.6%	13.5%
are overweight (at or above the 85th percentile and below the 95th percentile for BMI by age and sex)	20.0%	17.1%	14.6%
were physically active for a total of at least 60 minutes per day on five or more of the past seven days	31.7%	35.9%	29.3%
watched three or more hours per day of TV on an average school day	31.4%	18.1%	27.3%
played video or computer games or use a computer for something that is not school work three or more hours per day on an average school day	35.4%	34.3%	32.1%
ate five or more servings per day of fruits and vegetables during the past seven days	34.3%	30.4%	31.1%
drank a can, bottle, or glass of soda or pop one or more times per day during the past seven days	26.5%	21.3%	27.7%

Diabetes

The percentage of adults with Diabetes exceeds the Michigan average in all three counties, and the percentage of the Medicare population diagnosed with Diabetes in Crawford County exceeds the state of Michigan rate of 30.2%. The Diabetes Related Mortality rates of Crawford County at 81.3, and Oscoda at 73.9 exceed the state rate of 73.7, Roscommon County is lower 68.7.

	Crawford	Oscoda	Roscommon	Michigan	Source
Adults with Diabetes	12%	14%	16%	11%	Centers for Disease Control and Prevention 2012
Diabetes(Medicare Population)	31.1%	28.6%	29.8%	30.2%	Centers for Medicare and Medicaid Services 2012
Diabetes —any mention Mortality Rate*	81.3	73.9	68.7	73.7	Michigan Department of Health and Human Services 2012-2014
Diabetes Screening Medicare Population	90%	89%	91%	86%	Centers for Medicare and Medicaid Services 2012

^{*} Age adjusted rates per 100,000 population

Chronic Lower Respiratory Disease (CLRD) and Smoking

The mortality rate for CLRD is higher in Crawford and Roscommon counties than the state of Michigan average. In the United States, tobacco smoke is a key factor in the development and progression of COPD as well as heart disease, heart attack, and cancer. Current smoking rates in Crawford and Roscommon County were higher than the Michigan rate of 22%. Data for Oscoda County was not available, but in the District Health Department #2 Community Survey, 49% of the respondents reported that they were either currently using tobacco products or had done so in the past. The rates of women smoking while pregnant continue to be significantly higher than the Michigan rate in all three counties. In the regional 2013-2014 MiPHY data for Crawford, Ogemaw, Oscoda and Roscommon counties it was reported that 3% of the middle school students and 10.7% of the high school students smoked cigarettes during the last 30 days.

	Crawford	Oscoda	Roscommon	Michigan	Source
Mortality Rate	66	61.4	77.7	45.8	2010-2012, MDCH
Chronic Lower Respiratory Disease *	51.8	45.3	71.1	45.4	Michigan Department of Health and Human Services 2012-2014
Current Smoker	26.7%	49.0%**	29.8%	22%	Michigan Behavioral Risk Factor 2012- 2104 **District Health Department #2 2014Community Survey
Smoked While Pregnant	47.7%	34.4%	46.9%	21.6%	Michigan Department of Health and Human Services, as provided by Michigan League for Public Policy, 2013

^{*} Age adjusted rates per 100,000 population

Alcohol and Substance Abuse

The excessive drinking measure, at 17-19%, is under the Michigan average of 20% in all 3 counties. Excessive Drinking is the percentage of adults that report either binge drinking, defined as consuming more than 4 (women) or 5 (men) alcoholic beverages on a single occasion in the past 30 days, or heavy drinking, defined as drinking more than one (women) or 2 (men) drinks per day on average. Alcohol-impaired deaths continue to exceed the Michigan average all three counties. The 2013-2014 MiPHY data below lists the percentage of students who reported use of alcohol, marijuana, and unprescribed pain medication. Substance abuse is also reported in both the community and provider surveys as one of the most important health problems in the community.

Alcohol and Substance Abuse (continued)

	Crawford	Oscoda	Roscommon	Michigan	Source
Excessive drinking	19%	17%	17%	20%	County Health Ranking 2016
Alcohol-impaired driving deaths	36%	33%	33%	30%	County Health Ranking 2016
Drug Overdose Deaths*	-	-	18	16	County Health Ranking 2016

^{*} Age adjusted rates per 100,000 population

MiPHY survey results: Percentage of students who	7th	9th	11th
drank alcohol during the past 30 days	8.5%	16.4%	29.7%
used marijuana during the past 30 days	4.4%	13.4%	18.5%
took painkillers such as OxyContin, Codeine, Vicodin or Percocet without a doctor's prescription during the past 30 days	2.6%	7.6%	7.7%

Mental Health

A lack of mental health providers is a significant barrier to obtaining adequate mental health care. In the FY 2015 Community Survey, approximately 40% of the respondents reported that they or an immediate family member had ever been told by a doctor or another health professional that they had a mental health issue. Among these respondents, depression (self 18.6%/family member 15.1%) was identified as the most predominant mental health issue, followed by anxiety (self 18.6%/family member 11%) and attention deficit/hyperactivity disorder (self <1%/family member 14.5%).

The MiPHY data reports a significant number of middle school and high school students who reported symptoms of depression and making a plan about how they would commit suicide. Of the high school students completing the survey, 7.5% (29 students) reported actually attempting suicide one or more time in the past 12 months. The Grayling Hospital in collaboration with Northern Lakes Community Mental Health (NLCMH) has initiated the Michigan Child Collaborative Care (MC3) Program in the Munson Healthcare Grayling Physician Network offices to address the mental health needs of women and children, and has recently hired two MSWs, as work continues to establish behavior health services in the Munson Healthcare Grayling Physician Network.

	Crawford	Oscoda	Roscommon	Michigan	Source
Mental health providers	920:1	2,090:1	1,140:1	450:1	County Health Ranking 2016
Depression Medicare Population	17.2%	15.6%	16.2%	17.1%	Centers for Medicare and Medicaid 2012
Poor Mental Health Days	3.7	4.0	4.1	4.2	County Health Rankings 2016
Social Associations	10.8	20.3	15.8	10.2	County Health Rankings 2016
People with Developmental Disabilities*	64		153		NLCMH Summary of Services FY2014
Adults with Mental Illness*	357		621		NLCMH Summary of Services FY2014
Children with Mental Illness*	101		160		NLCMH Summary of Services FY2014

^{*}Clients served by Northern Lakes Community Mental Health FY 2014

Mental Health (continued)

MiPHY survey results: Percentage of students who	7th	9th	11th
felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities during the past 12 months	24.6%	29.7%	36.8%
ever made a plan about how they would attempt suicide during the past 12 months		13.4%	15.9%
actually attempted suicide one or more times during the past 12 months		7.9%	7.1%

Dental Health

A lack of dentists is a significant barrier to obtaining adequate dental care. It is more difficult for adult patients with Medicaid to access dental care in the three county service area. Currently there are no Michigan Community Dental Centers in Crawford, Oscoda or Roscommon counties. These dental centers are dedicated to providing dental services to Medicaid enrollees and low-income, uninsured residents throughout the state of Michigan. A My Community Dental Center is being built in Roscommon County with a projected opening date of August or September 2016. Participants in the FY 2015 Community survey listed no dental insurance and cost of dental care as two of the biggest problems they are having in getting health care services. Residents currently must travel outside of the county to receive care at one of these clinics.

In reviewing utilization data for Emergency Room visits at the Grayling Hospital for calendar year 2014, 372 patients sought care in the Emergency Department with dental related diagnoses. In calendar year 2015 the number increased to 405 patients. There is a strong relationship between dental health and overall health.

	Crawford	Oscoda	Roscommon	Michigan	9	Sourc	e
Dentists	2,841:1	4,329:1	2,217:1	1,557:1	County Health Ranking 2014		
	201	4	2015				
Grayling Hospital Emergency Room Visits with dental related diagnoses							405

Sexually Transmitted Disease

The reported number of cases of Gonorrhea reported in 2014 was similar to the average number of cases reported during 2009-2013. The number of reported cases of Chlamydia in 2014 was higher than the average number of cases 2009-2013 in all three counties

	Crawford	Oscoda	Roscommon	Michigan	Source
STD: Gonorrhea- Number of cases reported in 2014	0	0	1	9,666	Michigan Sexually Transmitted Disease Section, MDCH 2014
STD: Chlamydia – Number of cases reported in 2014	35	9	39	44,843	Michigan Sexually Transmitted Disease Section, MDCH 2014

Teen Pregnancy

The teen pregnancy rate continues to be higher than the Michigan rate in Roscommon and Oscoda Counties. Improvements have been seen in the teenage birth rate. The MiPHY data shows that 8.4% of the 7th grade, 25.1% of 9th grade, and 54.6% of 11th grade students surveyed reported ever having sexual intercourse.

Teen Pregnancy (continued)

	Crawford	Oscoda	Roscommon	Michigan	Source
Tean Pregnancy Age 15-19/1,000	33.4	48.4	41.1	38.3	Michigan Department of Health and Human Services, 2012-2014

MiPHY survey results: Percentage of students who	7th	9th	11th
ever had sexual intercourse	8.4%	25.1%	54.6%
had sexual intercourse during the past three months, the percentage who used a condom during last sexual intercourse	50.0%	66.7%	56.3%

MiPHY 7th grade n=235, 9th grade n=228, 11th grade n=191

Maternal and Infant Health

The percentage of Medicaid paid births in each of the three counties is higher than the state average, with Roscommon County being the highest at 74.1%. The percentage of low birth weight babies born in Crawford and Oscoda Counties exceeds the Michigan rate of 8.4%. The percentage of preterm births in Crawford County, at 13.7%, exceeded the Michigan rate of 12.2%. The percentage of women who smoked while pregnant continues to be much higher than the Michigan rate in all three counties, although improvements have been seen. Births with adequate prenatal care is below the Michigan rate in Oscoda County with only 58.1% receiving adequate care. The percentage of women who had excessive weight gain while pregnant exceeded the Michigan rate in Crawford and Roscommon counties.

	Crawford	Oscoda	Roscommon	Michigan	Source
Medicaid Paid Births	69.6%	53.8%	74.1%	43.6%	Michigan Department of Health and Human Services, 2012-2014
Low Birth weight	9.2%	9.1%	5.6%	8.4%	Michigan Department of Health and Human Services, 2012-2014
Preterm Births	13.7%	11.1%	10.4%	12.2%	Michigan Department of Health and Human Services, 2012-2014
Smoked While Pregnant	43.5%	32.0%	44.3%	19.3%	Michigan Department of Health and Human Services, 2012-2014
Births with adequate prenatal care	81.5%	58.1%	78.2%	67.5%	Michigan Department of Health and Human Services, 2012-2014
Weight Gain While Pregnant was excessive	52.1%	43.7%	47.7%	46.4%	Michigan Department of Health and Human Services, 2012-2014

Infant Mortality

Infant mortality is the rate at which babies born alive die before reaching their first birthday. There was 0 infant deaths in Crawford, 1 in Oscoda, and 1 in Roscommon County in 2014. Because the number of deaths is small, the rate is too small to calculate. The average number of infant deaths has decreased from the last assessment.

	Crawford	Oscoda	Roscommon	Michigan	Source
Infant Death Rate	**	**	**	6.8	MDCH 2011-2013
Average number of infant deaths/Infant Deaths	.7/2	.7/2	.3/1	777	MDCH 2011-2013
Average number of live births	109	82.3	179	113,533	MDCH 2011-2013

Immunizations

According to the Michigan County Quarterly Immunization Report Card, December 2015, Crawford and Roscommon County's immunization rates were higher than Oscoda County's rates. Oscoda County's immunization rates were lower than the state rate in all categories.

	Crawford	Oscoda	Roscommon	Michigan	Source
Birth dose Hep B	80.7%	72.4%	83.1%	78.6%	County Quarterly Immunization Report Card, December 31, 2015
43133142 coverage (19-35 months)	51.2%	39.1%	52.3%	51.8%	County Quarterly Immunization Report Card, December 31, 2015
1323213 coverage (13-17 years)	44.6%	14.9%	39.1%	24.6%	County Quarterly Immunization Report Card, December 31, 2015
1+ flu (6 months through 17 years)	22.7%	9.9%	21.2%	25.4%	County Quarterly Immunization Report Card, December 31, 2015
1+ flu (18 years +)	26.3%	18.4%	33.3%	21.1%	County Quarterly Immunization Report Card, December 31, 2015

Vulnerable Populations

Children

Although the percentage of the population 18 years and under in all three counties is less than the Michigan average of 22.4%, the number of those children living in poverty, insured by Medicaid, and those who are eligible for free and reduced price school lunch, exceed the state rates. With number of children who are eligible for free and reduced price lunch, there is concern for the availability and access to healthy foods at home. The number of children living in single parent households exceeds the state rate of 34% in Roscommon County. Of particular concern is the confirmed number of cases of child abuse and neglect, which exceeds the state rate in all three counties.

	Crawford	Oscoda	Roscommon	Michigan	Source
Persons under 18 years	18.0%	18.8%	15.1%	22.4%	US Census Bureau, 2014
Children in poverty	28%	32%	34%	23%	County Health Rankings 2016
Children ages 0-18 insured by Medicaid	47.3%	49.3%	59.9%	39.2%	Michigan Department of Health and Human Services, as provided by Michigan League for Public Policy, 2014
Children in single parent households	33%	29%	45%	34%	County Health Rankings 2016
Children eligible for school free and reduced price lunch	57.5%	64.3%	66.5%	46.7%	Michigan Department of Education, as provided by Michigan League for Public Policy, 2014
Child Abuse/Neglect: Number of Confirmed Victims/Rate per 1,000	87/33.4	29/18.0	115/31.2	33,020/14.7	Kids Count in Michigan Data Profile 2014

Seniors

The percentage of the population of persons over 65 in the three county area is larger than the state of Michigan, with Roscommon having the largest number of seniors. The Roscommon also has the highest median age at 54.2. In all three counties the median age is higher than Michigan's median age of 39.3 years. An aging population generally has greater health needs, as the risk of many chronic diseases increases as people grow older.

	Crawford	Oscoda	Roscommon	Michigan	Source
Persons 65 years and over	24.0%	26.1%	30.0%	15.4%	US Census Bureau, 2014
Median Age	48.6	50.8	54.3	39.3	US Census Bureau, 2014

Key Environmental Factors

Homes built before 1950 are at high risk for lead, the number of Lead - high risk homes represents the number of homes in Roscommon County built before 1950. Children who live in these homes or visit them should be screened. All three counties have an unintentional death rate that exceeds the Michigan rate of 36.7/100,000. Actual numbers are provided.

Roscommon leads the three county area in suicide deaths. The three county area enjoys good air quality. Drinking water violations were noted in Roscommon County, this measure is an indicator of the presence or absence of health-based drinking water violations in counties served by community water systems. Severe housing problems are at or above the state rate in Crawford and Roscommon Counties. Availability of safe affordable housing is of concern in the three county area.

	Crawford	Oscoda	Roscommon	Michigan	Source
Lead – High Risk Homes	2052		5591*	1,197,040	Michigan Department of Community Health 2013
Failed Septic Systems	36		463	4,130	Department of Environmental Quality
Unintentional Fatal Injuries	8	7	18	4,374	Michigan Department of Community Health 2014
Fatal injuries: suicide	3	3	6	1,344	Michigan Department of Community Health, 2014
Transport Fatal Injuries	3	3	5	986	Michigan Department of Community Health, 2014
Fatal injuries: other unintentional	5	4	13	3,388	Michigan Department of Community Health, 2014
Failed septic systems	36		463	4,130	Michigan Department of Community Health, 2013
Air pollution - particulate matter	11.3	11.3	11.4	11.5	County Health Rankings 2016
Drinking water violations	No	No	Yes		County Health Rankings 2016
Severe housing problems	19%	13%	17%	17%	County Health Rankings 2016

^{*}According to the 2009-2013 American Community Survey 5-Year Estimates, 5591 housing units in Roscommon County were built before 1950.

Dial 2-1-1 Northeast Michigan

Dial 2-1-1 is a free, easy-to-remember telephone number that connects people in need with people who can help - 24 hours a day, 7 days a week. Between January 2015 and December 2015 there were 263 requests from Crawford County, 170 from Oscoda County, and 783 requests from Roscommon County. Top service requests included:

- utility assistance
- housing
- legal, consumer and public safety services
- health care
- food/meals
- income support/assistance
- information services

Findings from the Community Input Process

Community Participation and Input

In collaboration with District Health Department #10 and the Health Department of Northwest Michigan, two surveys were developed to gain public input into the Community Health Needs Assessment, a survey of community members with emphasis on the at-risk and underserved, and a Health Provider Survey.

Community and Health Care Provider Surveys

Two separate surveys were created and distributed to both community members and health care providers, including both physicians and mid-level providers, to collect data. 796 residents completed the "What Matters to You" survey:

362 from Crawford County, 301 from Roscommon County, and 133 from Oscoda County. Surveys were widely distributed throughout the three county area, with the help of the Crawford County Commission on Aging and Senior Center, the Roscommon County Senior Center in Houghton Lake, the Oscoda County Senior Center, District Health Departments #10 and #2, Central Michigan District Health Department, Michigan Works, Crawford AuSable School District and the Human Service Collaboratives of Crawford, Oscoda, and Roscommon counties. Surveys were also

distributed to the participants of the Project Connect event in Prudenville. Both paper and online versions of the survey were available.

A total of 23 physicians and mid-level providers participated in the Health Care Provider Survey.

FY 15 Community Surveys

In FY 15 a Community Survey was distributed with an emphasis on the poor and underserved populations of our counties. 252 residents completed the surveys: 135 from Crawford County, 94 from Roscommon County, and 20 from Oscoda County, and 3 from counties outside the three county area. Surveys were distributed at the AuSable Free Clinic, the Baby and Toddler Closet in Grayling, the Crawford County Commission on Aging and Senior Center, the Roscommon County Senior Center in Houghton Lake, the Oscoda County Senior Center, to first OB patients, at District Health Department #10 and at the Project Connect event in Prudenville. Additional survey information was obtained for Oscoda County from District Health Department #2 in which 100 Oscoda County community members participated.

Most of the results from these surveys corresponded with the data that was collected from the "What Matters to You?" survey. There are a few cases where additional information was available from the FY 15 surveys. That information will be included in the narrative after the charts below.

Of the 796 "What Matters to You?" survey respondents:

- 94% of respondents said they had health insurance
- 95% responded as White Caucasian, 1 percent as American Indian, and 1% as two or more races, less than one percent as Hispanic or Latino and Black or African American
- 19% of respondents reported a household income as less than \$15,000, 28% reported a household income between \$15,000 and \$34,999, 30% reported a household income between \$35,000 and \$74,999, and 16% reported an income higher than \$75,000. 7% of the respondents did not respond.

Summary of the "What Matters to You?" community survey findings:

QUESTION	WHAT MATTERS TO YOU? COMMUNITY SURVEY N=796 (Crawford, Roscommon & Oscoda County)	HEALTH CARE PROVIDER SURVEY N=23 (Grayling Hospital only)
What are the three most important factors needed for a healthy community?	 Access to Healthcare, includes primary, specialty, behavioral and dental Good Jobs and Healthy Economy Access to Affordable Healthy Foods Good Schools/High Value on Education Affordable Housing 	 Good Jobs and Healthy Economy Good schools/high value on education Access to Healthcare, includes primary, specialty, behavioral and dental Healthy Lifestyles Access to Affordable Healthy Foods Safe Neighborhoods
What are the most important community health problems in the county you live in?	 Substance abuse Overweight and Obesity Aging problems Chronic Disease Lack of Access to Primary Care, Specialty Care, Behavioral Health Services or Dental Care Mental Health Issues Lack of affordable housing Lack of physical activity Lack of access to affordable, healthy food Tobacco and E-cigarette use Unsafe home environment (child abuse, neglect and domestic violence) 	1) Overweight and Obesity 2) Substance Abuse 3) Mental Health Issues 4) Chronic Pain 5) Tobacco Use
Please indicate how much you feel each of the following is a barrier to getting the health care that you need, or makes it more difficult. (% of respondents answering Major or Minor Barrier)	56.5% Availability of information on cost of health care services 53.5% Access to affordable health care 48.2% Coordination of resources among services and providers 41.2% Availability of information on area health care resources 37.4% Access to holistic treatment options 34.0% Ability to take time of work for appointments 23.7% Availability of transportation 13.6% Availability of child care 10.5% Availability to contact (no phone)	
Where do you get health information? (% of respondents answering yes or sometimes)	95.5% Doctor or health clinic 66.8% Family or friends 66.5% Internet 42.1% Television 39.1% Newspapers or magazines 30.3% Health Department 25.0% Radio	

Summary of the "What Matters to You?" community survey findings (continued):

WHAT MATTERS TO YOU? COMMUNITY SURVEY N=796 (Crawford, Roscommon & Oscoda County)							
QUESTION	ADULTS	OLDER ADULTS	CHILDREN				
What are the problems adults, older adults, and children in your family have in getting health care services?	 Insurance has high deductibles and/or copays Can't afford visits to doctor, clinic, or hospital Health insurance coverage is limited Insurance does not cover dental ER waiting time Difficult to set appointments Getting specialist care Finding a dentist Finding a doctor Insurance does not cover medications Cannot find a doctor to take me as a patient Transportation issues 	 Cannot afford visits to doctor, clinic, hospital Insurance coverage is limited Insurance does not cover dental Insurance has high deductibles and/or copays ER waiting time Insurance does not cover medications Transportation issues Getting specialist care Difficult to set appointments Finding a doctor Don't know where to go for healthcare Finding a dentist 	 ER waiting time Insurance has high deductibles and/or co-pays Health Insurance coverage is limited Finding a behavioral health provider Can't afford visits to doctor, clinic, hospital Getting specialist care Difficult to set appointments Health insurance does not cover dental services Health insurance does not cover behavioral health services Finding a dentist 				

WHAT MATTERS TO YOU? COMMUNITY SURVEY N=796 (Crawford, Roscommon & Oscoda County)							
QUESTION SELF IMMEDIATE FAMILY							
Have you or any member of your immediate family ever been told by a doctor or other health professional that you have any of the following?	 Obesity/overweight High Blood Pressure Arthritis High cholesterol Diabetes/prediabetes Chronic Pain Dental Health Problems Hearing Problems Asthma Heart disease/heart attack 	 High blood pressure High cholesterol Obesity/overweight Diabetes/prediabetes Arthritis Heart disease/heart attack Cancer Dental Health Problems Hearing Problems Chronic Pain 					

In the FY15 Community Surveys this additional information was collected:

What Defines a Healthy Community?

Safe Neighborhoods and Clean Environment were included in the top five factors that define a "healthy community".

What are the most Important Health Problems in your county?

Child Abuse and Neglect was ranked as one of the top five most important health problems.

Difficulties Experienced in Getting Healthcare:

Cost of Dental Care, No vision insurance, Can't afford medications and Existing medical debt were ranked among the ten biggest problems respondents FY 15 Survey respondents experienced getting healthcare for themselves or their families. In Oscoda County lack of providers was also identified as one of the difficulties experienced obtaining health care.

Health Care Providers in the FY15 Survey identified household budget/financial constraints, lack of transportation, lack of access to mental health services, medications are not affordable, and lack of parenting skills, as the top barriers their patients experience obtaining care.

Do you leave the county to seek medical services?

Just over 49% of the respondents of the Hospital's Community Survey, and 80 % of District Health Department #2's survey participants reported they leave the county they live in to seek Medical services. Reasons for seeking services outside of the county include: specialty services are not available, only Nurse practitioners are available, family doctor is in nearby town, the Free Clinic is in Grayling.

Leading Health Problems:

Vision problems were listed in the top ten when respondents were asked: Have you or a family member ever been told by a doctor or other health professional that you have any of the following?

Among the respondents who claimed that they or a family member had ever been told they had any of a list of mental health issues, depression (self 18.6%/family member 15.1%) was identified as the most predominant mental health issue, followed by anxiety (self 18.6%/family member 11%) and attention deficit/hyperactivity disorder (self <1%/family member 14.5%).

Advanced Directives:

When asked, "Do you have an Advance Directive?", approximately 28% of the FY15 survey participants said yes, while 35% said no, and another almost 37% reported that they didn't know what an advanced directive was.

What is needed in the Community to Help Make Residents Healthier?

Improved nutrition and eating habits and increased education regarding health issues were also identified as areas that are needed in the community to help make residents health.

Community Conversations

Among three Community Conversations that were open to the public and advertised in the three counties, 58 community members and representatives from local health departments, hospitals and other health care providers, social service agencies, schools, business, and government participated. These conversations centered on the question, "What can we do in our County to move closer to our vision of a healthy community?" Participants identified the following ideas for making these counties healthier places to live, work, and play. The participants and organizations of Crawford, Roscommon, and Oscoda Counties are below:

CRAWFORD COUNTY COMMUNITY CONVERSATION PARTICIPANTS REPRESENTED THE FOLLOWING ORGANIZATIONS:

January 6, 2016 | Devereaux Memorial Library, Grayling

- Grayling Police
- Catholic Human Services
- Michigan WORKS
- River House
- Baby to Toddler Closet
- Munson Healthcare Grayling Hospital
- District Health Department #10
- Grace Center
- Central Michigan University
- Chemical Bank
- Crawford Roscommon Child Protection Council

- MSU Extension
- Commission on Aging
- Grayling Main Street
- Grayling Chamber of Commerce
- Northern Lakes Community Mental Health
- Crawford County Transportation Authority
- Rialto Theater
- NFMSCA RSVP
- Crawford County Department of Health and Human Services

OSCODA COUNTY COMMUNITY CONVERSATION PARTICIPANTS REPRESENTED THE FOLLOWING ORGANIZATIONS: January 25, 2016 | Oscoda County Community Center, Mio

- Catholic Human Services
- Oscoda County Board of Commissioners
- District Health Department #2
- AuSable Valley Community Mental Health
- Oscoda County Human Services Coordinating Council
- Michigan WORKS
- True North

- Munson Healthcare Grayling Hospital
- Oscoda County Prosecutor's Office
- Michigan Department of Health and Human Services
- His Love Family Resources
- Love Inc.
- Wellspring Lutheran Services
- Crawford, Ogemaw, Oscoda, Roscommon ISD
- Oscoda County ACHIEVES

ROSCOMMON COUNTY COMMUNITY CONVERSATION PARTICIPANTS REPRESENTED THE FOLLOWING ORGANIZATIONS: January 20, 2016 | Roscommon County Building, Roscommon

- Mid-Michigan Community Health Services
- Roscommon County Transit Authority
- Veterans
- Roscommon County Commissioners
- River House
- Northern Lakes Community Mental Health
- Roscommon County United Way
- ROOC/COOR

- Grayling Hospital
- Department of Health and Human Services
- Roscommon County Economic Development Corporation
- Roscommon County
- Central Michigan District Health Department
- Catholic Human Services
- Roscommon County Probate Court

FOCUS QUESTION	CRAWFORD COUNTY	OSCODA COUNTY	ROSCOMMON COUNTY
What can we do here to move closer to our vision of a healthy community?	 1-Create community hub recreation and resources 2-Increase access to economic self-sufficiency 3-Create a wellness culture in the community 4-Increase behavioral health awareness and services 5-Link systems for lifespan care and support 6-Increase year round access and consumption of healthy foods 7-Increase accessibility for year round physical activity 	1-Enhance comprehensive health care services for all residents, all ages 2-Provide healthy lifestyle education 3-Expand safe and affordable physical activity options for all ages and all seasons 4-Provide positive youth development 5-Incorporate substance use awareness, prevention and education in all aspects 6-Increase safe and affordable housing 7-Expand economic development and employment 8-Improve healthy eating through better access to cooking knowledge and foods 9-Expand affordable transportation options 10-Increase availability of affordable and quality senior services 11-Expand children services and early education 12-Expand local animal rescue services	1-Enhance community participation and wellbeing 2-Increase access to healthy foods and nutritional education 3-Expand opportunities for safe and affordable exercise activities 4-Expand transportation opportunities 5-Broaden parameters for healthcare access 6-Create immediate and long term safe housing 7-Improve awareness and response to behavioral health issues

Ranking and Prioritizing the Findings

A list of health needs was developed by analyzing survey data, secondary data, and feedback from the community conversations. A ranking session was held. The group of key stakeholders, including hospital board members, medical staff, AuSable Free Clinic leadership, district health department, human service and non-profit representatives, and representatives from the health system, were given a list of health issues and asked to rank the issues on a scale of 1 to 5, with 5 being high. There were five criteria for scoring:

- 1. **Severity** —Risk of morbidity and mortality associated with problem
- 2. **Magnitude** Number of people impacted by the problem
- 3. **Impact** Improving this issue would have the greatest effect on health, quality of life and health disparities
- 4. **Sustainability** Resources are available and barriers are surmountable
- 5. **Achievability** Achievable and measurable outcomes are possible within three years

Based on review of the data related to each health issue and professional judgment, the participants ranked the health issues in the following order using the above criteria:

- 1. Healthy Lifestyles
- 2. Chronic Disease
- 3. Access to Health Care
- 4. Maternal Infant and Child Health
- 5. Substance Abuse
- 6. Tobacco Use
- 7. Dental Health
- 8. Mental Health

Living in a rural area is a determinant of health. Serving this rural population where there is geographic isolation, fewer transportation options and limited community resources compounds barriers and presents many challenges. The health issues and priorities identified were reviewed by the Grayling Hospital Community Health Improvement Committee and in compliance with the Affordable Care Act of 2010, Final Rule, an implementation strategy that will be used by the Grayling Hospital to address these needs will be developed for the next three years.

Reflections on the Community Health Needs Assessment

The Process: Lessons Learned and Recommendations for Future CHNA

The 2016 Community Health Needs Assessment Process required collection of a large amount of data and community input. A rural three county area provided many challenges in collecting both data and community input. With small population of the rural counties, data is sometimes reported as too small to calculate or not available. The initial community survey was too long. In order to get input at community events it was streamlined. Review of the survey questionnaire is necessary prior to distribution so that questions are easily understood, meaningful for data collection, yet minimized in number. Work will continue to find the best strategies and practices to collect broad community input, using the available resources.

Data available from secondary sources has some limitations. Some data was not available for our counties due to small sample sizes. Mental health data was limited. MiPHY data was based on 3 of 10 total districts in Region.

Sharing County Health Rankings data and information from the CHNA community survey, as well as enlisting focus group participation of the county collaborative bodies has led to discussion regarding the use of the collective impact model to coordinate efforts and work together to improve the health of the communities

we serve. Continued collaboration with our partners will be essential in the work that will need to be done moving forward. Coordination of resources and sharing of expertise will be necessary to steward limited resources while working together to address complex issues and improve outcomes. The rural nature of our counties will continue to present us with many challenges.

Conclusion and Next Steps

Munson Healthcare Grayling Hospital will develop an implementation strategy, or plan, to address the priority health needs identified in this assessment. This is a separate document, and will be available on the hospital website, http://www.munsonhealthcare.org/graylinghospital, in the Community Benefit section. Printed copies will also be available at the hospital, located at1100 E. Michigan Avenue, Grayling, MI 49738, in the Community Health Department, or by calling (989) 348-0924.

If you have questions, comments or feedback regarding this CHNA or the implementation strategy, please call Cheryl Melroy, RD, Community Health Coordinator, at (989) 348-0924, or email at cmelroy@mhc.net.

Appendices

- I. Community Data Worksheet
- II. Health Indicator Worksheet
- III. County Health Rankings Data
- IV. MiPHY Data Grid
- V. Environmental Health Data
- VI. "What Matters to You?" Community Survey
- VII. Provider Survey

	Crawford	Oscoda	Roscommon	Michigan	Source
Population	13,745	8,371	23,955	9,909,877	US Census Bureau, 2014 estimate
Population, % change	-2.30%	-3.10%	-2.00%	0.30%	US Census Bureau, April 1, 2010 to July 1, 2014
Persons under 5 years	4.10%	4.50%	3.70%	5.80%	US Census Bureau, 2014
Persons under 18 years	18.00%	18.80%	15.10%	22.40%	US Census Bureau, 2014
Persons 65 years and over	24.00%	26.10%	30.00%	15.40%	US Census Bureau, 2014
Female persons	49.60%	48.70%	50.10%	50.90%	US Census Bureau, 2014
Median Age	48	50	53	40.4	Michigan League for Public Policy Fact Sheet 2014
Race: White	96.70%	97.20%	96.70%	79.90%	US Census Bureau, 2014
Race: Black or African American	0.80%	0.30%	0.60%	14.20%	US Census Bureau, 2014
Race: American Indian and Alaska Native	0.70%	0.90%	0.70%	0.70%	US Census Bureau, 2014
Race: Asian	0.50%	0.10%	0.60%	2.90%	US Census Bureau, 2014
Two or more races	1.30%	1.50%	1.30%	2.30%	US Census Bureau, 2014
Hispanic or Latino	1.80%	1.40%	1.50%	4.80%	US Census Bureau, 2014
Median household income	\$39,982	\$33,942	\$34,765	\$48,471	US Census Bureau 2010-2014 American Community Survey
Unemployment	9.40%	12.00%	11.30%	7.30%	Bureau of Labor Statistics, as provided by Michigan League for Public Policy, 2014
Population with any disability	21.10%	21.90%	25.20%	13.90%	US Census Bureau 2010-2014 American Community Survey
Households with no vehicles	6.20%	7.20%	6.20%	8.00%	US Census Bureau 2010-2014 American Community Survey
Married couple family households	54.90%	53.70%	45.80%	48.00%	US Census Bureau 2010-2014 American Community Survey
Widowed Males	2.80%	4.50%	5.10%	2.70%	US Census Bureau 2010-2014 American Community Survey
Widowed Females	11.00%	11.30%	15.20%	9.50%	US Census Bureau 2010-2014 American Community Survey
Households with children under 18 years old	23.10%	21.20%	18.80%	30.60%	US Census Bureau 2010-2014 American Community Survey
Households with one or more people over 65	35.90%	39.80%	41.50%	26.70%	US Census Bureau 2010-2014 American Community Survey
High school graduate or higher > age 25	85.80%	82.80%	86.00%	89.30%	US Census Bureau 2010-2014 American Community Survey
Bachelor's degree or higher	15.80%	9.80%	13.30%	26.40%	US Census Bureau 2010-2014 American Community Survey
Families below poverty level	10.30%	13.20%	15.30%	12.10%	US Census Bureau 2010-2014 American Community Survey
Poverty: all ages	16.50%	20.50%	20.70%	16.20%	US Census Bureau and Small Area Income and Poverty Estimates (SAIPE), as provided by Michigan League for Public Policy, 2014

	Crawford	Oscoda	Roscommon	Michigan	Source
Poverty: ages 0-17	28.40%	31.90%	34.40%	22.60%	US Census Bureau and Small Area Income and Poverty Estimates (SAIPE), as provided by Michigan League for Public Policy, 2014
Poverty: ages 5-17	26.10%	29.60%	32.90%	20.80%	US Census Bureau and Small Area Income and Poverty Estimates (SAIPE), as provided by Michigan League for Public Policy, 2014
Medicaid paid births	71.80%	65.20%	73.10%	43.90%	Michigan Department of Health and Human Services, as provided by Michigan League for Public Policy, 2013
Children ages 0-18 insured by Medicaid	47.30%	49.30%	59.90%	39.20%	Michigan Department of Health and Human Services, as provided by Michigan League for Public Policy, 2014
WIC	67.00%	76.40%	75.30%	52.00%	Michigan Department of Health and Human Services, as provided by Michigan League for Public Policy, 2014
Children eligible for school free and reduced price lunch	57.50%	64.30%	66.50%	46.70%	Michigan Department of Education, as provided by Michigan League for Public Policy, 2014
Food Stamp/SNAP benefits in the past 12 months	29.50%	31.60%	40.30%	26.00%	Michigan Department of Health and Human Services, as provided by Michigan League for Public Policy, 2014
Persons under 18 years	18.00%	18.80%	15.10%	22.40%	US Census Bureau, 2014
Children in poverty	28%	32%	34%	23%	County Health Rankings 2016
Children in single parent households	33%	29%	45%	34%	County Health Rankings 2016
Child Abuse/Neglect: Number of Confirmed Victims/Rate per 1,000	87/33.4	29/18.0	115/31.2	33,020/14.7	Kids Count in Michigan Data Profile 2014

	Crawford	Oscoda	Roscommon	Michigan	Source
Uninsured children	5%	7%	5%	4%	County Health Rankings 2016
Uninsured adults	14%	18%	16%	13%	County Health Rankings 2016
Primary care physicians	1,070:1	2,090:1	3,000:1	1,240:1	County Health Rankings 2016
Dentists	3,440:1	4,190:1	2,180:1	1,450:1	County Health Rankings 2016
Mental health providers	920:01:00	2,090:1	1,140:1	450:01:00	County Health Rankings 2016
Healthy Michigan Plan County Enrollment	1071	604	2029	635,665	MI State Progress Report Feb-16
Marketplace Enrolled	504	331	872	345,804	Health Insurance Marketplace Plan Selections by County 2016 Open Enrollment Period Nov. 1, 2015 — Feb. 1, 2016
	Cance	er Incidence Ra	ate, age adjusted	d rate per 100,	000
All Cancer	428.6	414.5	509.1	478	Michigan Department of Health and Human Services, 2008-2012
Prostate	47.6	41.4	69.1	67.6	Michigan Department of Health and Human Services, 2008-2012
Lung and Bronchus	80	83.5	89.4	69.1	Michigan Department of Health and Human Services, 2008-2012
Breast	35.8	36	59.3	65.4	Michigan Department of Health and Human Services, 2008-2012
Colorectal	29.9	56.9	42.2	42.5	Michigan Department of Health and Human Services, 2008-2012
	Cance	er Mortality Ra	ate, age adjusted	d rate per 100,	
All Cancer	174	195.9	195.1	173.3	Michigan Department of Health and Human Services, 2012-2014
Hospital Discharges -Acute Myocardial Infarction*	287.9	263.9	267.3	204.4	Michigan Department of Health and Human Services, 2011-2013
Hospital Discharges - Congestive Heart Failure *	267.9	311.5	296	289.9	Michigan Department of Health and Human Services, 2011-2013
Hospital Discharges -Stroke*	219.9	229.5	207	229.9	Michigan Department of Health and Human Services, 2011-2013
Mortality Rate Cardiovascular Disease*	239.9	344.5	304.9	253	Michigan Department of Health and Human Services, 2012-2014
Mortality Rate Heart Disease*	188.1	275.1	267.1	199.3	Michigan Department of Health and Human Services, 2012-2014
Mortality Rate Stroke*	43.1	58.5	29.4	37.1	Michigan Department of Health and Human Services, 2012-2014
Hyperlipidemia: Medicare Population	45.40%	38.00%	53.40%	45.30%	Center for Medicare & Medicaid Services, 2012
Hypertension: Medicare Population	51.70%	50.10%	59.00%	57.30%	Center for Medicare & Medicaid Services, 2012
Adult obesity (BMI > 30)	32%	33%	32%	31%	County Health Rankings 2016
Physical inactivity	24%	23%	25%	23%	County Health Rankings 2016
Access to Exercise Opportunities	94%	92%	95%	84%	County Health Rankings 2016

	Crawford	Oscoda	Roscommon	Michigan	Source
Food Environment Index	7.1	7.3	6.4	7.1	County Health Rankings 2016
Food Insecurity	15%	18%	17%	16%	County Health Rankings 2016
Limited Access to Healthy Foods	7%	*	9%	6%	County Health Rankings 2016
Adults with Diabetes	12%	14%	16%	11%	Centers for Disease Control and Prevention 2012
Diabetes (Medicare Population)	31.10%	28.60%	29.80%	30.20%	Centers for Medicare and Medicaid Services 2012
Diabetes –any mention Mortality Rate*	81.3	73.9	68.7	73.7	Michigan Department of Health and Human Services 2012-2014
Diabetes Screening Medicare Population	90%	89%	91%	86%	Centers for Medicare and Medicaid Services 2012
Mortality Rate Chronic Lower Respiratory Disease *	51.8	45.3	71.1	45.4	Michigan Department of Health and Human Services 2012-2014
Current Smoker	26.70%	49.0%**	29.80%	22%	Michigan Behavioral Risk Factor 2012- 2104 **District Health Department #2
					2014Community Survey
Smoked While Pregnant	47.70%	34.40%	46.90%	21.60%	Michigan Department of Health and Human Services, as provided by Michigan League for Public Policy, 2013
Excessive drinking	19%	17%	17%	20%	County Health Ranking 2016
Alcohol-impaired driving deaths	36%	33%	33%	30%	County Health Ranking 2016
Drug Overdose Deaths*	-	-	18	16	County Health Ranking 2016
Mental health providers	920:01:00	2,090:1	1,140:1	450:01:00	County Health Ranking 2016
Depression Medicare Population	17.20%	15.60%	16.20%	17.10%	Centers for Medicare and Medicaid 2012
Poor Mental Health Days	3.7	4	4.1	4.2	County Health Rankings 2016
Social Associations	10.8	20.3	15.8	10.2	County Health Rankings 2016
People with Developmental Disabilities*	64		153		NLCMH Summary of Services FY2014
Adults with Mental Illness*	357		621		NLCMH Summary of Services FY2014
Children with Mental Illness*	101		160		NLCMH Summary of Services FY2014
Dentists	3,440:1	4,190:1	2,180:1	1,450:1	County Health Ranking 2016
STD: Gonorrhea- Number of cases reported in 2014	0	0	1	9,666	Michigan Sexually Transmitted Disease Section, MDCH 2014
STD: Chlamydia – Number of cases reported in 2014	35	9	39	44,843	Michigan Sexually Transmitted Disease Section, MDCH 2014

Appendix II. Health Indicator Worksheet

	Crawford	Oscoda	Roscommon	Michigan	Source
Teen Pregnancy Age 15-19/1,000	33.4	48.4	41.1	38.3	Michigan Department of Health and Human Services, 2012-2014
Medicaid Paid Births	69.60%	53.80%	74.10%	43.60%	Michigan Department of Health and Human Services, 2012-2014
Low Birth weight	9.20%	9.10%	5.60%	8.40%	Michigan Department of Health and Human Services, 2012-2014
Preterm Births	13.70%	11.10%	10.40%	12.20%	Michigan Department of Health and Human Services, 2012-2014
Smoked While Pregnant	43.50%	32.00%	44.30%	19.30%	Michigan Department of Health and Human Services, 2012-2014
Births with adequate prenatal care	81.50%	58.10%	78.20%	67.50%	Michigan Department of Health and Human Services, 2012-2014
Weight Gain While Pregnant was excessive	52.10%	43.70%	47.70%	46.40%	Michigan Department of Health and Human Services, 2012-2014
Infant Death Rate	**	**	**	6.9	MDCH 2012-2014
Number of infant deaths	0	1	1	755	Michigan Department of Health and Human Services, 2014
Number of live births	120	85	160	114,460	Michigan Department of Health and Human Services, 2014
Birth dose Hep B	80.70%	72.40%	83.10%	78.60%	County Quarterly Immunization Report Card, December 31, 2015
43133142 coverage (19-35 months)	51.20%	39.10%	52.30%	51.80%	County Quarterly Immunization Report Card, December 31, 2015
1323213 coverage (13-17 years)	44.60%	14.90%	39.10%	24.60%	County Quarterly Immunization Report Card, December 31, 2015
1+ flu (6 months through 17 years)	22.70%	9.90%	21.20%	25.40%	County Quarterly Immunization Report Card, December 31, 2015
1+ flu (18 years +)	26.30%	18.40%	33.30%	21.10%	County Quarterly Immunization Report Card, December 31, 2015

25%	11.3%	34%	4.0	45%	15.8	199	71	55	11.4	Yes	17%	78%	
44%	12.0%	32%	3.7	29%	20.3	297	93	10	11.3	No	13%	75%	
55%	9.4%	28%	9	33%	10.8	289			ů.	0	761	78%	
99 22	7.3% 9.	23% 28	4.7 3.6	34% 33	10.2	464 28	61 90	31	11.5	No	17% 19	83% 78	
Some college	Unemployment	Children in poverty	Income inequality	Children in single-parent households	Social associations	Violent crime**	Injury deaths	Physical Environment	Air pollution - particulate matter	Drinking water violations	Severe housing problems	Driving alone to work	

16%

13% 3.5 3.7

%91 3.9 4.2 %

> Poor physical health days Poor mental health days

Low birthweight

Health Factors

Poor or fair health

29

72

1.4 4.1

6%

2016

				Annual teach is another transfer and the state of the sta	Driving alone to work	83%
Health Behaviors		34	40	84	Long commute - driving alone	32%
Adult smoking	21%	17%	19%	19%		
Adult obesity**	31%	32%	33%	32%	** Compare across states with caution Note: Blank values reflect unreliable or missing data	issing data
Food environment index**	7.1	7.1	7.3	6.4		
Physical inactivity**	23%	24%	23%	25%		
Access to exercise opportunities	84%	94%	92%	%26		
Excessive drinking	20%	19%	17%	17%		
Alcohol-impaired driving deaths	30%	36%	33%	33%		
Sexually transmitted infections**	453.6	199.9	8.69	195.0		
Teen births	29	39	33	40		
Clinical Care		19	58	47		
Uninsured	13%	14%	18%	16%		
Primary care physicians	1,240:1	1,070:1	2,090:1	3,000:1		
Dentists	1,450:1	3,440:1	4,190:1	2,180:1		
Mental health providers	450:1	920:1	2,090:1	1,140:1		
Preventable hospital stays	59	52	50	64		
Diabetic monitoring	%98	%06	88%	91%		
Mammography screening	%59	75%	74%	73%		
Social & Economic Factors		70	78	81		
High school graduation**	78%	73%		73%		

Oscoda (OC), MI Roscommon (RO), MI

Michigan Crawford (CR), MI

County Health Rankings & Roadmaps Building a Colline of Health, County

5'6	% below 18 years of age	15.	% Non-Hispanic African American 13.	% American Indian and Alaskan Native 0.7	2.5	% Native Hawaiian/Other Pacific Islander 0.0	4.8	% Non-Hispanic white 75.	% not proficient in English 1%	20	25.
6,909,877	22.4%	15.4%	13.9%	0.7%	2.9%	%0.0	4.8%	75.8%		50.9%	25.4%
13,745	18.0%	24.0%	0.7%	0.7%	0.5%	0.0%	1.8%	95.2%	%0	49.6%	72.6%
8,371	18.8%	26.1%	0.3%	%6.0	0.1%	%0.0	1.4%	96.1%	1%	48.7%	100.0%
23,955	15.1%	30.0%	0.5%	0.7%	%9.0	0.0%	1.5%	95.5%	%0	50.1%	66.1%

Compare across states with caution te: Blank values reflect unreliable or missing data

2016

	Michigan	Crawford (CR), MI	Oscoda (OC), MI	Roscommon (RO), MI
Length of Life				
Premature age-adjusted mortality	360	390	420	420
Child mortality	50			
Infant mortality	7			
Quality of Life				
Frequent physical distress	11%	11%	12%	12%
Frequent mental distress	11%	11%	12%	13%
Diabetes prevalence**	10%	11%	13%	14%
HIV prevalence	178			90
Health Behaviors				
Food insecurity**	16%	15%	18%	17%
Limited access to healthy foods	%9	2%	%0	%6
Drug overdose deaths	16			18
Drug overdose deaths - modeled	18.0	≥20	>20	>20
Motor vehicle crash deaths	10	19	20	10
Insufficient sleep	34%	30%	31%	32%
Clinical Care				
Uninsured adults	16%	17%	22%	19%
Uninsured children	4%	2%	7%	%5
Health care costs**	\$10,153	\$9,431	\$9,608	\$10,168
Other primary care providers	1,342:1	1,375:1	2,790:1	1,141:1
Social & Economic Factors				
Median household income	\$49,800	\$41,100	\$34,000	\$35,000
Children eligible for free lunch	45%	54%	27%	62%
Residential segregation - black/white	74			
Residential segregation - non-white/white	61	43	21	38
Homicides	7			

 $\label{eq:posterior} \mbox{Appendix IV.} \qquad \mbox{MiPHY Crawford, Roscommon, Oscoda, and Ogemaw Counties, 2013-2014} \\ \mbox{3 of 10 districts participating /3 of 14 buildings/ 7^{th} grade: n=235, 9^{th} grade: n=291} \\ \mbox{3 of 20 districts participating /3 of 14 buildings/ 7^{th} grade: n=235, 9^{th} grade: n=191} \\ \mbox{3 of 20 districts participating /3 of 14 buildings/ 7^{th} grade: n=235, 9^{th} grade: n=191} \\ \mbox{3 of 20 districts participating /3 of 14 buildings/ 7^{th} grade: n=235, 9^{th} grade: n=191} \\ \mbox{3 of 20 districts participating /3 of 14 buildings/ 7^{th} grade: n=235, 9^{th} grade: n=191} \\ \mbox{3 of 20 districts participating /3 of 24 buildings/ 7^{th} grade: n=235, 9^{th} grade: n=291} \\ \mbox{3 of 20 districts participating /3 of 24 buildings/ 7^{th} grade: n=235, 9^{th} grade: n=291} \\ \mbox{3 of 20 districts participating /3 of 24 buildings/ 7^{th} grade: n=235, 9^{th} grade: n=291} \\ \mbox{3 of 20 districts participating /3 of 24 buildings/ 7^{th} grade: n=235, 9^{th} grade: n=291} \\ \mbox{3 of 20 districts participating /3 of 24 buildings/ 7^{th} grade: n=235, 9^{th} grade: n=291} \\ \mbox{3 of 20 districts participating /3 of 24 buildings/ 7^{th} grade: n=235, 9^{th} grade: n=285, 9

Alcohol Use

	7th		_
Percentage of students who ever drank alcohol	9th	38.5%	
	11th	68.5%	
**************************************	7th	8.5%	
refleefiege of studefits with dignik alcohol during the past	9th	16.4%	
30 days	11th	29.7%	
	7th		
Percentage of students who have ever been drunk	9th	21.7%	_
	11th	52.5%	_

Drinking and Driving/Riding

Percentage of students who ever rode in a car driven by	7th	21.0%
someone who had been drinking alcohol		
Percentage of students who rode in a car or other vehicle	9th	
driven by someone who had been drinking alcohol one or	11th	
more times during the past 30 days		
Percentage of students who ever rode in a car driven by	7th	
compone who had been drinking alcohol		
SOLITION WITH THE PROPERTY OF	0+6	1/1/10/
Percentage of students who rode in a car or other vehicle	3111	74.1%
driven by someone who had been drinking alcohol one or	11th	13 0%
more times during the past 30 days	1077	10:01
O conception of the contract o	7th	
refreshingse of students wild ever four in a car driven by	9th	2.6%
someone who had been diffixing alcohol	11th	4.8%

Appendix IV. MiPHY Crawford, Roscommon, Oscoda, and Ogemaw Counties, 2013-2014 3 of 10 districts participating /3 of 14 buildings/ $7^{\rm th}$ grade: n=235, $9^{\rm th}$ grade: n=228, $11^{\rm th}$ grade: n=191

Smoking

			_
	7th	28.3%	T
Percentage of students who reported sort of easy or very	9th	48.1%	T
יייין יי פרי יופט ריירי	11th	70.2%	T
	7th		
Percentage of students who ever smoked a whole cigarette	9th	24.1%	
	11th	39.7%	
	7th	3.0%	
*Percentage of students who smoked cigarettes during the	9th	7.8%	
יייייייייייייייייייייייייייייייייייייי	11th	14.1%	
	7th		
Among Students who are current smokers, the percentage	9th	26.3%	
	11th	20.0%	1
The state of the s	7th	2.1%	
ine percentage of students who used chewing tobacco,	9th	3.2%	
silali of alp duffilg the past 50 days.	11th	8.7%	

Other Drugs

	,	,		,										
11.8%	40.8%	%8.99		24.3%	42.5%	4.4%	13.4%	18.5%	2.6%	7.6%	7.7%	2.7%	12.6%	15.6%
7th	9th	11th	7th	9th	11th	7th	9th	11th	7th	9th	11th	7th	9th	11th
Percentage of students who reported sort of easy or very	easy to get marijuana			Percentage of students who ever tried marijuana			Percentage of students who used marijuana during the past 30 days		Percentage of students who took nainkillers such as	OxyContin, Codeine, Vicodin or Percocet without a doctor's	prescription during the past 30 days	Percentage of students who were offered sold or given an	illegal drug on school property by someone during the past	1.2 months

 $\label{eq:condition} \begin{tabular}{ll} Appendix IV. & MiPHY Crawford, Roscommon, Oscoda, and Ogennaw Counties, 2013-2014 \\ 3 of 10 districts participating /3 of 14 buildings/ <math>7^{th}$ grade: n=235, 9^{th} grade: n=228, 11^{th} grade: n=191

Suicide

15.8%			12.5%			5.9%			24.6%	29.7%	36.8%		20.1%	16.9%		13.4%	15.9%		7.9%	7.1%
7th	9th	11th	7th	9th	11th	7th	9th	11th	7th	9th	11th	7th	9th	11th	7th	9th	11th	7th	9th	11th
	Percentage of students who ever seriously considered attempting suicide			Percentage of students who ever made a plan about how they would attempt suicide			Percentage of students who ever tried to kill themselves		Darrantaga of etindants who falt to ead or honalacs almost	every day for two weeks or more in a row that they stopped	doing some usual activities during the past 12 months		Percentage of students who ever seriously considered attempting suicide during the past 12 months			Percentage of students who ever made a plan about how they would attempt suicide during the past 12 months			Percentage of students who actually attempted suicide one or more times during the past 12 months	

Appendix IV. MiPHY Crawford, Roscommon, Oscoda, and Ogemaw Counties, 2013-2014

3 of 10 districts participating /3 of 14 buildings/ 7th grade: n=235, 9th grade: n=228, 11th grade: n=191

Sexual Behavior

	7th	8.4%
Percentage of students who ever had sexual intercourse	9th	25.1%
	11th	54.6%
Percentage of students who had sexual intercourse during	9th	11.8%
the past 3 months	11th	40.7%
Of students who ever had sexual intercourse, the	9th	20.0%
percentage whose most partiel was 5 of more years older	11th	21.8%
Among students who had sexual intercourse, the percentage who drank alcohol or used drugs before last sexual intercourse	7th	6.7%
Among students who had sexual intercourse during the past	9th	8.3%
unree monus, the percentage who drank alcohol or used drugs before last sexual intercourse	11th	19.4%
Among students who had sexual intercourse during the past three months, the percentage who used a condom during last sexual intercourse	7th	20.0%
Among students who had sexual intercourse during the past	9th	66.7%
three months, the percentage who used a condom during last sexual intercourse	11th	56.3%
Percentage of students who have ever been physically	9th	4.1%
iorcea to nave sexual miercourse when they aid not want to	11th	7.0%
Percentage of students who had ever been pregnant or	9th	2.4%
gotten someone else pregnant	11th	5.1%

Appendix IV. MiPHY Crawford, Roscommon, Oscoda, and Ogemaw Counties, 2013-2014 3 of 10 districts participating /3 of 14 buildings/ $7^{\rm th}$ grade: n=235, $9^{\rm th}$ grade: n=228, $11^{\rm th}$ grade: n=191

Weight

 				Τ	Т			
16.4%	16.6%	13.5%	20.0%	17.1%	14.6%	26.0%	43.6%	43.9%
7th	9th	11th	7th	9th	11th	7th	9th	11th
	Percentage of students who are obese (at or above the 95 th percentile for BMI by age and sex)		Constitution of the state of th	reformings of students wind are overweight (at or above the 85^{th} percentile and below the 95^{th} percentile for BMI by age	and sex)		Percentage of students who were trying to lose weight	

Physical Activity

$\label{eq:condition} \mbox{Appendix IV.} \quad \mbox{MiPHY Crawford, Roscommon, Oscoda, and Ogennaw Counties, 2013-2014} \\ \mbox{3 of 10 districts participating } \mbox{4 of ubuildings} \mbox{7th grade: n=235, 9th grade: n=291, prode: n=191, pro$

Physical Health

Nutrition

Appendix V. Environmental Health Worksheet

	Crawford	Oscoda	Roscommon	Michigan	Source
Lead – High Risk Homes	2052		5591*	1,197,040	Michigan Department of Community Health 2013
Failed Septic Systems	36		463	4,130	Department of Environmental Quality
Unintentional Fatal Injuries	8	7	18	4,374	Michigan Department of Community Health 2014
Fatal injuries: suicide	3	3	6	1,344	Michigan Department of Community Health, 2014
Transport Fatal Injuries	3	3	5	986	Michigan Department of Community Health, 2014
Fatal injuries: other unintentional	5	4	13	3,388	Michigan Department of Community Health, 2014
Failed septic systems	36		463	4,130	Michigan Department of Community Health, 2013
Air pollution - particulate matter	11.3	11.3	11.4	11.5	County Health Rankings 2016
Drinking water violations	No	No	Yes		County Health Rankings 2016
Severe housing problems	19%	13%	17%	17%	County Health Rankings 2016

^{*}According to the 2009-2013 American Community Survey 5-Year Estimates, 5591 housing units in Roscommon County were built before 1950.

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Network are working together to identify what the most important health issues are here in Northern Michigan. One part of the project is this survey. The survey is anonymous and confidential. Your opinions will help us decide what to work on for the next three years. Health departments, hospitals, county health plans and the Northern Michigan Health

Thank you!

Good schools/high value on education	Healthy lifestyle	Low levels of child abuse	Opportunities for social/ emotional support	Parks and recreation/access to physical activity	Safe neighborhoods	Strong family life	
Access to affordable, healthy food	Access to health care, including primary care,	specialty care, behavioral health and dental	Affordable housing	Clean environment	Community involvement	Good jobs and healthy economy	0.44

1. Please check the three most important factors for a healthy community.

2. Please check the three most important health problems in your county.

Mental health issues	Overweight and obesity	Rape/sexual assault	Sexually transmitted diseases	Substance use (alcohol, illegal drugs, prescription	drugs,	Suicide	Teen pregnancy	Tobacco and e-cigarette use	Unsafe home environments (child abuse and	neglect and domestic violence)	
Aging problems (arthritis, hearing/vision loss)	Chronic disease (heart disease, cancer, stroke)	Chronic pain	Homelessness	Infectious disease	Injury/trauma	Lack of access to affordable, healthy food	Lack of access to primary, specialty care,	behavioral health or dental care	Lack of affordable housing	Lack of physical activity	

3. Please check the problems adults, older adults, and children in your family are having getting health care

Children					
Older Adults					
Adults					
	Cannot afford visits to doctor, dentist, clinic, and/or hospital	Cannot find a doctor to accept me as a patient	Difficult to set appointments	Do not know where to go for health care	ER waiting time

	Adults	Older Adults	Children
Finding a behavioral health provider			
Finding a dentist			
Finding a doctor			
Getting pregnancy care			
Getting specialist care			
Health insurance coverage is limited			
Health insurance does not cover behavioral health			
Health insurance does not cover dental services			
Health insurance does not cover medications			
Health insurance has high deductibles/co-pays			
Lack of health insurance			
Physician dropped me/them for missing appointments			
Too busy to get to the doctor			
Transnortation issues			

Have you or any member of your immediate family have ever been told by a doctor or other health professional that you have any of the following diseases and conditions?

	You	Family Member
Alcoholism or other addiction		
Arthritis		
Asthma		
Cancer		
Chronic pain		
Dental health problems		
Diabetes/prediabetes		
Hearing problems		
Heart disease/heart attack		
High blood pressure		
High cholesterol		
Kidney disease		
Lung disease/COPD		
Overweight/obese		
Stroke		

Please indicate how much you feel each of the following is a barrier to getting the health care that you need, or makes it more difficult. Not Not a Minor Major

Barrier Applicable									
Barrier									
Barrier									
	Availability of information on area health care resources	Availability of information on cost of health care services	Coordination of resources among services and providers	Access to affordable care	Access to holistic treatment options	Availability of transportation	Availability of child care	Ability to contact (no telephone)	Ability to take time off work for appointment/care

No		lan					
Sometimes		n helps us to p					
Yes		<i>l information</i> County					
6. Where do you get your health information?	Doctor or health clinic Family or friends Health Department Internet Newspapers or radio Television	Please tell us about yourself. This anonymous personal information helps us to plan programs and services where they are needed most. 7. What county do you live in?	8. How old are you? years old 9. What is your highest level of education? 8. Brade or less 8. Grame high school 1. High school graduale/vocational-technical/GED 5. Some college College graduate Post college/secondary school	10. What is your annual household income? Less than \$15,000 \$15,000 to \$34,999 \$35,000 to \$74,999 \$75,000 to \$99,999 \$100,000 or more	11. Do you have health insurance? —— yes —— no	12. What is your race/ethnidity? White Black or African American American Indian or Alaska Native Asian Native Hawaiian or Pacific Islander Hispanic or Latino Two or more races	13. What is your gender? Female Male

Northern Michigan 2015 Health Care Provider Survey

1.Check the three most important factors needed for a "healthy community."	s needed for a "healthy community."
Access to affordable healthy foods	Healthy lifestyles
Access to health care, including primary care, specialty care, behavioral health services and dental care	Low levels of child abuse Opportunities for social and/or emotional
Affordable housing	support Parks and recreation/access to physical
Clean environment	activity
Community involvement Good jobs and healthy economy	Safe neighborhoods Strong family life
Good schools/high value on education	
Other (please specify)/Additional Comments	
2.Check the three most important comm live in.	2. Check the three most important community health problems in the county you live in.
Aging problems	Mental health issues
Chronic disease	Overweight and obesity
Chronic pain	Rape/sexual assault
Homelessness	Sexually transmitted diseases
Infectious Disease	Substance abuse
Injury/trauma	Suicide
Lack of access to affordable healthy food	Teenage pregnancy
Lack of access to primary care, specialty care, behavioral health services or dental care	Tobacco use Unsafe home environments (child abuse and neglect/domestic violence)
Lack of physical activity	

https://www.surveymonkey.com/r/Northern_Michigan_2015_Health_Care_Provider_Survey

Northern Michigan 2015 Health Care Provider Survey

3.Which hospital are you primarily affiliated with?	primarily affiliated	with?	
Alpena Regional Medical Center	Center	Munson He	Munson Healthcare Cadillac Hospital
Charlevoix Area Hospital	0	Munson He	Munson Healthcare Grayling Hospital
Gerber Memorial Health Services	ervices	Munson Me	Munson Medical Center
Kalkaska Memorial Health Center	Center	Otsego Me	Otsego Memorial Hospital
McLaren Northern Michigan	O	Paul Oliver	Paul Oliver Memorial Hospital
Mecosta County Medical Center	Senter	St. Joseph	St. Joseph Health System
Memorial Medical Center of West Michigan	of West Michigan	West Brand	West Branch Regional Medical Center
Mercy Health Partners, Lakeshore Campus	keshore Campus	West Shore	West Shore Medical Center
Other (please specify)			
4.Where do you live?			
Alcona County	O losco County		Newaygo County
Alpena County	Kalkaska County	£	Oceana County
Antrim County	Lake County		Ogemaw County
Benzie County	Leelanau County	rty.	Oscoda County
Charlevoix County	Manistee County	À	Otsego County
Cheboygan County	Mason County		Presque Isle County
Crawford County	Mecosta County	>	Roscommon County
Emmet County	Missaukee County	nty	Wexford County
Grand Traverse County	Montmorency County	county	
Other (please specify)			

https://www.surveymonkey.com/r/Northern_Michigan_2015_Health_Care_Provider_Survey