NORTHERN MICHIGAN 2012
Community Health Assessment

ALPENA • ANTRIM • CHARLEVOIX • CHEBOYGAN • CHIPPEWA
EMMET • MACKINAC • MONTMORENCY • OTSEGO • PRESQUE ISLE

A PROJECT FUNDED BY

[Logos of various organizations]
A NOTE TO THE COMMUNITY
January 2013

In a remarkable collaborative partnership, Northern Health Plan and three hospitals – Charlevoix Area Hospital, McLaren Northern Michigan, and Otsego Memorial Hospital – joined the Health Department of Northwest Michigan in providing funding for robust community health assessment across the region we all serve.

Fifteen months later, we are proud to present this 2012 Community Health Assessment Report. It is a comprehensive collection and analysis of health status and needs in Alpena, Antrim, Charlevoix, Cheboygan, Chippewa, Emmet, Mackinac, Montmorency, Otsego, and Presque Isle counties. We’ve learned that too many of our residents, and especially low-income residents:

- Are overweight or obese and don’t spend time engaged in physical activities;
- Lack access to healthy food and recreational facilities in their communities;
- Experience a variety of barriers to health care, including mental health services and substance abuse treatment; and
- Abuse alcohol and drugs and use tobacco.

One stark fact about the health of our communities is clear: Even the strongest partnerships among hospitals, health care providers, and health departments cannot impact community health alone. High school graduation rates, community planning and design, access to healthy foods and recreational activities, and air and water quality have as much, or greater, impact on health than seeing a doctor or nurse when we are sick.

Gathering a wealth of information, reviewing data, and setting priorities are only the first steps of our long-term community health improvement initiative. On behalf of the Northern Michigan Mobilizing for Action through Planning & Partnerships (MAPP) Executive Committee, we invite you to get involved.

Please join us as we work together to improve health and quality of life for all Northern Michigan residents. For more information, please contact Jane Sundmacher, Community Health Planner, at (231) 347-5041 or jsundmacher@nwhealth.org.

Yours in good health,

Linda Yaroch, Health Officer
Health Department of Northwest Michigan

John Bruning, Health Officer
District Health Department #4

America leads the world in medical research and medical care, and for all we spend on health care, we should be the healthiest people on Earth. Yet, for some of the most important indicators, like how long we live, we’re not even in the top 25, behind countries like Bosnia and Jordan. It’s time for America to lead again on health and that means taking three steps. The first is to ensure everyone can afford to see a doctor when they’re sick. The second is to build preventive care, like screening for cancer and heart disease, into every health care plan and make it available to people who otherwise won’t or can’t go in for it (For example, have them available in public places where it’s easy to stop for a test). The third is to stop thinking about health as something we get at the doctor’s office but instead as something that starts in our families, our schools and workplaces, in our playgrounds and parks, and in the air we breathe and the water we drink. The more you see the problem of health this way, the more opportunities you have to improve it. Scientists have found that the conditions in which we live and work have an enormous impact on our health, long before we ever see a doctor. It’s time to expand the way we think about health to include how to keep it, not just how to get it back.

Robert Wood Johnson Foundation,
A New Way to Talk About the Social Determinants of Health (2010)
EXECUTIVE SUMMARY

How healthy is Northern Michigan? How do we prevent disease, save lives, and save dollars? How do we work together so all residents can make healthy choices? These questions drove a comprehensive 15-month exploration utilizing the “gold standard” community health assessment framework, Mobilizing for Action through Planning & Partnerships (MAPP), in Alpena, Antrim, Charlevoix, Cheboygan, Chippewa, Emmet, Mackinac, Montmorency, Otsego and Presque Isle counties.

Charlevoix Area Hospital, the Health Department of Northwest Michigan, McLaren Northern Michigan, Northern Health Plan and Otsego Memorial Hospital established a community health assessment and improvement initiative, and provided funding to the project in October 2011. Leaders from each organization, plus District Health Department #4, provided oversight to the project, staffed by Jane Sundmacher, Community Health Planner for the Health Department of Northwest Michigan.

MAPP consists of four assessments, each with important information for improving community health. But their value is multiplied by considering findings as a whole. Together, the assessments provide a 360-degree view of the community and the basis for well-informed selection of community health priorities.

COMMUNITY THEMES AND STRENGTHS ASSESSMENT

More than 1,200 individuals participated in surveys and/or focus groups throughout Northern Michigan in 2012. About 900 residents completed the “Healthy Community” survey and about 100 physicians, nurse practitioners, and physician assistants completed a “Health Care Provider” survey.

More than 200 people participated in 22 focus groups, community dialogues, and key informant interviews; these included community health needs assessment activities led by Munson Medical Center, which covered Antrim County, and the Quality of Life Project’s primary research activities in Otsego County.

There was significant agreement among the results of these community engagement strategies, with obesity, mental health, alcohol and drug abuse, lack of physical activity, chronic disease, and lack of access to health care identified most often.
FORCES OF CHANGE ASSESSMENT

The Forces of Change Assessment was an opportunity for local multipurpose collaborative bodies and MAPP Work Groups to identify impending legislative, technological and other changes that affect the context in which the community and its health system operate. These included:

- Results of the 2012 Presidential election and upcoming implementation of the Affordable Care Act (“Obamacare”);
- Connections between lower education levels, low income, insurance status, health risk behaviors and health outcomes;
- Societal effect of a large and growing segment of older adults;
- Lack of access to health care, including the complexities of accessing mental health services;
- Changes in the regional health delivery system; and
- Technological advances, like electronic health records and Health Information Exchanges.

PUBLIC HEALTH SYSTEMS ASSESSMENT

Two Public Health System Assessments were conducted in Northern Michigan, using the National Public Health Standards Program scoring instrument. The Northwest assessment (December 2011) revealed excellent system-wide capacity to develop policies and plans, evaluate personal and population-based health services, enforce laws, and investigate and diagnose health problems and hazards in the community. Northeast counties completed the assessment in November 2012; these results, from the U.S Centers for Disease Control & Prevention, are pending.

COMMUNITY HEALTH STATUS ASSESSMENT

More than 250 health indicators were collected, organized, and analyzed for each of the 10 counties in the region, including social determinants of health and other statistics reported annually in the County Health Rankings. This model for population health emphasizes interrelated factors that, if improved, can help make communities healthier places to live, learn, work, and play.

The social determinants of health are the circumstances in which people are born, grow up, live, work and age, and the systems put in place to deal with illness.

These circumstances are, in turn, shaped by a wider set of forces: economics, social policies and politics.

World Health Organization

*Key Concepts in the Social Determinants of Health, 2010*
Social and Economic Indicators

Population characteristics

Most (91%) of the 234,911 people who live in Northern Michigan service area are white; Native Americans, at 5%, represent the largest minority group. At 20%, older adults represent a larger proportion of the population in the region than they do statewide (14%).

Education and income

The relationship between higher education and improved health outcomes is well-known, with years of formal education correlating strongly with improved work and economic opportunities, reduced psychosocial stress, and healthier lifestyles. Though high school graduation rates exceed the State rate (76%) in every county, the proportion of residents who have earned at least an Associate’s degree lags behind the State (33%), except in Emmet County. With lower educational levels across the region, it is not surprising that incomes fall below the Michigan median income ($45,354) as well, except in Emmet County, where it reaches $45,875. The proportion of single-parent households – a crude predictor for low-income – falls below the state rate of 17% in all counties in the region. However, rates of children in poverty approach or exceed the State rate (20%) in most of the 10 counties.

County-level income data cannot accurately describe the large disparity between the lowest and highest incomes in the region, particularly in the Northwest counties. By drilling down to Census Tracts, stark differences become evident. For example, median household income in Emmet County peaks at $68,531 per year in Tract 9706. In adjacent Tract 9708, median income is less than half ($31,409).

Social and emotional support

A large proportion of adults in Northern Michigan do not have adequate social and emotional support, approaching or exceeding the State rate of 20% in all but three counties: Charlevoix, Montmorency, and Presque Isle. As poverty and poor social connections are among the risk factors for child abuse and neglect, these statistics may explain, in part, why child abuse is grotesquely over-represented in the 10-county region, with 18 victims for every 1,000 children, exceeding the State rate by one-third.

Health Factors

Clinical Care

- Access to health care

A significant proportion of Northern Michigan residents experience barriers to healthcare.

*Geography:* Many residents have to travel long distances for appointments with health care providers, who are concentrated in population centers where hospitals operate – e.g., Alpena, Charlevoix, Gaylord, and Petoskey.

*Health Care Provider supply:* Several areas within the 10-county region are designated as “Health Professions Shortage Areas” for mental health and/or primary care, and the ratio for primary care provider to population exceeds the state rate of 874:1 in all but Charlevoix and Emmet Counties.

*Rates of uninsured:* The proportion of uninsured ranges from 16% in Otsego County to 23% in Chippewa County, and exceeds all regions of the State, with the exception of metropolitan Detroit.
• **Quality of care**

Most health care providers meet or exceed the standard measures selected by County Health Rankings to quantify quality of care.

*Preventable hospital stays:* The rate for preventable hospital stays in the 10 counties is below the State rate of 74 per 1,000 Medicare population, suggesting that these residents do not use local hospitals as their main source of care.

*Patient screening:* Medicare populations are screened for breast cancer at or above the standard (68%), except in Chippewa County. Nine of 10 counties’ proportion of diabetic patients on Medicare who were regularly screened for A1c exceeded the State rate (84%)

**Health Risk Behaviors**

• **Obesity**

One-third of adults are obese in the 10-county region, while teen obesity rates range from 10% in Presque Isle County to 19% in Cheboygan County. About one-quarter of adults report no leisure time physical activity. However, high school students from all counties engage in regular physical activity above the state rate of 47%, ranging up to 69% in Presque Isle County.

• **Tobacco use**

Adult smoking rates approach or exceed the state rate of 21%, and there is a strong correlation between tobacco use and income. More than twice as many low-income residents (44%) smoke. In addition, maternal smoking rates are quite high, ranging from 25% in Charlevoix County to 39% in Presque Isle County, and are even higher among low-income pregnant women.

• **Alcohol abuse**

Eighteen percent of adults engage in excessive drinking – that is, they drink five or more alcoholic beverages in one sitting. Of the eight counties in the region with excessive drinking data available, only Presque Isle County, at 13%, is below the State rate. Meanwhile, 31% of Chippewa County residents report excessive drinking. Alcohol is involved in about one-third of the motor vehicle crashes in Michigan.

• **Unsafe driving**

Rates for motor vehicle crashes in Northern Michigan range from 11 per 100,000 population in Presque Isle County to 24 per 100,000 in Antrim County. Motor vehicle crashes claimed the lives of 21 people in the region during 2011 alone.

• **Risky sexual behavior**

The statewide teen pregnancy rate is 47.3 per 1,000 female population age 15-19. Teen pregnancy rates range widely in the region, from 26.4 per 1,000 in Charlevoix County to 48.6 in Otsego County.
Environment

- Physical environment

Air quality is generally excellent in Northern Michigan. There were three ozone days in the State, none of which were in the region. Eight of the 10 counties experienced one or two particulate matter days per year, where air is unhealthy for sensitive individuals to breathe. Only Chippewa (at seven days) and Mackinac (at five days) met or exceeded the State’s five particulate matter days per year, a result of industrial pollution and ambient winds in the Upper Peninsula.

- Natural environment

*Physical recreation facilities:* There is a wide range of access to fitness and recreational sports facilities to swim, skate or play racquet sports. Emmet County has the greatest access, with 0.24 facilities per 10,000 population; Antrim County, with a rate of 0.04, has the least access, although data were not available for Mackinac and Montmorency counties.

*Access to healthy food:* There are 17 Census Tracts designated as *food deserts* in the 10-county region because residents have very limited access to fresh, affordable food.

*Fast food restaurant density:* In Alpena, Charlevoix, Chippewa, Emmet, Mackinac, and Otsego counties, fast food restaurant density exceeds the State rate of 0.55 per 1,000 residents. Chippewa and Mackinac counties have both large food deserts and high access to fast food.

Health Outcomes

- Premature death

Premature death is represented by the years of potential life lost before age 75. For example, a person dying at age 25 contributes 50 years of life lost, whereas a person who dies at age 65 contributes 10 years of life lost. Rates for potential years of life lost in Northern Michigan range from 4,624 per (age-adjusted) 100,000 population per year in Emmet County, to 8,563 in Otsego County. Leading causes of death in the region are heart disease, cancer, and stroke.

- Quality of life

A greater proportion of the population rate their health “fair” or “poor” in Antrim, Charlevoix, Emmet and Chippewa counties than statewide (14%). Overall, Northern Michigan residents experience three or four poor mental health days per month, about the same as the State. Poor physical health days per month range from 2.8 in Mackinac County to 4.8 in Presque Isle County.

- Low birth weight infants

Low birth weight in the 10-county region ranges from 5.1% of live births in Mackinac County to 8.7% in Alpena County. For comparison, 7.1% of infants born to white women statewide are of low birth weight.
STRATEGIC ISSUES

Community-wide meetings were convened between October and December 2012 in the Tip of the Mitt counties. Participants reviewed data, discussed key issues and ranked top priorities. Antrim County was covered through collaboration with Munson Healthcare, which conducted its own community health needs assessment for its five-county service area. Munson boards reviewed data and determined priorities for Antrim, Benzie, Grand Traverse, Leelanau, and Kalkaska Counties, based on the “Triple Aim” criteria.

Northern Michigan Community Health Priority Issues 2013-2015

<table>
<thead>
<tr>
<th>Antrim</th>
<th>Charlevoix</th>
<th>Emmet</th>
<th>Otsego</th>
<th>Northeast</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Obesity</td>
<td>• Obesity</td>
<td>• Obesity</td>
<td>• Obesity</td>
<td>• Obesity</td>
</tr>
<tr>
<td>• Access to care</td>
<td>• Chronic disease</td>
<td>• Chronic disease</td>
<td>• Access to care</td>
<td>• Access to care</td>
</tr>
<tr>
<td>• Diabetes</td>
<td>• Mental health</td>
<td>• Access to care</td>
<td>• Substance abuse/tobacco</td>
<td>• Substance abuse/tobacco</td>
</tr>
<tr>
<td></td>
<td>• Abuse and neglect</td>
<td>• Maternal and child health</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Substance abuse/tobacco</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Maternal smoking</td>
<td>• Access to care</td>
<td>• Mental health</td>
<td>• Abuse and neglect</td>
<td>• Abuse and neglect</td>
</tr>
<tr>
<td></td>
<td>• Maternal/child health</td>
<td>• Abuse and neglect</td>
<td>• Substance abuse/tobacco</td>
<td></td>
</tr>
</tbody>
</table>

NEXT STEPS

As illustrated in the chart above, there is considerable agreement across the 10-county service area that top priorities are—

• Obesity/Chronic Disease Prevention
• Access to Care (including mental health and maternal and child health)
• Substance Abuse and Tobacco Use

Three Action Plan Teams, one for each of the priority issues, will be convened early in 2013 to develop regional Action Plans. Together, these Action Plans will form a regional Community Health Improvement Plan (CHIP) that aligns with goals and objectives of Healthy People 2020 and Michigan’s State Health Improvement Plan. To achieve objectives, Action Plan Teams will select evidenced-based strategies consisting of multi-level interventions, ranging from individual, community, and policy levels. Once CHIPS are complete, funding will be sought as needed to implement Action Plans.