NORTHERN MICHIGAN 2012

Community Health Assessment

MONTMORENCY COUNTY • OTSEGO COUNTY

A PROJECT FUNDED BY

Charlevoix Area Hospital

HEALTH DEPARTMENT of Northwest Michigan

McLaren NORTHERN MICHIGAN

Northern Health Plan

OMH

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 and District Health Department #4 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, with a special focus on Otsego and Montmorency 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 thing is clear: Even the strongest partnerships among hospitals, health care providers, and health departments cannot improve 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 j.sundmacher@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)***

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MAPP
Executive Committee

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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 for the regional community health assessment. About 900 residents completed a "Healthy Community" survey, including 201 residents from Otsego and Montmorency counties.

More than 500 Otsego County residents responded to the two Otsego County Quality of Life Project's surveys and/or participated in community dialogues held in Elmira, Gaylord, Johannesburg, Vanderbilt, and Wolverine. These results were integrated into the Community Themes and Strengths Assessment.

FORCES OF CHANGE ASSESSMENT

The Forces of Change Assessment was an opportunity for local multipurpose collaborative bodies (MPCBs) 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, especially in Montmorency County;
- Lack of access to health care, including the complexities of accessing mental health services;
- Changes in the regional health delivery system, for example, the closure of inpatient services at Cheboygan Memorial Hospital;
- Major community conflicts, like Atlanta's Board of Education recall; and
- Technological advances, like electronic health records and Health Information Exchanges.

PUBLIC HEALTH SYSTEM ASSESSMENTS

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 in Antrim, Charlevoix, Emmet, and Otsego counties. Northeast counties (Alpena, Cheboygan, Montmorency, and Presque Isle) completed the assessment in November 2012; its 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 10-county service area are white; Native Americans, at 5%, represent the largest minority group. In Otsego and Montmorency counties, 97% of residents are white and Hispanic and Latinos, at 1%, are the largest minority group and Native Americans, at 0.6%, are the second largest minority group.

At 20%, older adults represent a larger proportion of the population in the 10-county region than they do statewide (14%). Seventeen per cent of Otsego County's population is age 65 and older. In Montmorency County, seniors represent an even larger share – 27%.

From 2000 to 2010, Northeast and Upper Peninsula counties lost population. Montmorency County lost 5% of its population. However, Northwest counties gained population, including Otsego County, which gained 4% of its population.

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 across the 10-county region, the proportion of residents who have earned at least an Associate degree lags behind the State (33%), except in Emmet County.

With lower educational levels across the region, it is not surprising that incomes generally fall below the Michigan median income ($45,354); Otsego median income is $43,601 and Montmorency County is the lowest in the region, at $33,294. Though 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, rates of children in poverty approach or exceed the State rate (20%) in most of the 10 counties. Proportion for Otsego County is 15%; Montmorency County has the highest percentage in the region with 30% of children living below the poverty level.

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 experiences barriers to healthcare.

***Geography*:** Many residents have to travel long distances for appointments with health care providers, who are concentrated primarily in population centers where hospitals operate, such as Otsego Memorial Hospital in Gaylord.

***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 county population exceeds the state rate of 874:1 in all but Charlevoix and Emmet counties. There are 910 Otsego County residents and 2,037 Montmorency County residents per primary care provider.

***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. The proportion of regional diabetic patients on Medicare who were screened regularly for A1c exceeded the state rate (84%), except in Otsego County (81%).

Health Risk Behaviors

- Obesity

About one-third of adults are obese in the 10-county region (31% in Otsego; 32% in Montmorency). Teen obesity rates range from 10% in Presque Isle County to 19% in Cheboygan County, with 13% in Otsego County. Montmorency does not participate in the *Michigan Profile for Healthy Youth*, source of teen obesity data.

About one-quarter of Northern Michigan adults report no leisure time physical activity (25% in Otsego; 26% in Montmorency). However, high school students from all counties reporting 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: 44% of low income residents in the eight Tip of the Mitt counties smoke. Otsego County and Chippewa County, with 29%, have the smoking highest rates in Northern Michigan. In addition, maternal smoking rates are quite high – up to 39% in Presque Isle County – and are even higher among low-income pregnant women.

- Alcohol abuse

Eighteen percent of adults in Northern Michigan 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. Twenty-one per cent of adults in Otsego County are binge drinkers (data is not available for Montmorency County). 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. Otsego County rate is 15 and Montmorency County rate is 16 per 100,000. Motor vehicle crashes claimed the lives of 21 people across 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. Data are not available for Montmorency County.

Environment

- Natural environment

  Air quality is generally excellent in Northern Michigan. There were three ozone days in the State, none of which were in the region. Tip of the Mitt counties experienced one or two particulate matter days per year, where air is unhealthy for sensitive individuals to breathe, compared to the State's five days per year.

- Built 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 1,000 population; Antrim County, with a rate of 0.04, has the least access. Otsego County access to fitness facilities is 0.13 per 1,000 (data is not available for Montmorency County).

  ***Access to healthy food*:** Census Tracts where residents have limited access to fresh, affordable food are designated as *food deserts.* Of the 17 food deserts in the 10-county region, two are in Otsego County; there are no food deserts in Montmorency County.

  ***Fast food restaurant density*:** In Alpena, Charlevoix, Emmet, Mackinac, and Otsego counties, fast food restaurant density exceeds the State rate of 0.55 per 1,000 residents. Montmorency County has the lowest rate across the region, at 0.3 per 1,000 residents.

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 potential life lost (YPLL). Rates in Northern Michigan range from 4,624 per 100,000 population in Emmet, to 8,322 in Montmorency and at 8,563 YPLL, Otsego County has the highest rate in the region. Leading causes of death in the region, state, and U.S. are heart disease, cancer, and stroke.

- Quality of life

  Self-reports of health: A greater proportion of the population rate their health "fair" or "poor" in Antrim, Charlevoix, Emmet and Chippewa counties than statewide (14%). Rates in Otsego County (11%) and Montmorency County (12%) are among the lowest in the region. In other words, these residents rate their health "good" or "excellent" the most.

  Poor physical health days: Poor physical health days per month range up to 4.8 per month (Presque Isle County) in the region. Otsego residents report 3.5 days and Montmorency residents report 3.7 days, comparable to the statewide rate of 3.5 poor physical health days per month.

  Poor mental health days: Overall, Northern Michigan residents experience three or four poor mental health days per month, about the same as the state. Otsego residents reported 3.4 days, while Montmorency residents reported 4.4 days.

- Low birth weight infants

  Low birth weight in the 10-county region ranges up to 8.7%, in Alpena County. In Otsego, proportion of low birth weight infants is 6.2%, in Montmorency it is 7.8%. Montmorency is one of three Northern Michigan counties where the percentage of low birthweight is above 7.1%, the proportion of white mothers who delivered low birthweight babies in statewide.

STRATEGIC ISSUES

Community-wide meetings were convened between October and December 2012 in the Tip of the Mitt counties. The Otsego County meeting was held on October 18, 2012 at the M-TEC Center in Gaylord. Fifteen community members and representatives from hospital, health department and social service agencies, as well as college and grant-making organizations, reviewed data, discussed key issues and ranked top priorities as follows:

- **Obesity and chronic disease prevention;**
- **Access to healthcare, including mental health and maternal and child health;**
- **Substance abuse prevention; and**
- **Abuse and neglect.**

NEXT STEPS

Northern Michigan Community Health Priority Issues 2013-2015

Antrim	Charlevoix	Emmet	Otsego	Northeast
• Obesity	• Obesity	• Obesity	• Obesity • *Chronic disease*	• Obesity
• Access to care	• Chronic disease	• Chronic disease	• Access to care • *Mental health* • *Maternal/child health*	• Access to care
• Diabetes	• Mental health • *Abuse and neglect* • *Substance abuse/tobacco*	• Access to care • *Maternal and child health*	• Substance abuse/tobacco	• Substance abuse/tobacco
• Maternal smoking	• Access to care • *Maternal/child health*	• Mental health • *Abuse and neglect* • *Substance abuse/tobacco*	• Abuse and neglect	

Responses collected throughout the 10-county service area indicate the following as top priorities:

- **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.

ACKNOWLEDGEMENTS

Antrim County Community Collaborative
Antrim MAPP Work Group

Ranae McCauley, Coordinator, Antrim County Community Collaborative (Chair)
Amy Burk, Mancelona Communities In Schools
Diane Butler, Munson Medical Center
Sue Coen, Charlevoix Area Hospital
Gerry McAvoy, Central Lake Public Schools
Carole Merritt-Doherty, North Country Community Mental Health Services

Human Services Coordinating Body of Charlevoix and Emmet Counties
Health Work Group/MAPP Work Group

Therese Green, McLaren Northern Michigan (Chair)
Jenifer Byrd, Community Health Center of Northern Michigan
Pat Fralick, Health Department of Northwest Michigan
Christine Gebhard, North Country Community Mental Health Services
Maureen Hollacker, Great Start Coalition of Charlevoix, Emmet and Northern Antrim
Martha Lancaster, Char-Em United Way
Dianne Litzenburger, Charlevoix-Emmet Intermediate School District
Jan Mancinelli, Women's Resource Center of Northern Michigan
Jack Messer, Charlevoix County Commission on Aging
Julie Puroll, Friendship Center
Maureen Radke, Charlevoix County Community Foundation
Connie Roland, East Jordan Family Health Center
Andrew Sahara, North Country Community Mental Health Services
Miriam Schulingkamp, Planned Parenthood – West and Northern Michigan
Rachel Smolinski, HARBOR, Inc.

Otsego Human Services Network
Otsego MAPP Work Group

Christie Perdue, Otsego Memorial Hospital (Chair)
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Laurie Andrews, Otsego Human Services Network
Dana Bensinger, Otsego County Community Foundation
Maureen Derenzy, Otsego County Library
Colleen Gorno, Great Start Collaborative Parent Coalition
Chris Graham, Catholic Human Services
Melinda Hambleton, Great Start Coalition of Cheboygan, Otsego and Presque Isle
Chris Krajewski, Women's Resource Center of Northern Michigan
Lorraine Manary, Otsego County United Way
Veronika Peacetree, Goodwill Industries of Northern Michigan
Carolyn Penniman, Otsego County MSU-Extension
Sandy Tarbutton, Health Department of Northwest Michigan
Dona Wishart, Otsego County Commission on Aging

SPECIAL THANKS

Many people and organizations contributed to the 2012 Northern Michigan Community Health Assessment Report. More than 1,200 community residents from across the region participated in focus groups, completed surveys or identified strategic issues. These contributions make the report meaningful. Members of the multi-purpose collaborative bodies in Antrim, Charlevoix, Emmet, Cheboygan, Montmorency, Otsego, and Presque Isle Counties assisted in distributing the Healthy Community Survey, which provided valuable input from clients and patients.

It was a pleasure working with Phil Alexander, Project Director for the Otsego County Quality of Life Project as well as Lorraine Manary, Executive Director of the Otsego County United Way and Dana Bensinger, Executive Director of the Otsego County Community Foundation, who conducted five Quality of Life "community conversations" throughout Otsego County. The Community Themes & Strengths Assessment is much richer because of their collaboration.

Finally, special thanks to the following staff from the Health Department of Northwest Michigan for their assistance in conducting assessments or preparing this report: Erika Van Dam, Natalie Kasiborski, Dan Reynolds, Liane Hagerman, Sheila McKinney, Wendi Wright, and especially Nicole Schaub, Graduate Student Intern from the University of Michigan School of Public Health, and Lydia Doublestein, Student Intern from Calvin College.

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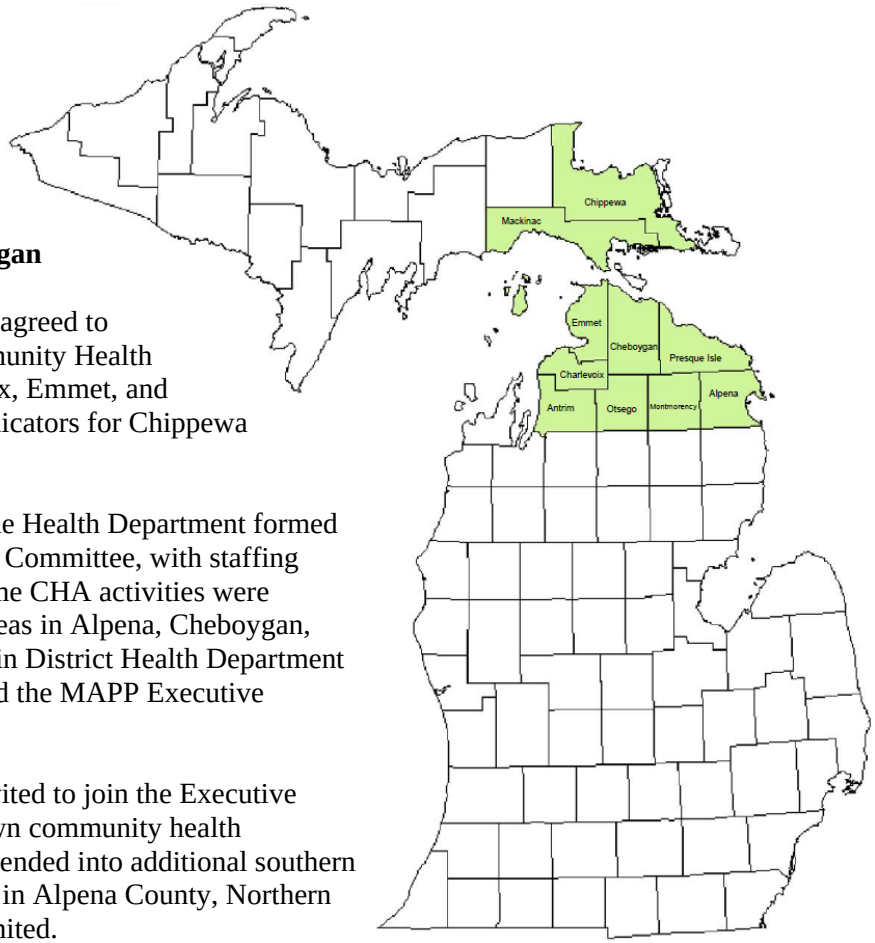
MOBILIZING FOR ACTION THROUGH PLANNING & PARTNERSHIPS (MAPP)

Mobilizing for Action through Planning & Partnerships (MAPP) is the "gold standard" process for community health assessment and improvement, developed by the National Association for County & City Health Officials (NACCHO) and U.S. Centers for Disease Control (CDC) & Prevention. MAPP is not an agency-focused assessment; it is a community-driven planning tool that applies strategic thinking to prioritize issues and identify resources to address them.

Phase 1: Organizing for Success and Developing Partnerships

The first phase of MAPP involves two critical and interrelated activities: organizing the planning process, and developing the planning partnership. The purpose of this phase is to structure a planning process that builds commitment, engages participants as active partners, uses participants' time well, and results in a plan that can realistically be implemented.

No one individual or organization can improve community health by itself. MAPP is based on the premise just about everyone has a stake in the communities' health, safety, and wellbeing.



In October 2011, **Charlevoix Area Hospital** (CAH), the **Health Department of Northwest Michigan** (Northwest), **McLaren Northern Michigan** (MNM), **Northern Health Plan** (NHP), and **Otsego Memorial Hospital** (OMH) agreed to contribute funds to conduct robust Community Health Assessment (CHA) in Antrim, Charlevoix, Emmet, and Otsego counties, and to collect health indicators for Chippewa and Mackinac Counties.

Representatives from the hospitals and the Health Department formed the Northern Michigan MAPP Executive Committee, with staffing support from Northwest. Later, when some CHA activities were expanded to include hospitals' service areas in Alpena, Cheboygan, Montmorency and Presque Isle counties in District Health Department #4's jurisdiction, its Health Officer joined the MAPP Executive Committee.

Alpena Regional Medical Center was invited to join the Executive Committee, but decided to conduct its own community health assessment for its service area, which extended into additional southern counties. To avoid doubling assessments in Alpena County, Northern Michigan MAPP activities there were limited.

The Community Health Assessment was integrated into three Multi-Purpose Collaborative Bodies (MPCBs), establishing work groups to plan and implement local assessment activities, including the Otsego County Human Services Network (OHSN). OHSN established the Otsego MAPP Work Group, chaired by Christie Perdue, Director of Marketing and Foundation at Otsego Memorial Hospital. Its members worked closely with the Otsego Quality of Life Project, Otsego County United Way and Building Healthy Communities Coalition, which were conducting related assessments in the county.

Northern Michigan MAPP staff established and maintained contact with Northeast MPCBs, including the Montmorency Human Services Coordinating Council (MHSCC). Council members completed the Forces of Change Assessment, assisted in the Community Themes and Strengths Assessment by distributing the Healthy Community Survey, and participated in a focus group in Atlanta. MHSCC members also attended the Northeast session to review data and identify community priorities.

Phase 2: Visioning

Visioning, the second phase of MAPP, provides focus, purpose, and direction to the MAPP process so that participants collectively achieve a shared vision of the future. It provides an overarching goal for the community. ***Healthy people in healthy communities***, Northwest's agency vision, was adopted for Northern Michigan MAPP by the Executive Committee.

Phase 3: Conducting the Four Assessments

MAPP consists of four assessments. Each yields important information for improving community health, but their value is multiplied by considering the findings as a whole. Together, the assessments provide a 360-degree view of the community.

Community Themes and Strengths Assessment

What issues are the most important to health and quality of life in our community?

The Community Themes and Strengths Assessment is a vital part of a community health improvement process. During this phase, community members' thoughts, opinions, concerns, and solutions are gathered. As a result, these individuals become more vested in the process, with a sense of ownership and responsibility for the outcomes.

While a variety of methods may be used for the Community Themes and Strengths Assessment, the MAPP Work Groups selected a combination of surveys and focus groups to quantify community concerns and perceptions about quality of life. The Otsego MAPP Work Group and Otsego Quality of Life Project worked closely together to design community engagement strategies that complemented, and did not duplicate, each other.

Healthy Community Survey

More than 900 residents from the eight counties across the Tip of the Mitt completed a brief Healthy Community Survey, including 201 from Otsego and Montmorency counties (Attachment 1). Extra effort was made to reach low-income residents and young families who do not typically respond to surveys. At well-attended community events, there were raffles of a $25 gift card to encourage attendees to complete the survey.

The top four factors identified as most the important in defining a healthy community were the same as the results from across the region (though in a slightly different order):

- **good jobs and a healthy economy (64%);**
- **access to health care (44%);**
- **good schools (37%); and**
- **healthy lifestyles (31%).**

In addition, about one-quarter of respondents from Otsego and Montmorency counties identified strong family life (27%) and community involvement (22%) as key factors.

HEALTHY COMMUNITY SURVEY

In the following list, what do you think are the three most important factors that define a "healthy community"?

	What county do you live in?		
	Montmorency	**Otsego**	**Response Totals**
1. Community involvement	26.5% (9)	21.1% (35)	22.0% (44)
2. Low/safe neighborhoods	14.7% (5)	10.2% (17)	11.0% (22)
3. Low levels of child abuse	8.8% (3)	3.6% (6)	4.5% (9)
4. Good schools	**67.6% (23)**	30.7% (51)	37.0% (74)
5. Access to health care*	32.4% (11)	46.4% (77)	44.0% (88)
6. Parks and recreation	8.8% (3)	8.4% (14)	8.5% (17)
7. Clean environment	20.6% (7)	13.9% (23)	15.0% (30)
8. Affordable housing	11.8% (4)	12.0% (20)	12.0% (24)
9. Tolerance for diversity	2.9% (1)	4.8% (8)	4.5% (9)
10. Good jobs and healthy economy	44.1% (15)	**68.1% (113)**	**64.0% (128)**
11. Strong family life	29.4% (10)	26.5% (44)	27.0% (54)
12. Healthy lifestyles	20.6% (7)	33.1% (55)	31.0% (62)
13. Low death rate and disease rates	0.0% (0)	3.6% (6)	3.0% (6)
14. Religious or spiritual values	8.8% (3)	12.7% (21)	12.0% (24)
15. Arts and cultural events	2.9% (1)	1.8% (3)	2.0% (4)
16. Other, please specify	0 replies (0.0%)	4 replies (2.4%)	2.0% (4)
answered question	34	166	200
		skipped question	1

Healthy Community Survey: What makes a healthy community?

HEALTHY COMMUNITY SURVEY

In the following list, what do you think are the three most important "health problems" in your county? (These are the problems that have the greatest impact on overall health)

	What county do you live in?		
	Montmorency	**Otsego**	**Response Totals**
Motor vehicle crashes	9.1% (3)	1.8% (3)	3.0% (6)
Rape/sexual assault	3.0% (1)	3.0% (5)	3.0% (6)
Mental health issues	15.2% (5)	23.5% (39)	22.1% (44)
Homicides	0.0% (0)	0.6% (1)	0.5% (1)
Child abuse and neglect	24.2% (8)	20.5% (34)	21.1% (42)
Suicide	0.0% (0)	3.0% (5)	2.5% (5)
Teenage pregnancy	18.2% (6)	14.5% (24)	15.1% (30)
Domestic violence	9.1% (3)	9.0% (15)	9.0% (18)
Firearm-related injuries	0.0% (0)	0.6% (1)	0.5% (1)
Sexually transmitted diseases	3.0% (1)	0.6% (1)	1.0% (2)
Infectious disease (TB, Hepatitis)	0.0% (0)	0.6% (1)	0.5% (1)
Lack of physical activity	39.4% (13)	38.0% (63)	38.2% (76)
Alcohol and drug issues	45.5% (15)	59.0% (98)	56.8% (113)
Lack of access to health care*	21.2% (7)	21.1% (35)	21.1% (42)
Chronic diseases (heart disease, cancer, diabetes)	24.2% (8)	25.9% (43)	25.6% (51)
Aging problems (arthritis, hearing/vision loss, etc)	15.2% (5)	12.0% (20)	12.6% (25)
Tobacco use	27.3% (9)	16.9% (28)	18.6% (37)
Homelessness	0.0% (0)	9.6% (16)	8.0% (16)
Obesity	39.4% (13)	35.5% (59)	36.2% (72)
Other, please specify	0 replies (0.0%)	7 replies (4.2%)	3.5% (7)
answered question	33	166	199
		skipped question	2

Healthy Community Survey: What are the most important health problems?

Respondents from Otsego and Montmorency counties ranked the top health problems in their communities as follows:

- **alcohol and drug issues (57%)**
- **lack of physical activity (38%)**
- **obesity (36%)**
- **chronic disease (26%)**
- **mental health issues (22%)**
- **lack of access to healthcare (21%)**
- **child abuse and neglect (21%)**
- **tobacco use (19%)**

Otsego Quality of Life (QOL) Surveys

Mailed QOL Survey

QOL mailed, on a random basis, to 1,167 Otsego County residents who were registered to vote. Forty-nine percent (571) useable surveys were returned; 70% of respondents were age 50 and over. The QOL Survey consisted of 68 questions selected by an Advisory Committee that included several members of the Otsego MAPP Work Group. See **Attachment 2** for the final QOL report.

Of the items related to health and social determinants of health, respondents described they were "very satisfied" with:

- **affordability of public transportation (24%)**
- **education (33%)**
- **bike paths (38%)**
- **quality of health care services (40%)**
- **quality of water in lakes and streams (42%)**
- **snowmobile trails (46%)**
- **quality of drinking water (62%)**
- **availability of fresh fruits and vegetables (65%)**

Respondents "strongly agreed" that:

- **my health care needs can be addressed locally (16%)**
- **our downtown areas are pedestrian-friendly (19%)**
- **neighborhood is safe (32%)**

Finally, respondents had "high concern" for:

- **access to day care for children (13%)**
- **pedestrian/sidewalk safety (22%)**
- **access to mental health care (23%)**
- **availability of affordable housing (26%)**
- **getting enough exercise (28%)**
- **air pollution (35%)**
- **access to medical care (39%)**
- **availability of services to seniors so they can stay in their homes (39%)**
- **having enough money to pay rent/mortgage (40%)**
- **water pollution (47%)**
- **youth being bullied (49%)**
- **crime (50%)**
- **unemployment rate (70%)**
- **jobs that pay a family-sustaining wage (80%)**

On-line QOL Survey

There were items on the on-line survey that related to health and the social determinants of health:

- **62% have "not enough money" or "just enough money" to meet everyday needs**
- **80% leave Otsego County for medical care "rarely" or "never"**
- **89% feel "safe" or "somewhat safe" walking alone in their neighborhood after dark**
- **90% rated their quality of life as "good" or "very good"**
- **98% feel "safe" or "somewhat safe" in their home during the day**
- **98% feel "safe" or "somewhat safe" in their home after dark**

Health Care Provider Survey

About 100 physicians and mid-level providers, mostly from Charlevoix and Emmet counties, completed the Health Care Provider Survey (Attachment 3). Health care providers identified the following as the most important factors for a healthy community:

- **good jobs and a healthy economy (53%);**
- **access to health care (53%);**
- **healthy lifestyles (43%);**
- **strong family life (29%); and**
- **good schools (25%).**

When asked for their opinions of the top three health problems in their communities, health care providers identified:

- **obesity (68%);**
- **alcohol and drug problems issues (46%);**
- **lack of physical activity (40%);**
- **mental health issues (32%);**
- **tobacco use (31%); and**
- **chronic disease (26%).**

In the following list, what do you think are the three most important factors that define a "healthy community"?

	Response Percent	Response Count
community involvement	14.8%	16
low levels of child abuse	3.7%	4
access to healthcare	**52.8%**	**57**
clean environment	24.1%	26
tolerance for diversity	10.2%	11
strong family life	28.7%	31
low death rate and disease rate	10.2%	11
arts and cultural events	1.9%	2
low crime/safe neighborhoods	20.4%	22
good schools	25.0%	27
parks and recreation	9.3%	10
affordable housing	8.3%	9
good jobs and healthy economy	**52.8%**	**57**
healthy lifestyles	42.6%	46
religious or spiritual values	5.6%	6
Other (please specify)	0.9%	1
	answered question	**108**
	skipped question	**0**

Health Care Provider Survey: What defines a healthy community?

In the following list, what do you think are the three most important health problems in your county?

	Response Percent	Response Count
motor vehicle crashes	1.9%	2
mental health issues	31.5%	34
child abuse and neglect	4.6%	5
teenage pregnancy	3.7%	4
sexually transmitted infections	1.9%	2
lack of physical activity	39.8%	43
lack of access to healthcare	14.8%	16
aging problems	19.4%	21
homelessness	0.0%	0
rape/sexual assault	0.0%	0
obesity	**67.6%**	**73**
suicide	3.7%	4
domestic violence	3.7%	4
infectious disease	0.0%	0
alcohol and drug issues	46.3%	50
chronic disease	25.9%	28
tobacco use	30.6%	33
homicides	0.0%	0
Other (please specify)	8.3%	9
	answered question	**108**
	skipped question	**0**

Health Care Provider Survey: What are the most important health problems?

Focus Groups, Community Dialogues and Key Informant Interviews

Depending on the related activities underway in each county, different types of constituents or stakeholders were convened across the Tip of the Mitt. Overall, 22 meetings were convened, with a total of more than 200 participants. Some groups were organized by invitation, and others were open to the community.

Otsego County

Northern Michigan MAPP partnered with the Otsego County Quality of Life Project, which included community dialogues in each of the five towns in the county. Anyone who lived Elmira, Gaylord, Johannesburg, Vanderbilt, or Waters was encouraged to join these conversations.

The issues raised most often in these quality of life discussions were as follows:

- socioeconomic issues, including education (5 of 5 groups);
- need for additional services for older adults and others in the community(3 of 5);
- the need to apply urban planning principles, including making communities walkable/bikeable (3 of 5); and
- more community involvement (3 of 5).

Cheboygan, Montmorency and Presque Isle Counties

Three focus groups were conducted in Northeast Michigan, in Cheboygan, Atlanta and Rogers City. All local residents were invited to participate. The issues raised most often by the Northeast Michigan groups were as follows:

- access to affordable care, including mental health services and substance abuse treatment (3 of 3 groups);
- alcohol/tobacco/other drug use (3 of 3);
- obesity and preventing chronic disease (2 of 3); and
- need to increase awareness and coordination of community resources (2 of 3).

Forces of Change Assessment

What is occurring or might occur that affects the health of our community or the local public health system?

The Forces of Change Assessment (Attachment 4) 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");

- The connections between lower education levels; low income; uninsured or underinsured status; health risks, such as obesity and tobacco use; and chronic diseases such as coronary heart disease, cancer, stroke, and diabetes.

- The role a tourism-based economy plays in the health of communities. Jobs in this sector are often low-paying, seasonal, and/or part-time, and usually do not include health benefits. When benefits are offered, they often have such high out-of-pocket deductibles and co-pays that families cannot afford needed health care services.

- The high proportion of older adults in the population, a segment that is growing faster in Northern Michigan than elsewhere in State. Aging "Baby Boomers" will strain the health care delivery system, as many of them suffer from chronic diseases as a result of obesity and tobacco use.

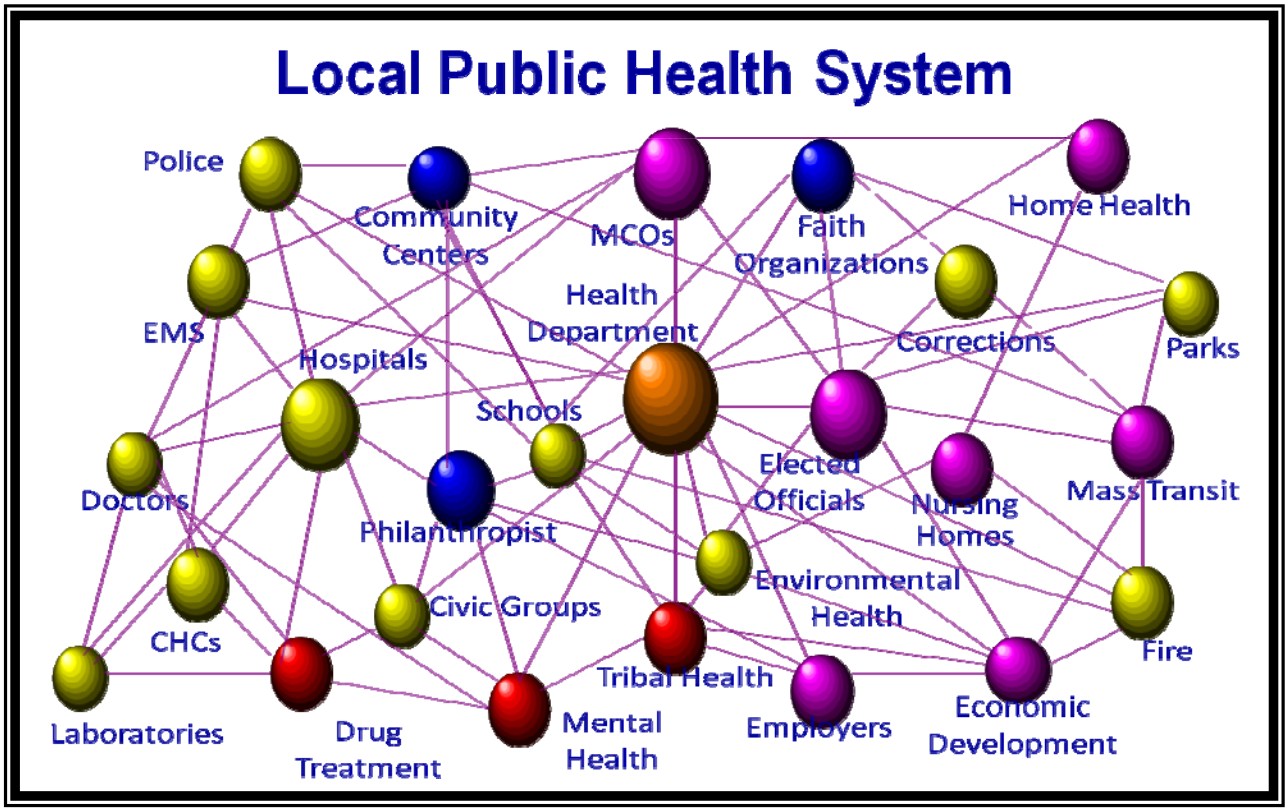
- Lack of access to affordable health care services due to barriers such as short supply of primary care providers and some specialty care providers (psychiatrists for instance), insured/underinsured status, and whether or not primary care providers accept Medicaid or specific insurance policies or offer a sliding fee scale.

- The complex issue of access to mental health services. Even if families have coverage for mental health, it can be difficult to find a provider, e.g., a psychiatrist or therapist, who accepts a specific health insurance policy. Outside of community mental health agencies and federally-qualified health centers, few providers accept Medicaid or offer a sliding fee scale. Community mental health agencies care for those with severe and persistent mental illness, but funding for residents with mild or moderate mental illness is very limited.

- Closures within the local health delivery system, including inpatient services at Cheboygan Memorial Hospital, especially the Obstetrics Department, and inpatient psychiatric services at Northern Michigan Regional Hospital.

- Impact of major conflicts in the community, such as the Board of Education recall in Atlanta;

- Technological advances, such as electronic health records, broadband internet access, and Health Information Exchanges.



Public Health System Assessment

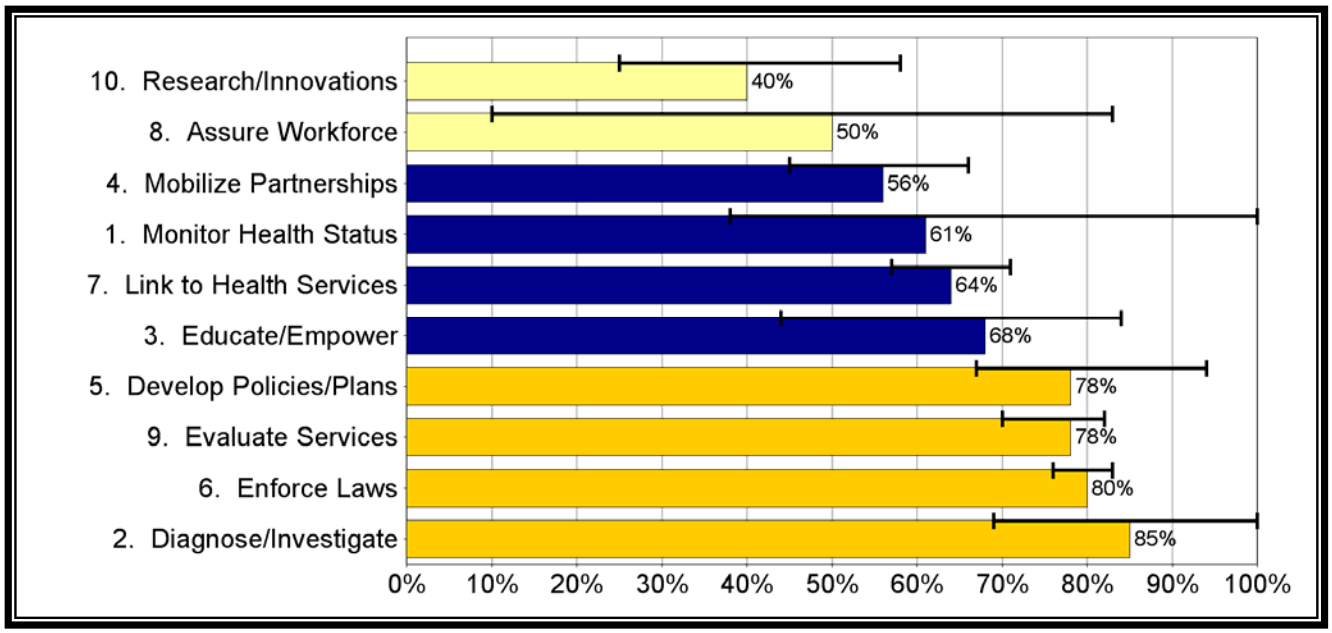
What are the components, activities, competencies, and capacities of our local public health system?

The overall public health system is complex. It includes all public, private, and voluntary organizations that contribute to public health activities within a given area. The Public Health System Assessment focuses on the contributions of all entities – hospitals, physicians, health departments, managed care organizations, environmental agencies, social service and community-based organizations, educational and religious institutions and many others – and recognizes their role in improving community health.

Two Public Health System Assessments were conducted in Northern Michigan, using the National Public Health Standards Program scoring instrument. Representatives from health, social services, government, law enforcement, and funding organizations from Antrim, Charlevoix, Emmet, and Otsego counties completed the assessment in December 2011 (**Attachment 5**). Participants discussed and voted on many indicators related to the 10 Essential Public Health Services.

10 Essential Public Health Services

1. **Monitor** health status to identify and solve community health problems.
2. **Diagnose and investigate** health problems and health hazards in the community.
3. **Inform, educate and empower** people about health issues.
4. **Mobilize** community partnerships and action to identify and solve health problems.
5. **Develop** policies and plans that support individual and community health efforts.
6. **Enforce** laws and regulations that protect health and ensure safety.
7. **Link** people to needed personal health services and assure the provision of health care when otherwise unavailable.
8. **Assure** competent public and personal health care workforce.
9. **Evaluate** effectiveness, accessibility, and quality of personal and population-based health services.
10. **Research** for new insights and innovative solutions to health problems.



2011 Northwest Michigan Public Health System Assessment
Rank ordered performance scores for each Essential Service, by level of activity

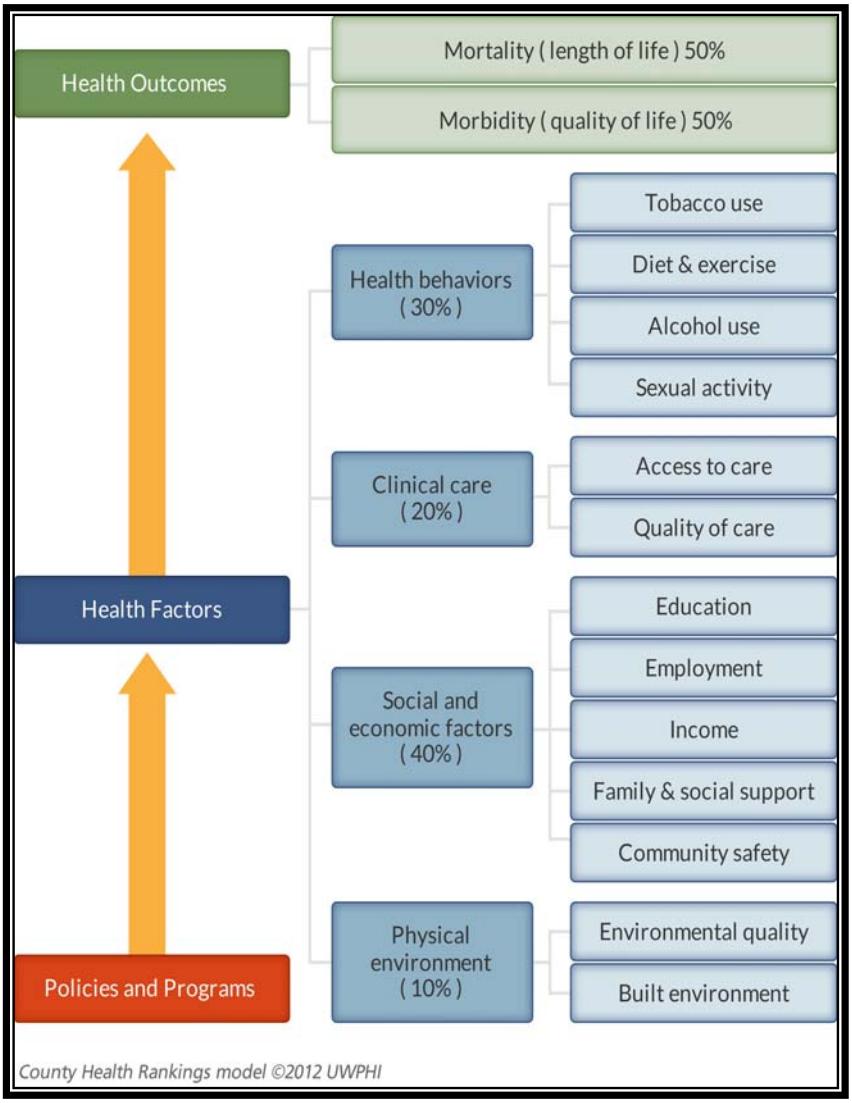
In November 2012, similar organizations from the four counties in District Health Department #4's jurisdiction (Alpena, Cheboygan, Montmorency, and Presque Isle) completed the Public Health System Assessment; a report from the CDC is pending.

Community Health Status Assessment

What does the health status of our community look like?

The Community Health Status Assessment consists of 258 health indicators collected for the10-county service area. Attachment 6 is a spreadsheet of the database for Otsego and Montmorency counties. It provides a wealth of information that can be accessed easily by the entire community for strategic planning, grant writing, and other data-driven activities.

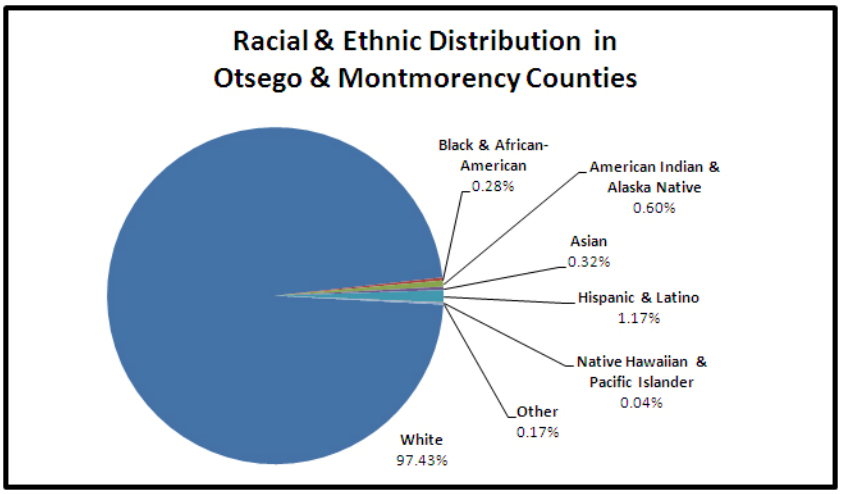
The *County Health Rankings* Model, developed by the University of Wisconsin and the Robert Wood Johnson Foundation, identifies a set of measures that affect health from both inside and outside the doctor's office. The model recognizes that where people live, work, and play can have a profound impact on their health.



Social and Economic Factors

Population characteristics

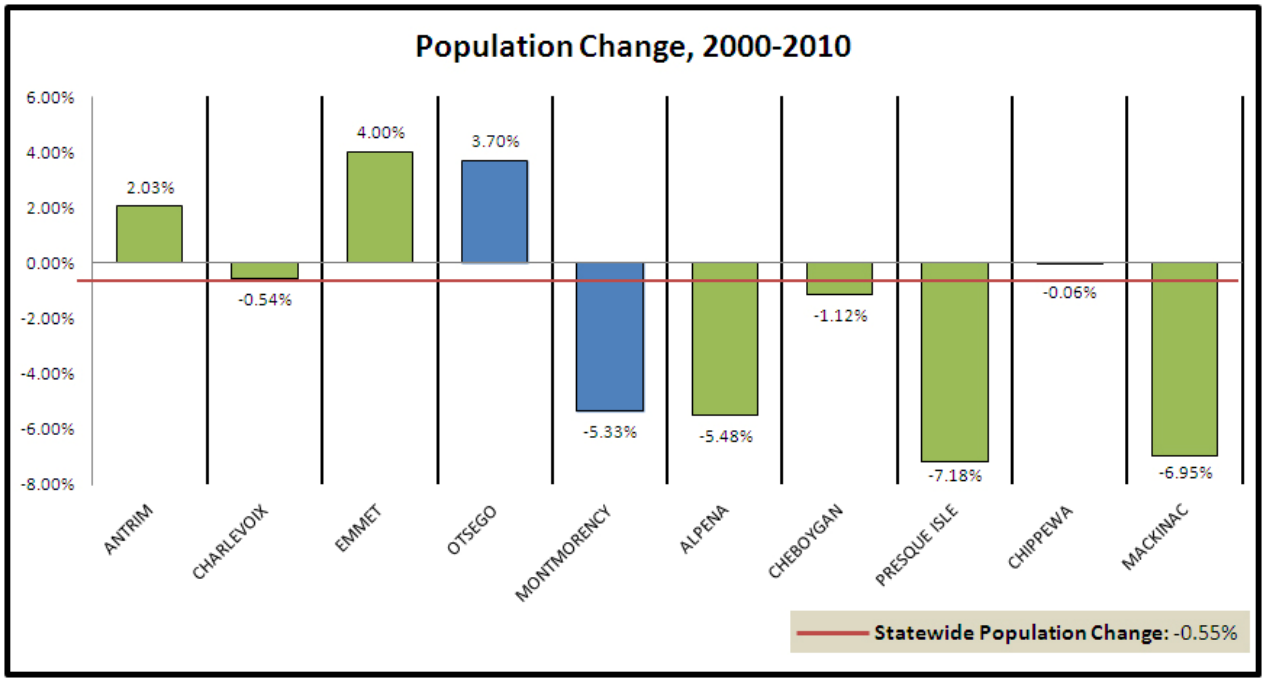
Most (91%) of the 234,911 people who live in Northern Michigan service area are white; Native Americans, at 5%, represent the largest minority group. In Otsego and Montmorency counties 97% of residents are white and Hispanic and Latinos, at 1%, are the largest minority group and Native Americans, at 0.6%, are the second largest minority group.



Data collected from 2006-2010 American Community Survey (ACS Demographic and Housing Estimates)

At 20%, older adults represent a larger proportion of the population in the 10-county region than they do statewide (14%). Seventeen per cent of Otsego County's population is age 65 and older. In Montmorency County, seniors represent an even larger share – 27%.

From 2000 to 2010, Northeast and Upper Peninsula counties lost population. Montmorency County lost 5% of its population. However, Northwest counties gained population, including Otsego, which gained 4% of its population.

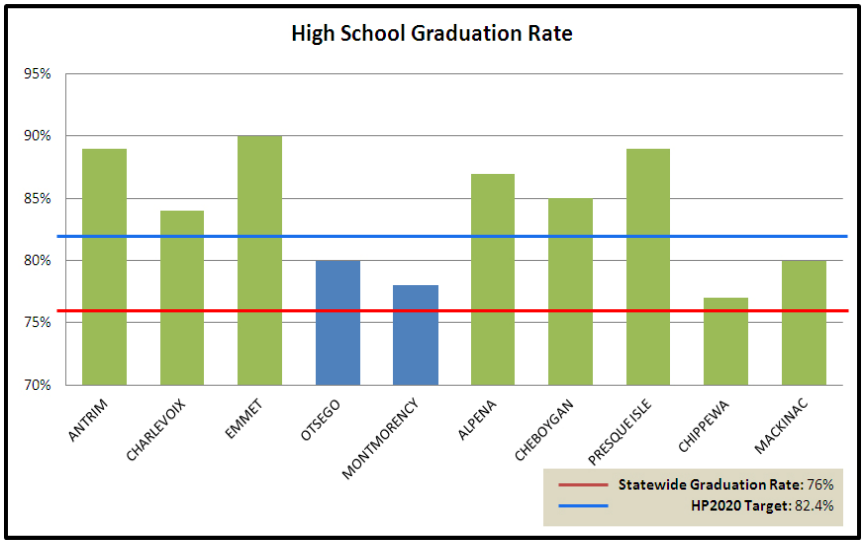


Data obtained from American Community Survey at www.census.gov

Education and Income

The relationship between more 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.

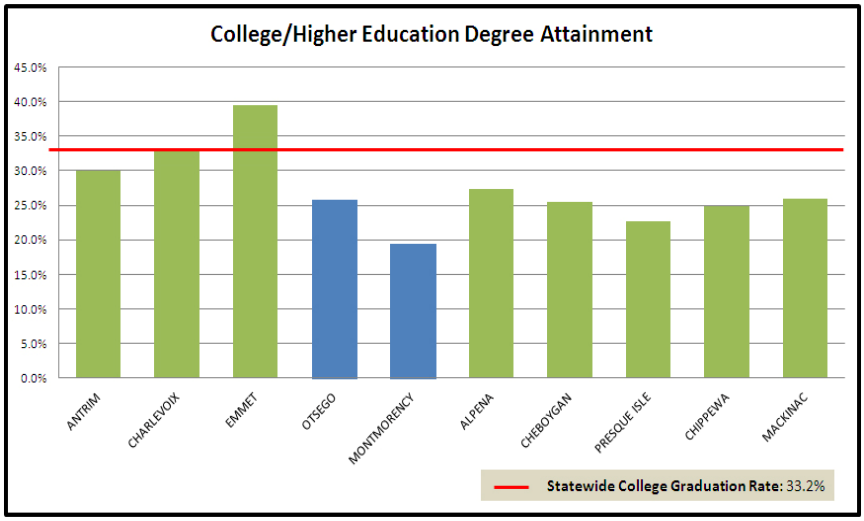
Education results in higher incomes, on average. Access to health care is a particularly important resource that is often linked to jobs requiring a certain level of educational attainment. However, when income and health care insurance are controlled for, the magnitude of education's effect on health outcomes remains substantive and statistically significant.



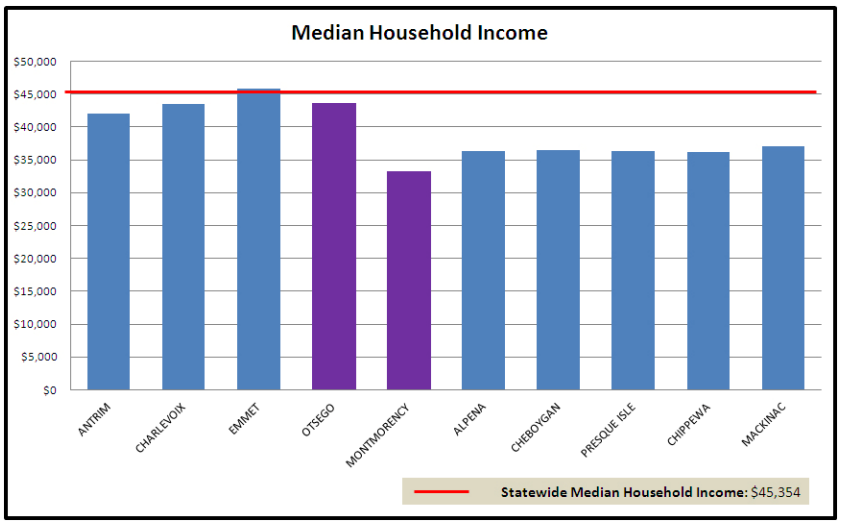
2009 data obtained from 2011 County Health Rankings at www.countyhealthrankings.org

High school graduation rates across the region exceed the Healthy People 2020 goal and the Michigan rate (76%). However, rates vary widely, up to 90% in Emmet County. Graduation rates for Otsego and Montmorency are 80% and 78% respectively.

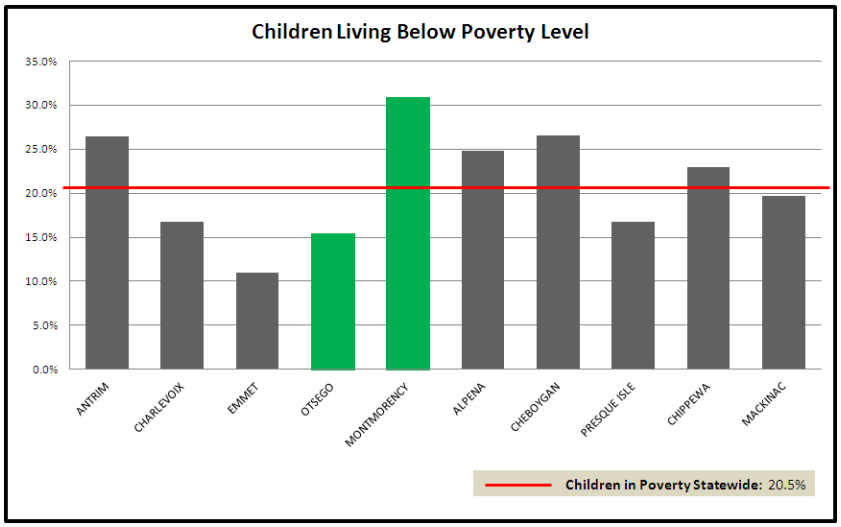
Conversely, fewer residents across the region have earned at least an Associate Degree. Montmorency, at 19% has the lowest rate in Northern Michigan. Twenty-six per cent of Otsego County residents have an Associate degree or higher.



2006-2010 data obtained from American Community Survey at www.census.gov



2009 data obtained from 2011 County Health Rankings at www.countyhealthrankings.org



2006-2010 data obtained from American Community Survey at www.census.gov

Incomes across the region generally follow the same pattern as education, with all counties' median household income below the statewide median income of $45,354, with the exception of Emmet County.

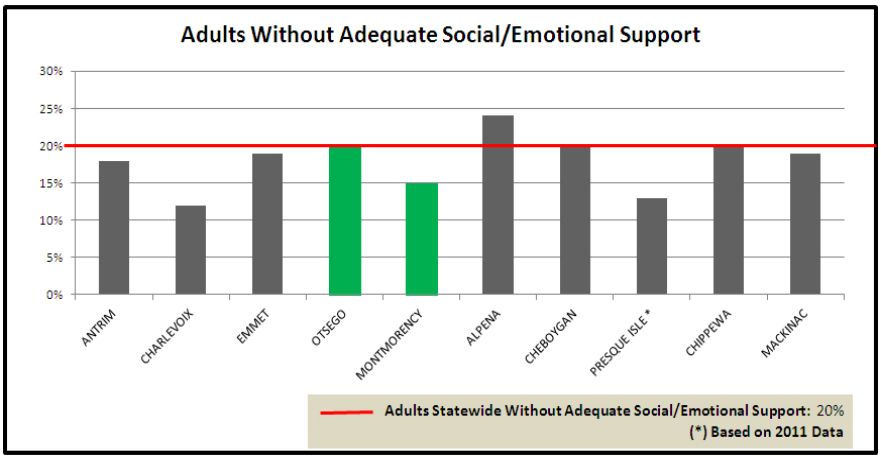
Poverty can result in negative health consequences, such as increased risk of mortality, increased prevalence of medical conditions and disease incidence, depression, intimate partner violence, and poor health behaviors.

Children's risk of poor health and premature mortality may also be increased due to the poor educational achievement associated with poverty. The children in poverty measure is highly correlated with overall poverty rates.

In general, a higher proportion of children live in poverty in the Northeast and Upper Peninsula counties. In six of the 10 counties in the region, the rate exceeds or approaches the State rate of 20.5%, ranging from 20% in Mackinac County to 30% of children living below the Federal Poverty Level in Montmorency County.

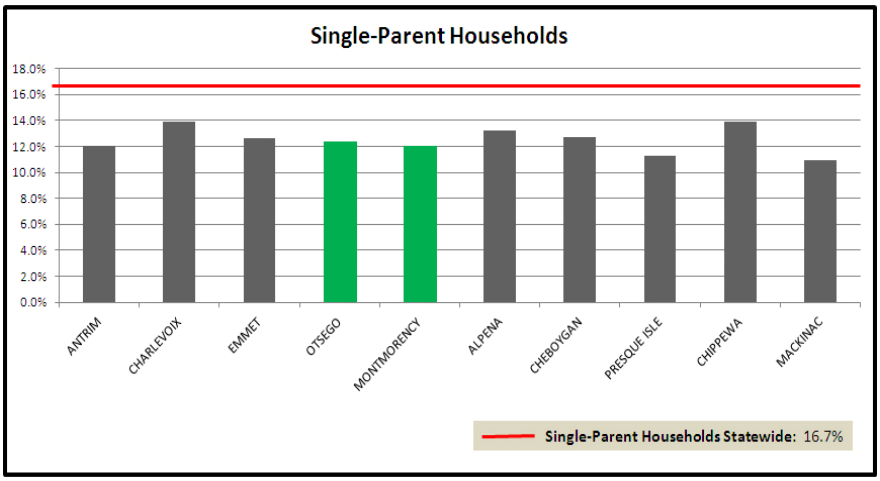
Family and Social Support

The *County Health Rankings* measure social isolation because the link between socially-isolated individuals and poor health outcomes has been well-established in literature. Socially-isolated individuals typically have limited access to the types of support provided by social relationships. One study found that the magnitude of risk associated with social isolation is similar to the risk of cigarette smoking for adverse health outcomes.



2009 data (except as noted) obtained from 2011 County Health Rankings at www.countyhealthrankings.org

Understanding the percentage of socially-isolated individuals in a community may provide a more complete perspective on a community's collective health profile. This is because socially-isolated individuals are more likely to be concentrated in communities with poorer community networks.

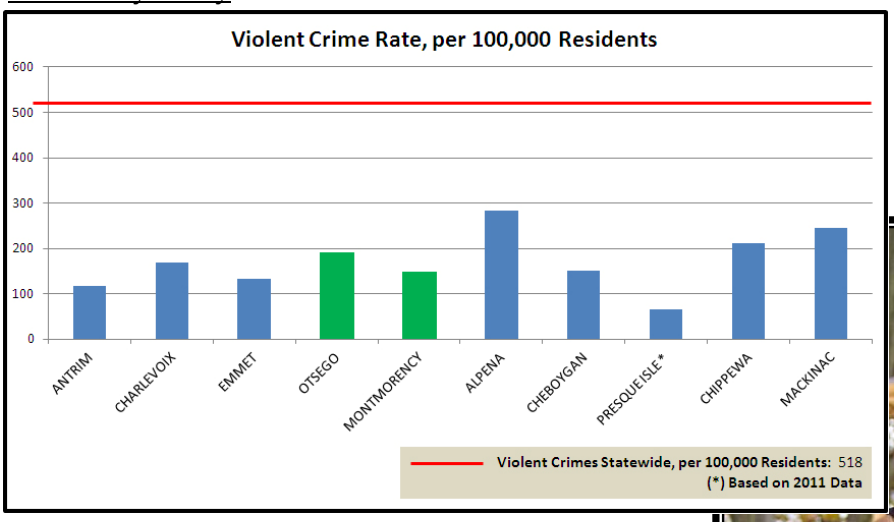


2006-2010 data obtained from American Community Survey at www.census.gov

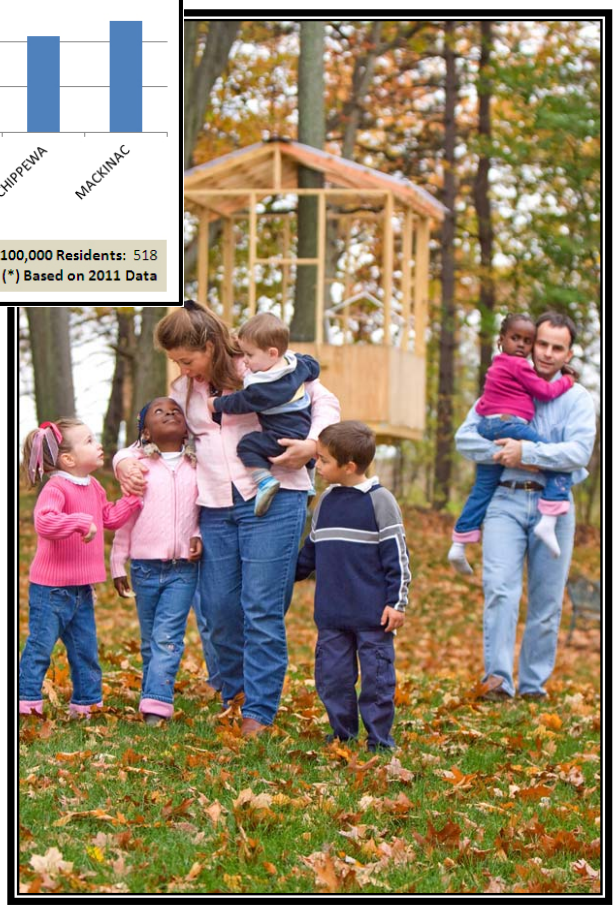
Poor family support, minimal contact with others, and limited involvement in community life are associated with increased morbidity and early mortality. Furthermore, social support networks have been identified as powerful predictors of health behaviors, suggesting that individuals without a strong social network are less likely to participate in healthy lifestyle choices. In Northern Michigan, rates for adults without adequate social and emotional support are generally better than the State except in Alpena, where 24% of adults reportedly do not have adequate support.

Adults and children in single-parent households are at risk for adverse health outcomes such as mental health problems (including substance abuse, depression, and suicide) and unhealthy behaviors such as smoking and excessive alcohol use. There are fewer single households in the region when compared to the State.

Community Safety



2009 data (except as noted) obtained from 2011 County Health Rankings at www.countyhealthrankings.org



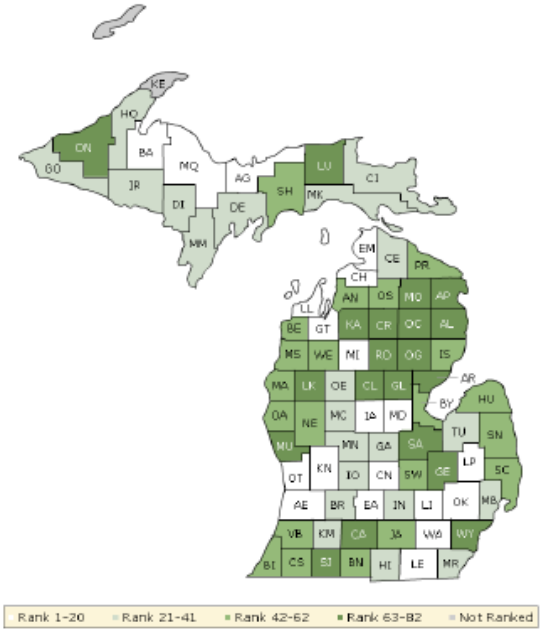
High levels of violent crime compromise physical safety and psychological wellbeing. Crime rates can also deter residents from pursuing healthy behaviors such as exercising out-of-doors.

Additionally, some evidence indicates that increased stress levels may contribute to obesity prevalence, even after controlling for diet and physical activity levels.

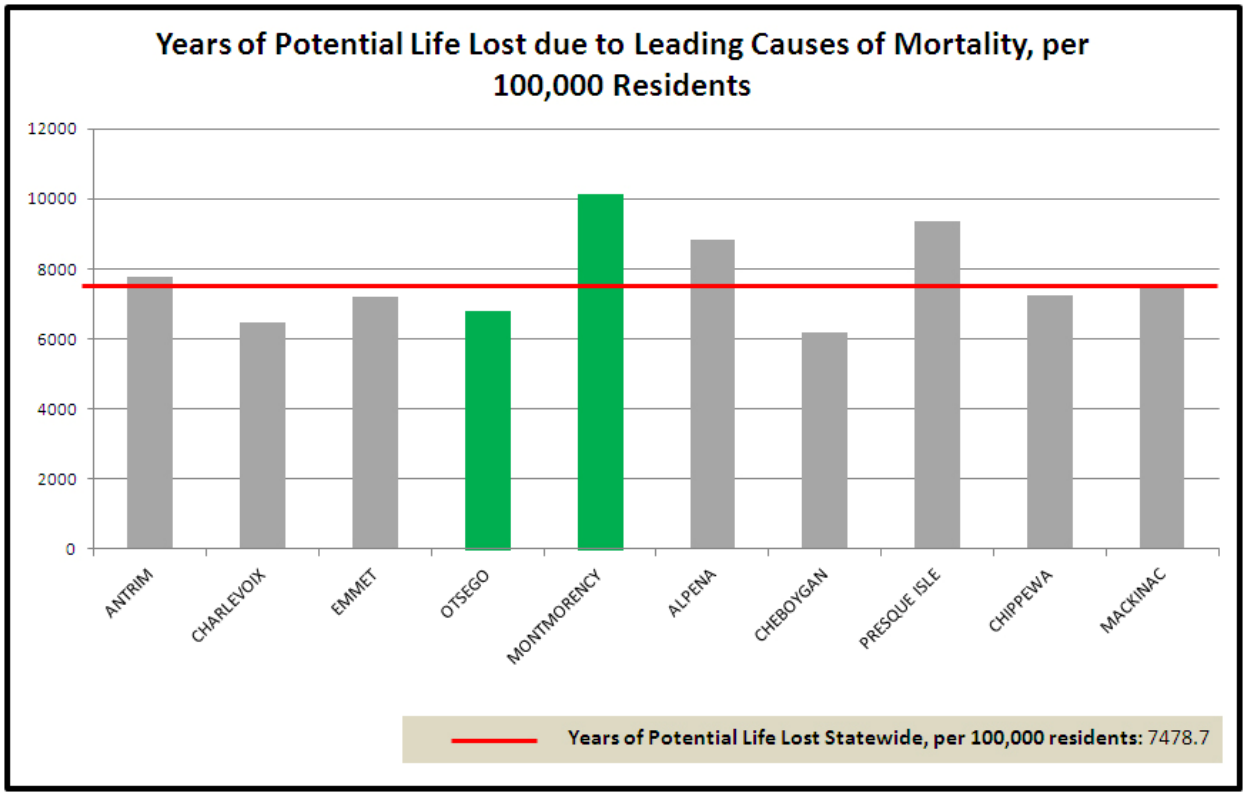
Though the violent crime rate varies widely in the 10-county region, from 65 per 100,000 in Presque Isle County to 283 per 100,000 in Alpena County, all counties experience much lower violent crime rates than Michigan as a whole.

Health Outcomes

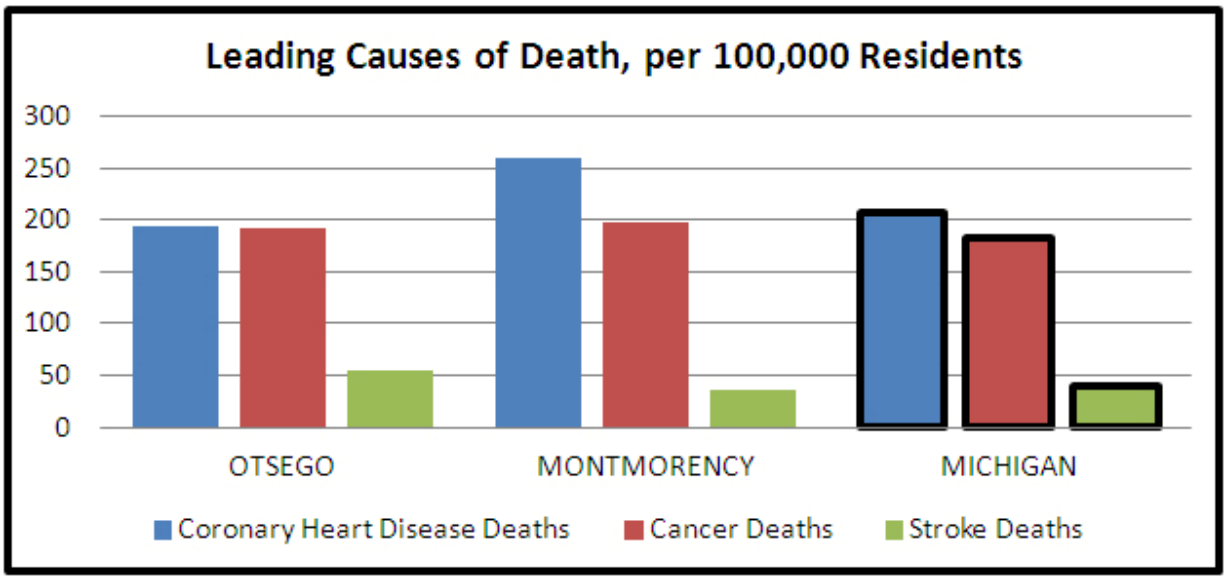
HEALTH OUTCOMES



County	Rank	County	Rank	County	Rank	County	Rank
Alcona	79	Dickinson	29	Lake	78	Oceana	44
Alger	8	Eaton	9	Lapeer	11	Ogemaw	67
Allegan	18	Emmet	7	Leelanau	1	Ontonagon	82
Alpena	66	Genesee	77	Lenawee	13	Osceola	36
Antrim	45	Gladwin	68	Livingston	4	Oscoda	73
Arenac	69	Gogebic	35	Luce	71	Otsego	51
Baraga	6	Grand Traverse	10	Mackinac	30	Ottawa	2
Barry	21	Gratiot	33	Macomb	41	Presque Isle	58
Bay	54	Hillsdale	37	Manistee	56	Roscommon	75
Benzie	43	Houghton	24	Marquette	12	Saginaw	76
Berrien	62	Huron	46	Mason	42	Sanilac	50
Branch	48	Ingham	32	Mecosta	31	Schoolcraft	60
Calhoun	72	Ionia	26	Menominee	23	Shiawassee	52
Cass	55	Iosco	57	Midland	17	St. Clair	49
Charlevoix	14	Iron	39	Missaukee	19	St. Joseph	70
Cheboygan	22	Isabella	20	Monroe	38	Tuscola	27
Chippewa	28	Jackson	53	Montcalm	34	Van Buren	47
Clare	80	Kalamazoo	40	Montmorency	64	Washtenaw	5
Clinton	3	Kalkaska	74	Muskegon	63	Wayne	81
Crawford	65	Kent	15	Newaygo	59	Wexford	61
Delta	25	Keweenaw	NR	Oakland	16		



2010 data obtained from the Michigan Department of Community Health



2007-2009 data obtained from the Michigan Department of Community Health

Premature Deaths

The *County Health Rankings* quantifies and compares the health status of county populations by measuring the burden of premature deaths, an important measure of a population's health. Premature deaths are deaths that occur before a person reaches an expected age, e.g., age 75. Many of these deaths are considered to be preventable. By examining premature mortality rates across communities and investigating the underlying causes of high rates of premature death, resources can be targeted toward strategies that will extend years of life.

As a nation, more than 75% of our health care spending is on people with chronic conditions such as heart disease, cancer, stroke, and diabetes. These persistent conditions – the leading causes of death and disability – leave in their wake deaths that could have been prevented, lifelong disability, compromised quality of life, and burgeoning health care costs.

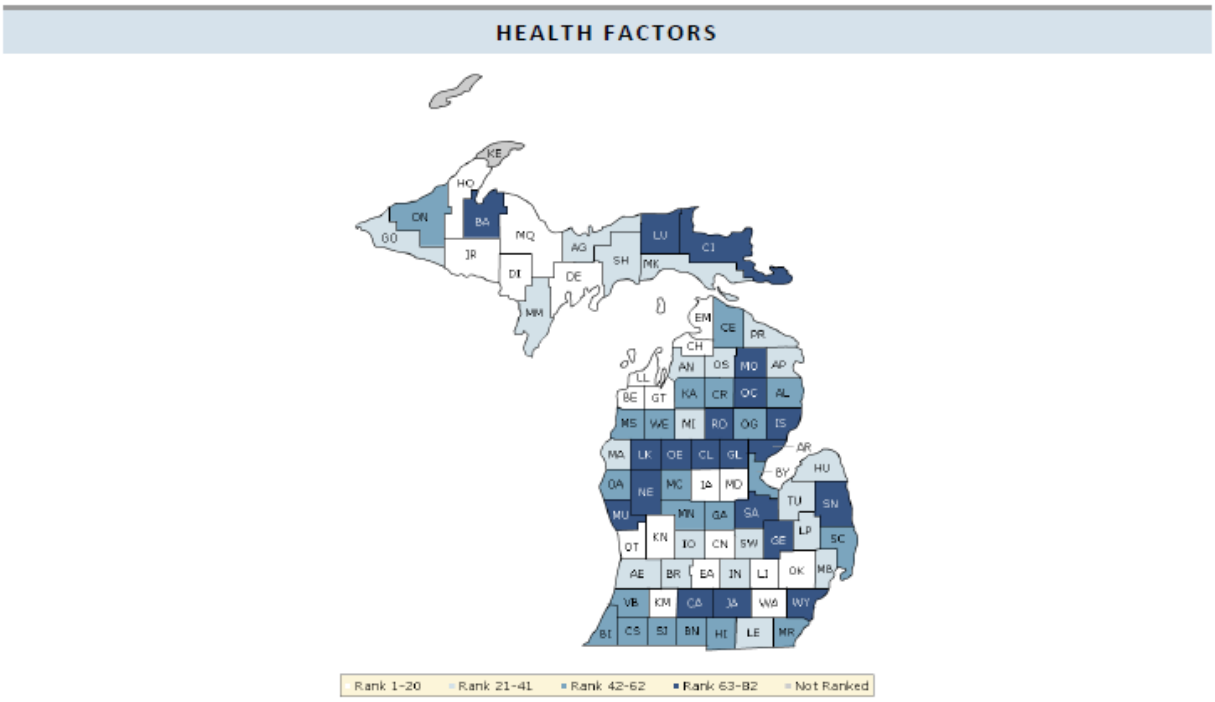
Heart disease is the leading cause of death throughout the state and the region, followed by cancer and stroke. The prevalence of all three diseases increases with age, and is inversely proportional to household income level.

- In Michigan, 206 deaths per 100,000 population were the result of coronary heart disease; counties in the 10-county region approach or exceed this, ranging from 159 per 100,000 population in Emmet County to 260 per 100,000 in Presque Isle.

- In general, Northwest counties experience lower rates than Northeast and Upper Peninsula counties. Rates for cancer deaths in the 10 counties generally hover at the Michigan rate of 182 per 100,000, ranging from 155 per 100,000 population in Alpena County to 215 in Cheboygan County.

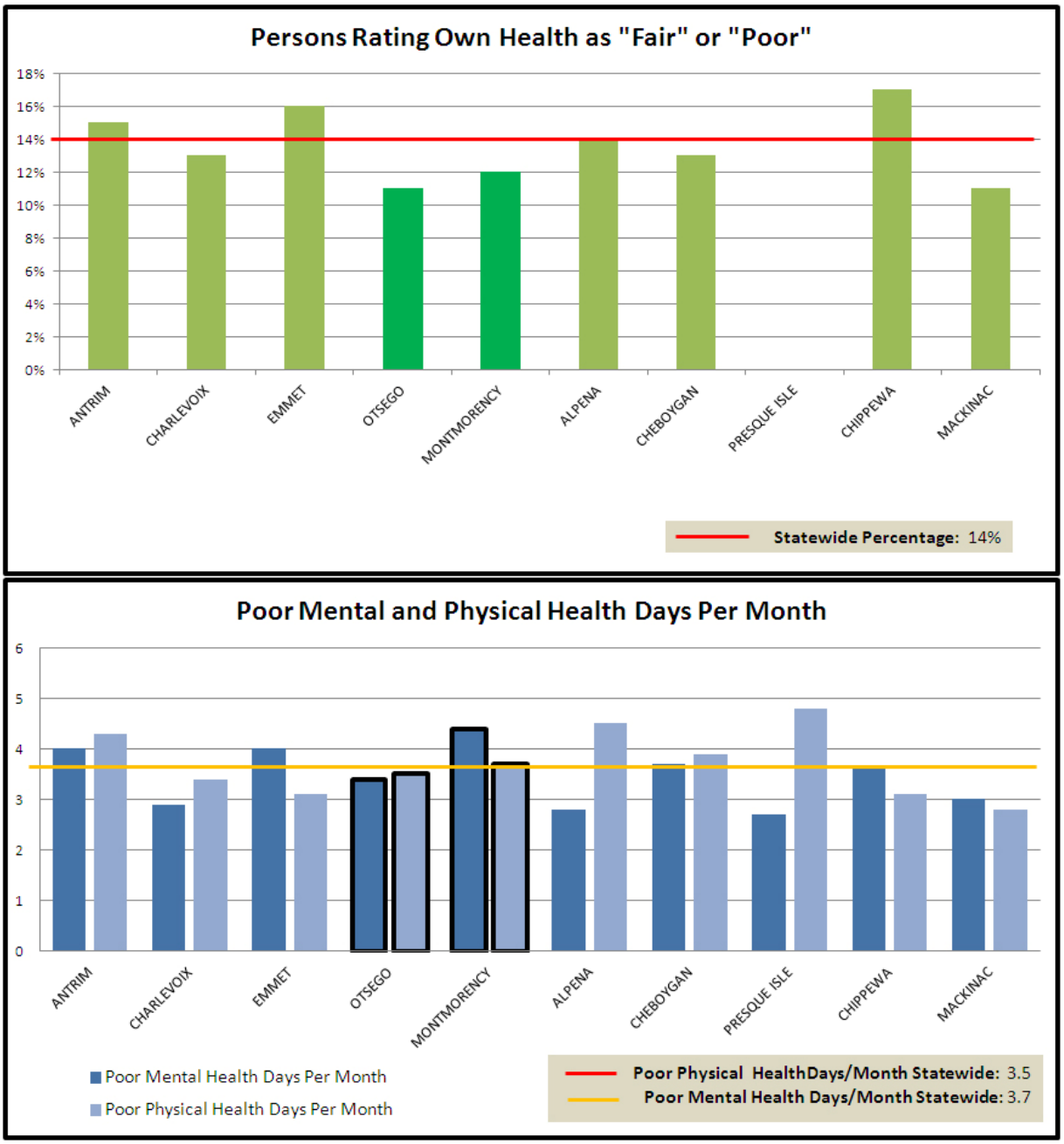
- Rates of death due to stroke also hover at the State rate of 40 per 100,000, ranging from 28.5 per 100,000 in Emmet County to 54.5 per 100,000 in Otsego County.

Health Factors



County	Rank	County	Rank	County	Rank	County	Rank
Alcona	47	Dickinson	10	Lake	81	Oceana	61
Alger	30	Eaton	12	Lapeer	34	Ogemaw	59
Allegan	26	Emmet	15	Leelanau	3	Ontonagon	50
Alpena	29	Genesee	75	Lenawee	27	Osceola	65
Antrim	31	Gladwin	77	Livingston	2	Oscoda	70
Arenac	67	Gogebic	22	Luce	76	Otsego	32
Baraga	79	Grand Traverse	9	Mackinac	41	Ottawa	5
Barry	23	Gratiot	57	Macomb	28	Presque Isle	33
Bay	53	Hillsdale	55	Manistee	45	Roscommon	78
Benzie	13	Houghton	11	Marquette	4	Saginaw	74
Berrien	48	Huron	21	Mason	37	Sanilac	69
Branch	46	Ingham	24	Mecosta	42	Schoolcraft	38
Calhoun	71	Ionia	39	Menominee	36	Shiawassee	25
Cass	51	Iosco	63	Midland	7	St. Clair	60
Charlevoix	14	Iron	18	Missaukee	35	St. Joseph	58
Cheboygan	49	Isabella	20	Monroe	43	Tuscola	40
Chippewa	66	Jackson	68	Montcalm	62	Van Buren	56
Clare	80	Kalamazoo	17	Montmorency	64	Washtenaw	1
Clinton	8	Kalkaska	54	Muskegon	73	Wayne	82
Crawford	52	Kent	19	Newaygo	72	Wexford	44
Delta	16	Keweenaw	NR	Oakland	6		

Health-Related Quality of life



2009 data obtained from 2011 County Health Rankings at www.countyhealthrankings.org

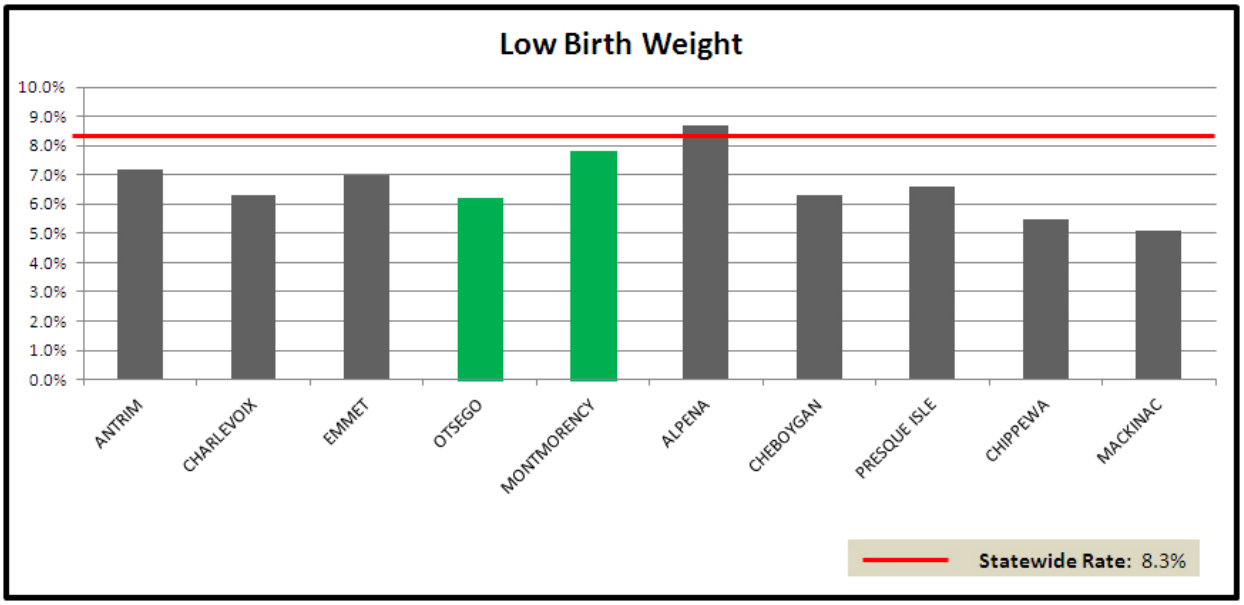
In addition to measuring how long people live, it is also important to include measures of how healthy people are while alive. Their reports of days when their physical health was not good are a reliable estimate of recent health.

In the 10-county region, the proportion of individuals rating their own health as “fair” or “poor” ranges up to 17% in Chippewa County. Otsego County, at 11%, and Montmorency County at 12%, rate their health

"fair" or "poor" less than the other counties in Northern Michigan. In other words, they rate their health as "excellent" or "good" more often than the other counties.

Overall, Northern Michigan residents reported three to five poor physical health days in the past month, ranging from 2.8 days in Alpena to 4.8 in Presque Isle County. Otsego County (with 3.4 days) and Montmorency (3.7) track with the State rate of 3.5 days per month.

Mental and emotional wellbeing is essential to overall health. Positive mental health allows people to realize their full potential, cope with the stresses of life, work productively, and make meaningful contributions to their communities. Anxiety, mood and impulse control disorders are associated with a higher probability of risk behaviors intimate partner and family violence, many other chronic and acute conditions, and premature death. Regional residents report experiencing three to four poor mental health days per month. Otsego's rate, 3.5, tracks with State; however, Montmorency County, with 4.4, has the highest number of poor mental health days per month in the region.



2009 data obtained from 2011 County Health Rankings at www.countyhealthrankings.org

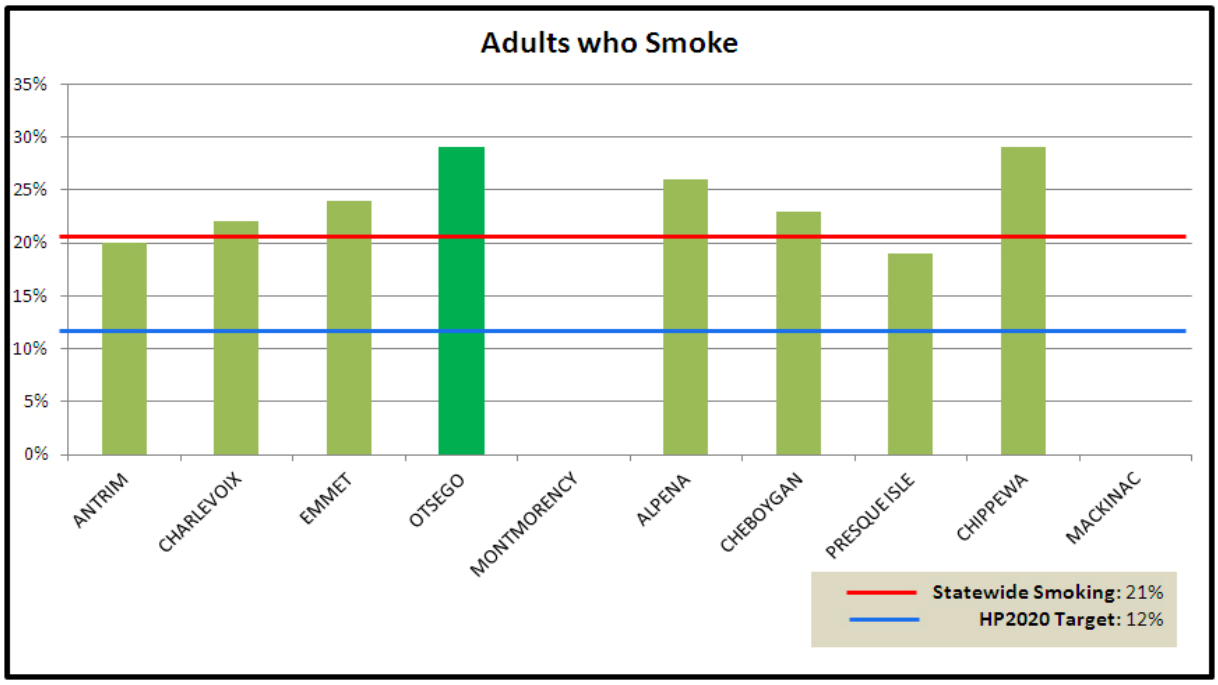
Low Birth Weight

Improving the wellbeing of mothers, infants, and children is an important health goal for the United States. Low birth weight, which is when an infant weighs less than 2,500 grams (approximately 5 lbs, 8 oz), is a critical measure because it represents both maternal and infant health factors. Smoking, drug and alcohol abuse, lack of weight gain during pregnancy, and pregnancy again within six months or less are factors that can contribute to low birth weight. Infants born to teenage mothers have a higher risk of being low birth weight babies and a higher mortality rate. Compared to infants of normal weight, low birth weight infants may be more at risk for many health problems. Some babies may become sick in the first six days of life (perinatal morbidity) or develop infections. Other babies may even suffer from longer-term problems, such as delayed motor and social development or learning disabilities.

When comparing all races, State rate (8.3%) for low birth weight surpasses those in all but one of the counties in the region. Otsego County, at 6.2% has the lowest low birthweight rate in the eight counties across the Tip of the Mitt. However, four additional counties' rates exceed State rate when comparing low birthweight infants born to white women (7.1%), including Montmorency County, at 7.8%.

Health Behaviors

Four modifiable health risk behaviors – lack of physical activity, poor nutrition, tobacco use, and excessive alcohol consumption – are responsible for much of the illness, suffering, and early death related to chronic diseases.



2009 data obtained from 2011 County Health Rankings at www.countyhealthrankings.org

Tobacco

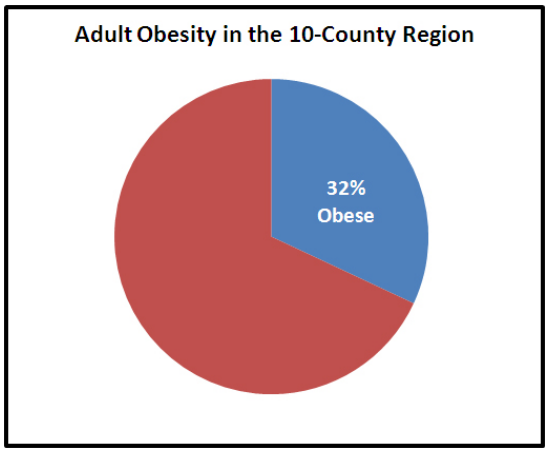
Tobacco is the leading cause of disease, disability, and death in the U.S. Living tobacco-free reduces a person's risk of developing heart disease, various cancers, chronic obstructive pulmonary disease, periodontal disease, asthma and other diseases, as well as premature death. Tobacco-free living means avoiding all types of tobacco products, including cigarettes, cigars, smokeless tobacco, pipes, and hookahs – and also living free from secondhand smoke exposure. Smoking rates in the region exceed the state rate of 21% in six of the eight counties reporting, ranging from 19% in Presque Isle County to 29% in Otsego and Chippewa counties. Data are not available for Montmorency County.

Obesity

Obesity is often the end result of an overall energy imbalance due to poor diet and limited physical activity. It is common and serious, increasing the risk for health conditions such as coronary heart disease, type 2 diabetes, cancer, hypertension, dyslipidemia, stroke, liver and gallbladder disease, sleep apnea and respiratory problems, and osteoarthritis. The medical costs of obesity in the U.S. are staggering.

The adult obesity measure represents the percent of the adult population, age 20 and older, that has a body mass index (BMI) greater than or equal to 30 kg/m^2.

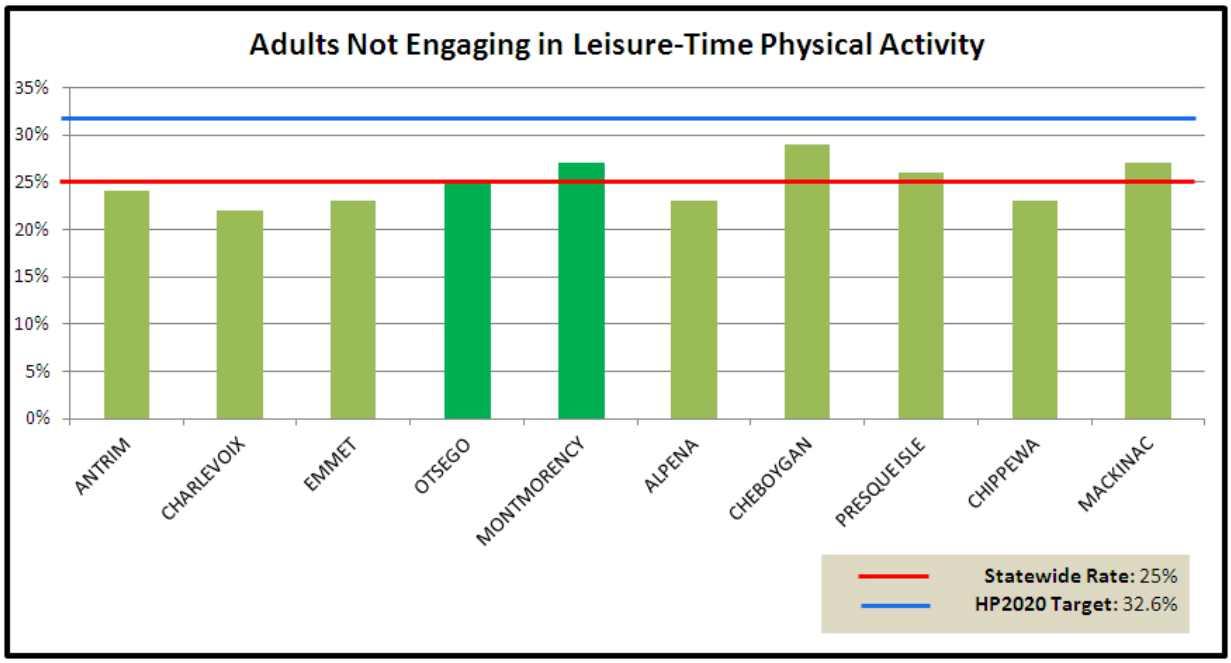
Adult obesity in Otsego (31%) and Montmorency (32%) Counties tracks with state rate of 32%.



2009 data obtained from 2011 County Health Rankings at www.countyhealthrankings.org

Physical Activity

Physical activity is one of the most important factors in improving one's health. It strengthens bones and muscles, reduces stress and depression, and makes it easier to maintain a healthy body weight or to reduce weight if overweight or obese. Even people who do not lose weight get substantial benefits from regular physical activity, including lower incidence of high blood pressure, diabetes, and cancer. Healthy physical activity includes aerobic activity, muscle strengthening activities, and activities to increase balance and flexibility. As described by the *Physical Activity Guidelines for Americans*, adults should engage in at least 150 minutes of moderate-intensity activity each week, and children and teenagers should engage in at least one hour of activity each day.



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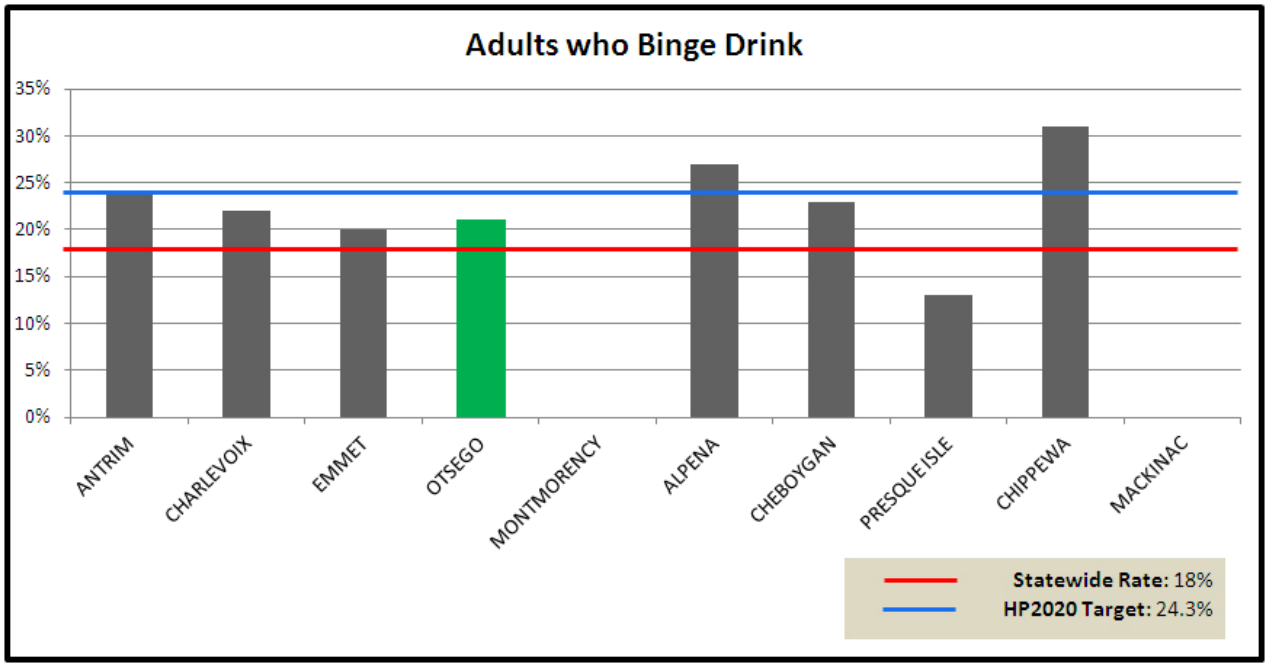


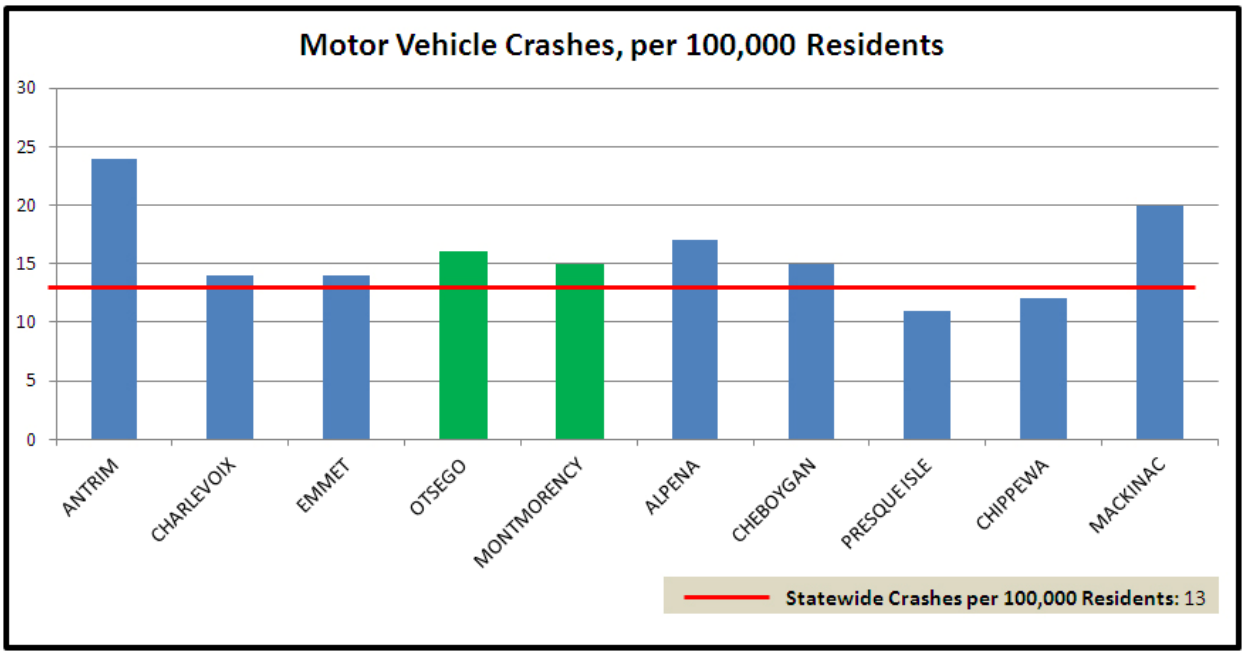
2009 data obtained from 2011 County Health Rankings at www.countyhealthrankings.org

Drug and Alcohol Abuse

Preventing drug abuse and excessive alcohol use improves quality of life, academic performance, workplace productivity and military preparedness, reduces crime and criminal justice expenses, reduces motor vehicle crashes and fatalities, and lowers health care costs for acute and chronic conditions. Alcohol and other drug use can impede judgment and lead to harmful risk-taking behavior.

Excessive alcohol use includes binge drinking, underage drinking, drinking while pregnant, and alcohol-impaired driving. It is a risk factor for a number of adverse health outcomes, such as alcohol poisoning, hypertension, acute myocardial infarction, sexually transmitted infections, unintended pregnancy, fetal alcohol syndrome, sudden infant death syndrome, interpersonal violence.

Statewide, 18% of adults meet the definition of “excessive drinking” by drinking five or more alcoholic beverages in one sitting. Excessive drinking rates are available in eight of the 10 counties in the region; of these, only Presque Isle County, at 13%, is below the State rate. Twenty-one per cent of Otsego County report binge drinking. Data are unavailable for Montmorency County.

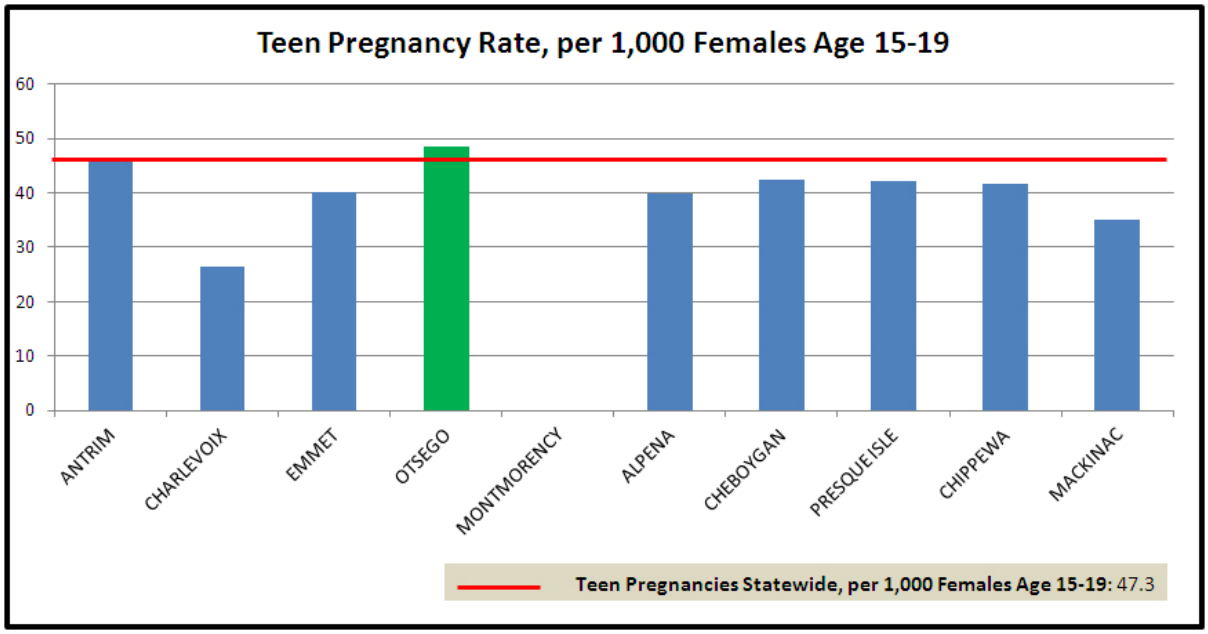


2009 data obtained from 2011 County Health Rankings at www.countyhealthrankings.org

Motor Vehicle Crashes

Motor vehicle crash deaths are measured as the crude mortality rate per 100,000 population due to on- or off-road accidents involving a motor vehicle. Motor vehicle deaths includes traffic and non-traffic accidents involving motorcycles and 3-wheel motor vehicles; cars; vans; trucks; buses; street cars; ATVs; industrial, agricultural, and construction vehicles; and bikes and pedestrians when colliding with any of the vehicles mentioned. Deaths due to boating and airline crashes are not included in this measure.

About one-third of the motor vehicle crashes in Michigan involve alcohol. 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. Both Otsego (16) and Montmorency (15 per 100,000) counties exceed the statewide rate of 13 motor vehicle crashes per 100,000 population.

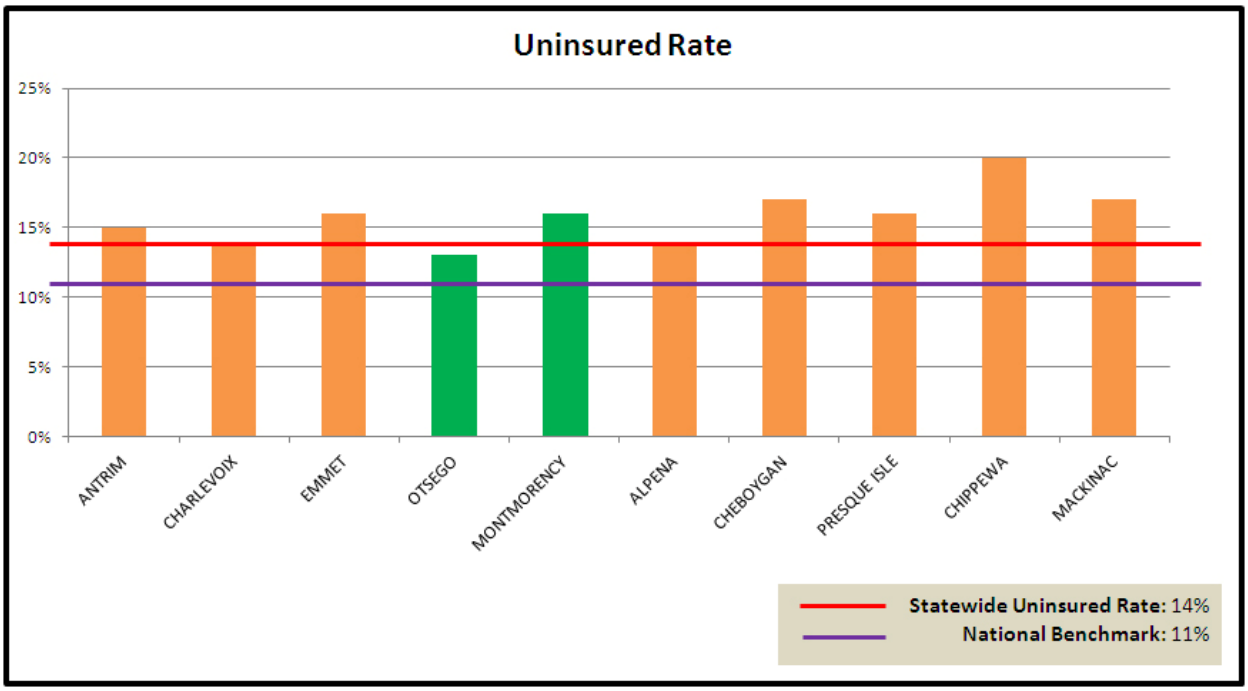


2007-2009 data obtained from the Michigan Department of Community Health

Teen Pregnancy Rates

Teen pregnancy is associated with poor prenatal care and pre-term delivery. Pregnant teens are more likely than older women to receive late or no prenatal care, have gestational hypertension and anemia, and achieve poor maternal weight gain. They are also more likely to have a pre-term delivery and low birth weight, increasing the risk of child developmental delay, illness, and mortality. Nearly 80% of teen-age mothers will access government-supported programs. Their children are more likely to be incarcerated, drop out of high school, have more chronic health problems, and become teen parents themselves.

Teen pregnancy rates range from 26.4 per 1,000 females age 15-19 in Charlevoix County to 48.6 in Otsego County, which exceeds the State's teen pregnancy rate of 47.3. All of the Northeast and Upper Peninsula counties' teen pregnancy rates are below the state rate. Data are not available for Montmorency County.



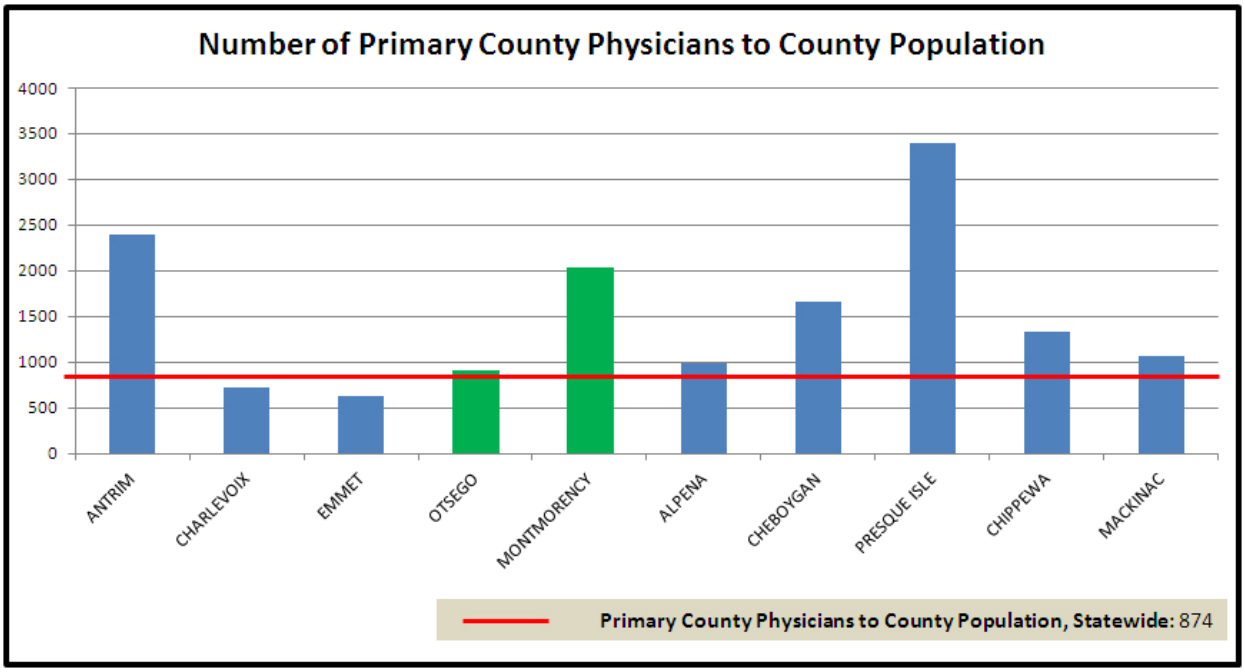
2009 data obtained from 2011 County Health Rankings at www.countyhealthrankings.org

Clinical Care

Access to Health Care

Access to health care measures accessibility to needed primary care, health care specialists, and emergency treatment. While having health insurance is a crucial step toward accessing the different aspects of the health care system, health insurance by itself does not ensure access. It is also necessary to have comprehensive coverage, providers that accept the individual's health insurance, relatively close proximity of providers to patients, and primary care providers in the community. There are additional barriers to access in some populations due to lack of transportation to providers' offices, lack of knowledge about preventive care, long waits to get an appointment, low health literacy, and inability to pay the high-deductible of many insurance plans and/or co-pays for receiving treatment.

Employment-based coverage is the largest source of health coverage in the U.S., and many unskilled, low paying, and part-time jobs do not offer health coverage benefits. In general, employment status is the most important predictor of health care coverage in the U.S. Evidence shows that uninsured individuals experience more adverse outcomes (physically, mentally, and financially) compared to insured individuals. The uninsured are less likely to receive preventive and diagnostic health care services, are more often diagnosed at a later disease stage, and on average receive less treatment for their condition compared to insured individuals. The Institute of Medicine reports that the uninsured population has a 25% higher mortality rate than the insured population.



2009 data obtained from 2011 County Health Rankings at www.countyhealthrankings.org

Residents of Northern Michigan experience high rates of uninsured. In fact, statewide, only the metropolitan Detroit region has a higher rate. In the 10-county region, all but two counties – Charlevoix and Otsego – do not approach or exceed the state rate. Nineteen per cent of Montmorency County residents are uninsured.

Having access to care requires having not only financial coverage, but also access to providers. While high rates of specialist physicians has been shown to be associated with higher, and perhaps unnecessary, utilization, having sufficient availability of primary care physicians is essential so that people can get preventive and primary care and, when needed, referrals to appropriate specialty care.

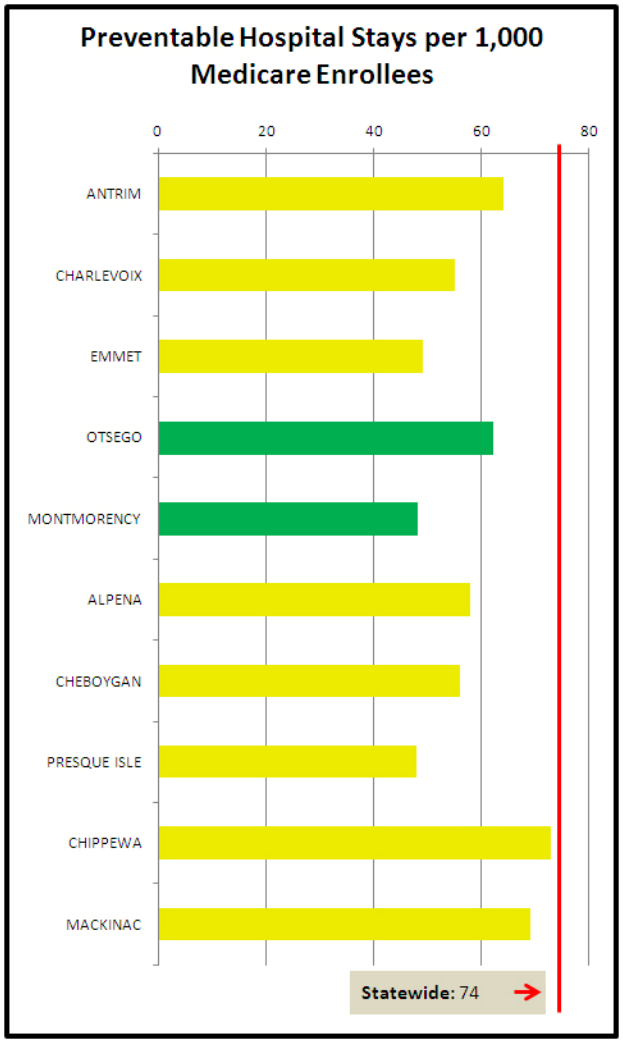
Primary care physicians include practicing physicians specializing in general practice medicine, family medicine, internal medicine, pediatrics, and obstetrics/gynecology. The measure represents the county population per one provider. In Northern Michigan, patient to primary care physician ratios exceed state rates in all but Charlevoix and Emmet counties and rise up to 3,394:1 in Presque Isle County. Ratios for Otsego and Montmorency counties are 1:910 and 1:2,037 respectively.

<u>Quality of Health Care</u>

Quality health care can be explained as *the right care, for the right person, at the right time*. The Institute of Medicine (IOM) further defines the quality of health care as "the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge." The IOM lists six characteristics of quality healthcare: safe, timely, effective, efficient, equitable, and patient-centered.

There are hundreds of potential quality measures, with no consensus on the best set of measures to use when assessing quality of health care. *County Health Rankings* include three measures of quality of healthcare: preventable hospitalizations, screening for breast cancer, and screening for diabetes.

These quality indicators were selected because they provide the greatest benefit to patient outcomes, help bridge the gaps seen among different populations, and can be implemented in a safe, efficient, and cost-effective way.



2009 data obtained from 2011 County Health Rankings at www.countyhealthrankings.org

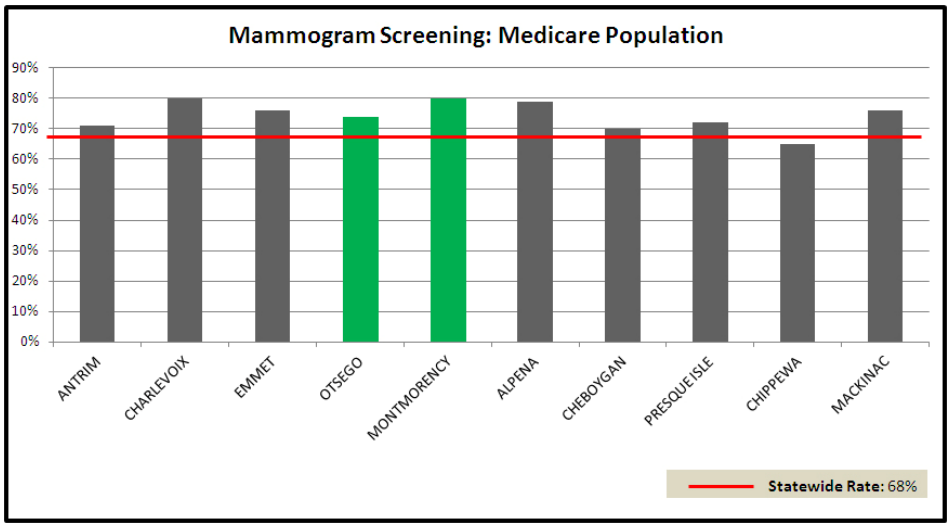
Unnecessary Hospitalizations

Hospitalization for outpatient conditions suggests that there may be difficulty in obtaining quality care in an outpatient setting. In Northern Michigan, the rate for preventable hospital stays in the 10 counties is lower the State rate of 74 per 1,000 Medicare population, suggesting that residents in the region are being managed appropriately in an outpatient setting.

Breast Cancer Screening

Evidence suggests that mammography screening reduces breast cancer mortality, especially among older women. A physician's recommendation or referral and health insurance coverage play a major role in facilitating breast cancer screening.

With the exception of Chippewa County, mammogram screening rates in the 10-county region exceed the state rate of 68%.



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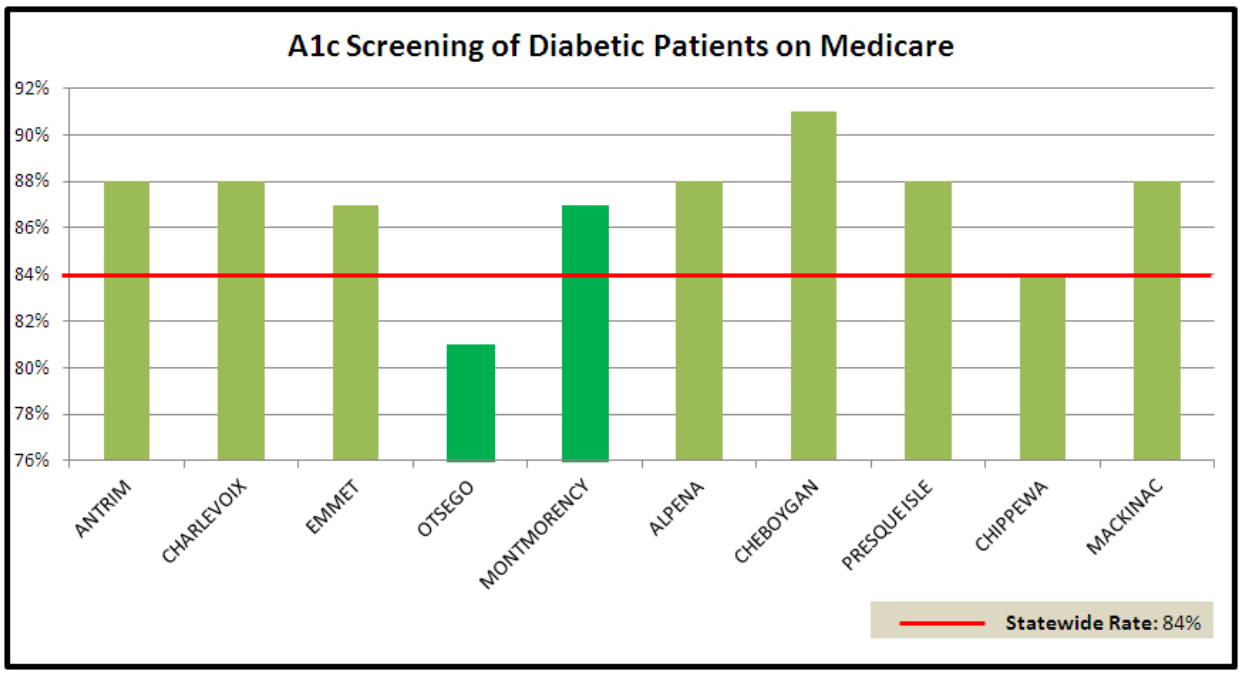


2009 data obtained from 2011 County Health Rankings at www.countyhealthrankings.org

Diabetes Screening

Regular glycated hemoglobin (A1c) screening among diabetic patients is considered the standard of care. It helps assess the management of diabetes over the long term by providing an estimate of how well a patient has managed his or her diabetes over the past two to three months. When hyperglycemia is addressed and controlled, complications from diabetes can be delayed or prevented. Nine of 10 counties' proportion of diabetic patients enrolled in Medicare who were screened regularly for A1c exceeded the State rate (84%).

Physical Environment

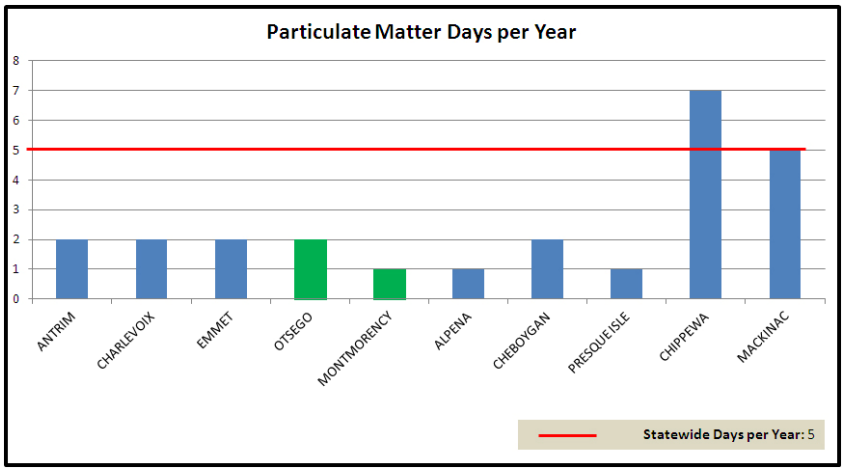
Air quality

The relationship between elevated air pollution—particularly fine particulate matter and ozone—and compromised health has been well documented. The negative consequences of ambient air pollution include decreased lung function, chronic bronchitis, asthma, and other adverse pulmonary effects.

Air quality is generally excellent in Northern Michigan. There were three "ozone days" in the state, but none 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. Chippewa (at seven days) and Mackinac (at five days) met or exceeded the State's five days per year, a result of industrial pollution and ambient winds in the Upper Peninsula.

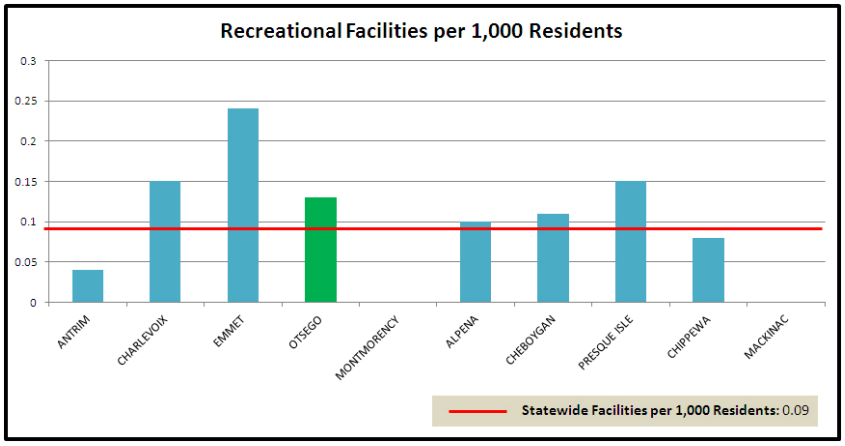
Built environment

The built environment refers to human-made (versus natural) resources and infrastructure designed to support human activity, such as buildings, roads, parks, restaurants, grocery stores and other amenities. The characteristics of the built environment can affect the health of residents in multiple ways.



2009 data obtained from 2011 County Health Rankings at www.countyhealthrankings.org

Better information on the availability of healthy food and recreational facilities within the built environment will enable communities to take action to reduce the adverse health outcomes associated with poor diet, lack of physical activity and obesity.



2008 data obtained from USDA Food Environment Atlas

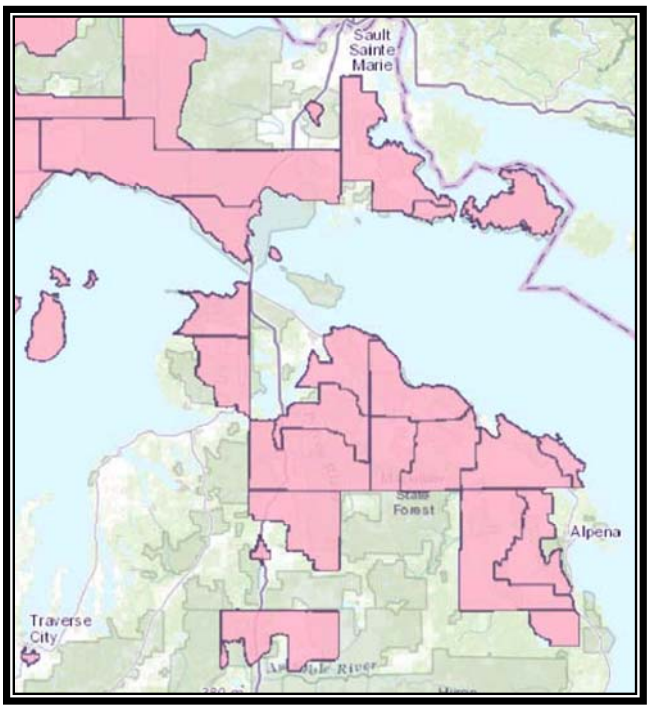
The availability of recreational facilities can influence individuals' and communities' choices to engage in physical activity. Proximity to places with recreational opportunities is associated with higher physical activity levels, which in turn is associated with lower rates of adverse health outcomes associated with poor diet, lack of physical activity, and obesity.

There is considerable variation in access to local establishments engaged in operating fitness and recreational sports activities such as swimming, skating or racquet sports in Northern Michigan. Emmet County has the greatest access, with .24 facilities per 1,000 population; Antrim County, with a rate of .04, has the least access, with 0.13 facilities per thousand. Data were not available for Mackinac and Montmorency counties.

Healthy Eating

Though research on the food environment is still in its early stages, there is strong evidence that access to fast food restaurants and residing in a food desert correlate with a high prevalence of overweight, obesity, and premature death. Supermarkets traditionally provide healthier options than convenience or smaller

grocery stores. Not having access to fresh fruits and vegetables provides an important barrier to consumption and is related to premature mortality.

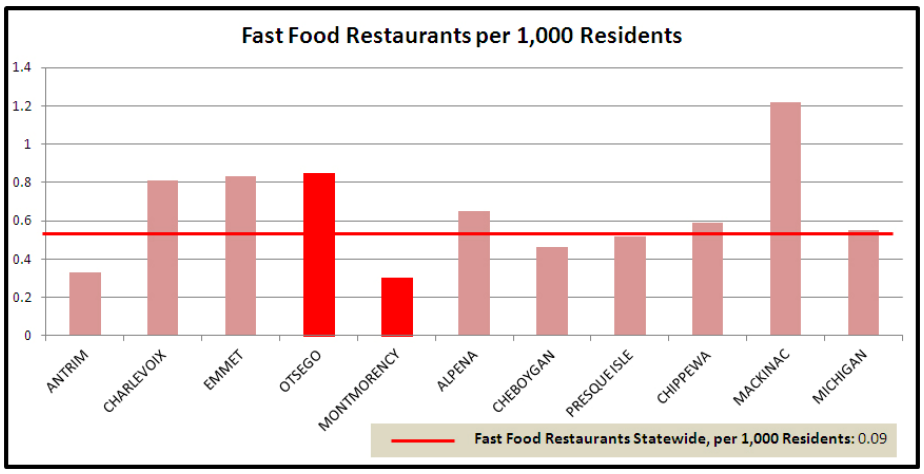


Food deserts in Northern Michigan, 2012 *(USDA)*

Access to Healthy Food

Eating healthy food can help reduce people's risk for heart disease, high blood pressure, diabetes, osteoporosis, and several types of cancer, as well as help them maintain a healthy body weight. As described in the *Dietary Guidelines for Americans*, eating healthy means consuming a variety of nutritious foods and beverages, especially vegetables, fruits, low and fat-free dairy products, and whole grains; limiting intake of saturated fats, added sugars, and sodium; keeping trans fat intake as low as possible; and balancing caloric intake with calories burned to manage body weight.

Seventeen Census Tracts in Northern Michigan with limited access to fresh, affordable food and are designated *food deserts*. Two food deserts are located in Otsego County.



2009 data obtained from USDA Food Environment Atlas

Literature indicates that the number of kilocalories consumed daily has been on an increasing trend over the past several decades. This problem can be partially attributed to the increasing trend of consuming more food prepared outside of the home, from restaurants and grocery stores.

Among most child age-groups, fast food restaurants are the second highest energy provider, second only to grocery stores. According to one meta-analysis, obesity was associated with a fast food environment. Several studies saw an increase in obesity and diabetes prevalence with increased access to fast food outlets.

In Alpena, Charlevoix, Chippewa, Emmet, Mackinac, and Otsego counties, fast food restaurant density exceeds state rate of 0.55 per 1,000 residents. With a rate of 0.3, Montmorency has the lowest fast food density in Northern Michigan.

Phase 4: Identifying Strategic Issues

During this phase of the MAPP process, results of the four MAPP assessments were reviewed and discussed in community-wide meetings, and participants developed an ordered list of the most important issues facing their community.

A series of four community-wide meetings were convened: one each in Charlevoix, Emmet, and Otsego counties, and another for the Northeast counties (Alpena, Cheboygan, Montmorency, and Presque Isle). These three-hour meetings were designed and facilitated to elicit participation from attendees, using group dynamic techniques. In preparation for the meetings, staff reviewed a variety of major community health planning documents, such as the *National Prevention Strategy*, key indicators of *Healthy People 2020*, Michigan's *State Health Improvement Plan*, and Michigan's *4 x 4 Plan for Health & Wellness*. Briefs were prepared to describe issues common in the documents. These Issue Briefs included local data collected for the four MAPP assessments for each of the following topics:

- Abuse and Neglect
- Access to Healthcare
- Alcohol and Drug Abuse
- Chronic Disease
- Maternal and Child Health
- Mental Health
- Obesity
- Substance Abuse
- Tobacco Use

Following a welcome from the local health department's health officer, staff led brainstorming, asking, "What are the top community health issues that need to be addressed?" Participants jotted responses on sticky notes, one idea per note, and organized them into groups. In every meeting, the list of concerns that were generated aligned with those in the prepared Issue Briefs.

Next, participants divided up the Issue Briefs and reviewed them. Depending on how many community members were in attendance, they could have one, two, or three briefs to review. As small groups, they discussed the following questions and reported their responses to the larger group:

1. **What themes can you identify in the Issue Brief?**
2. **Which of the themes are embraced in the community?**
3. **What would have to change in order to embrace all of the themes?**

These discussions provided an efficient way for participants to understand large amounts of primary and secondary data and to lay the groundwork for developing Community Health Improvement Plans later on. Participants then voted for the top priority issues, sometimes combining two or more. Finally, individuals and organizations were identified to invite to assist in developing Action Teams for each priority.

Antrim County used a different process, led by Munson Healthcare. Thirty-five priority health issues were identified from results of 100 community health indicators and multiple focus groups and other primary research activities. These were organized into 10 categories:

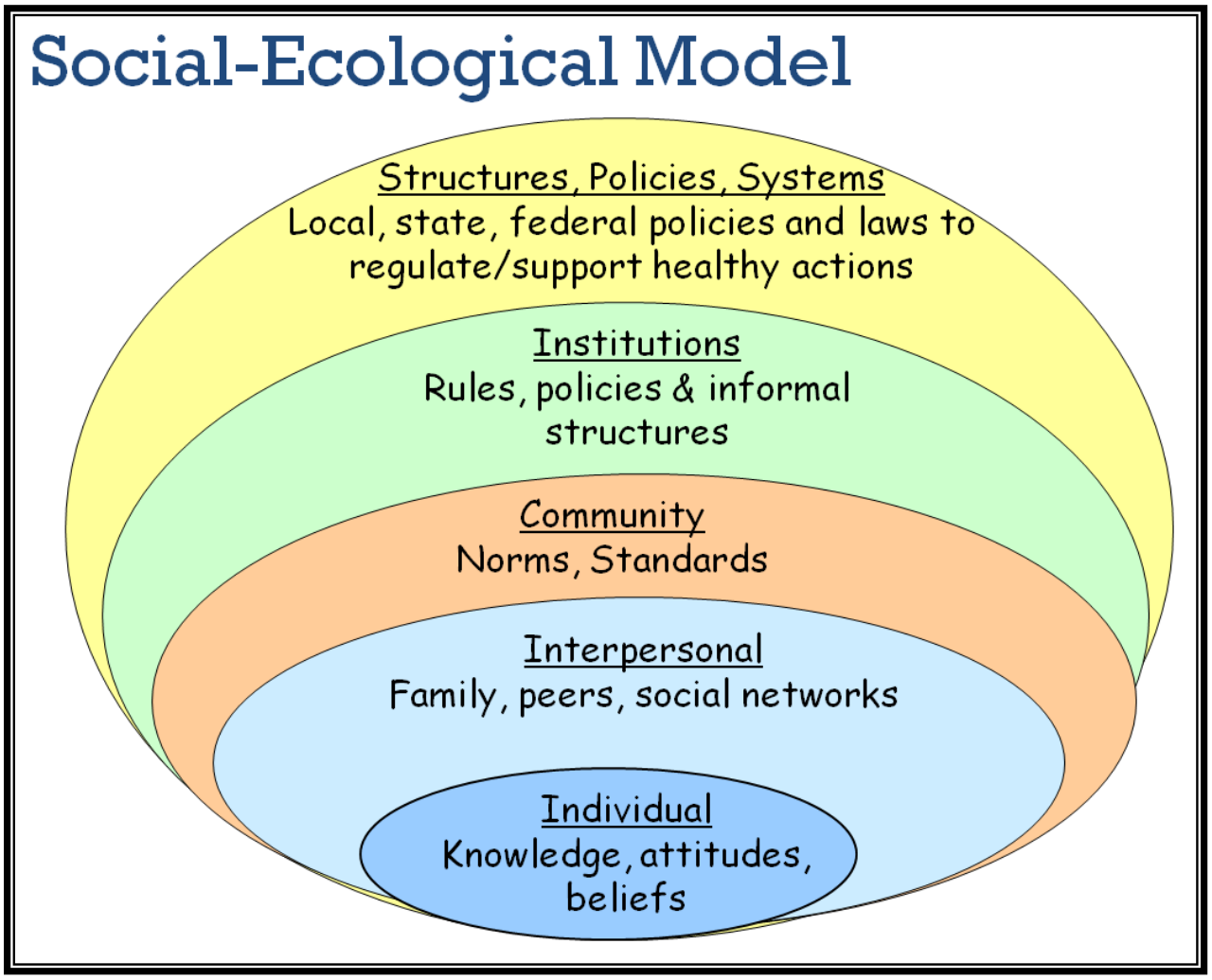
These data were reviewed by Munson's Community Health Needs Assessment Steering Committee; Community Health Committee; executive leadership of their member hospitals and Boards of Directors. Priorities were selected based on their alignment with the following ("Triple Aim") criteria: Improve patient experience of care; improve the health of the population and reduce per capita cost of health care.

Northern Michigan Community Health Priority Issues, 2013-2015

Antrim	Charlevoix	Emmet	Otsego	Northeast
• Obesity	• Obesity	• Obesity	• Obesity • *Chronic disease*	• Obesity
• Access to care	• Chronic disease	• Chronic disease	• Access to care • *Mental health* • *Maternal/child health*	• Access to care
• Diabetes	• Mental health • *Abuse and neglect* • *Substance abuse/tobacco*	• Access to care • *Maternal and child health*	• Substance abuse/tobacco	• Substance abuse/tobacco
• Maternal smoking	• Access to care • *Maternal/child health*	• Mental health • *Abuse and neglect* • *Substance abuse/tobacco*	• Abuse and neglect	

See **Attachment 7** for Issue Briefs summarizing the primary and secondary data collected during the assessment phase for the regional priorities. Each provides an overview of the issue and summarizes the related community health assessment results.

Phase 5: Formulating Goals and Strategies



Three Regional Planning Teams will begin meeting in January 2013 to develop Action Plans, using for Social-Ecological Model, for each of the following regional priorities:

- **Obesity/chronic disease prevention**
- **Access to health care, including mental health services, substance abuse treatment, and maternal and child health**
- **Substance abuse/tobacco use**

Together, these Action Plans form the Northern Michigan Community Health Improvement Plan. Action Plans will align with the Healthy People 2020 goals and objectives. Action Planning Teams will consider the Leading Health Indicators listed in the following tables, and select evidenced-based strategies to accomplish them.

Strategic Issue	Healthy People 2020 Goal	Healthy People 2020 Objective
Obesity and chronic disease prevention	Promote health and reduce chronic disease risk through the consumption of healthful diets and achievement and maintenance of healthy body weights	Reduce the proportion of adults who are obese
		Reduce the proportion of children and adults who are obese
		Increase the proportion of infants who are exclusively breastfed through 6 months of age
	Improve health, fitness, and quality of life through daily physical activity	Reduce the proportion of adults who engage in no leisure time physical activity
		Increase the proportion of adults and adolescents who meet physical activity guidelines for aerobic and muscle-building activity
		Increase the proportion of adolescents and children who meet physical activity guidelines
		Increase the proportion of the Nation's public and private schools that require daily physical education for all students
		Increase regularly scheduled recess in elementary schools
		Increase the proportion of children and adolescents who do not exceed daily limits for screen time
	Improve health, fitness, and quality of life through daily physical activity, continued	Increase the proportion of schools that provide access to their physical activity spaces for all persons outside of regular school hours
		Increase the proportion of schools that provide access to their physical activity spaces for all persons outside of regular school hours
		Increase the proportion of physician office visits that include education or counseling related to physical activity
Access to health care, including mental health services and substance abuse treatment	Improve access to comprehensive, quality health care services	Increase the proportion of persons with health insurance
		Increase the proportion of persons with a usual primary care provider
		Increase the proportion of children, including those with special health care needs, who have access to a medical home
		Increase the proportion of pregnant females who received early and adequate prenatal care
		Increase the proportion of primary care facilities that provide mental health services onsite or by paid referral
		Increase the proportion of children with mental health problems who receive treatment
		Increase depression screening by primary care providers
		Increase the proportion of persons with co-occurring substance abuse and mental health disorders who receive treatment for both disorders
		Increase the proportion of persons who need alcohol and/or illicit drug treatment and received specialty treatment for abuse or dependence in the past year

Strategic Issue	Healthy People Goal	Healthy People Objective
Alcohol, tobacco and other drug use	Reduce substance abuse to protect health, safety, and quality of life for all, especially children	Reduce proportion of adults aged 18 and older who report they engaged in binge drinking in the last month
		Reduce proportion of high school seniors who reported binge drinking during the past 2 weeks
		Reduce proportion of persons aged 12 or older who reported non medical use of any psychotherapeutic drug in the last year
		Proportion of youth aged 12 to 17 years who have used illicit drugs in the past 30 days.
		Increase abstinence from alcohol, cigarettes, and illicit drugs among pregnant women
	Reduce illness, disability, and death related to tobacco use and secondhand smoke	Reduce the proportion of adults who are current smokers
		Reduce the proportion of adolescents who smoked cigarettes in the past 30 days
		Reduce the proportion of youth age 3 to 11 who are exposed to secondhand smoke

ATTACHMENTS

1. **Healthy Community Survey Report**
2. **Quality of Life Project Report**
3. **Health Care Provider Survey Report**
4. **Forces of Change Assessment Report**
5. **Public Health System Assessment Reports**
6. **Community Health Status Assessment**
7. **Strategic Issue Briefs**

ATTACHMENT 1

Healthy Community Survey Report

Charlevoix Area Hospital

HEALTH DEPARTMENT of Northwest Michigan

McLaren NORTHERN MICHIGAN

Northern Health Plan

OMH

HEALTHY COMMUNITY SURVEY

SurveyMonkey

What county do you live in?

	What county do you live in?		
	Montmorency	**Otsego**	**Response Totals**
Alpena	0.0% (0)	0.0% (0)	0.0% (0)
Antrim	0.0% (0)	0.0% (0)	0.0% (0)
Charlevoix	0.0% (0)	0.0% (0)	0.0% (0)
Cheboygan	0.0% (0)	0.0% (0)	0.0% (0)
Emmet	0.0% (0)	0.0% (0)	0.0% (0)
Montmorency	**100.0% (34)**	0.0% (0)	16.9% (34)
Otsego	0.0% (0)	**100.0% (167)**	**83.1% (167)**
Presque Isle	0.0% (0)	0.0% (0)	0.0% (0)
Other, please specify	0 replies (0.0%)	0 replies (0.0%)	0.0% (0)
answered question	34	167	**201**
		skipped question	**0**

HEALTHY COMMUNITY SURVEY

SurveyMonkey

How do you pay for your health care?

	What county do you live in?		
	Montmorency	**Otsego**	**Response Totals**
Pay cash (no insurance)	19.4% (6)	8.5% (14)	10.2% (20)
Health Insurance	**51.6% (16)**	**78.2% (129)**	**74.0% (145)**
Medicaid	25.8% (8)	5.5% (9)	8.7% (17)
Medicare	3.2% (1)	3.0% (5)	3.1% (6)
Veteran's Administration	0.0% (0)	1.2% (2)	1.0% (2)
Other, please specify	0 replies (0.0%)	6 replies (3.6%)	3.1% (6)
answered question	31	165	**196**
		skipped question	**5**

HEALTHY COMMUNITY SURVEY

SurveyMonkey

What is your household income per year?

	What county do you live in?		
	Montmorency	**Otsego**	**Response Totals**
Less than $20,000	**25.8% (8)**	13.0% (21)	15.0% (29)
$20,000 to $29,000	**25.8% (8)**	10.5% (17)	13.0% (25)
$30,000 to $39,000	12.9% (4)	6.8% (11)	7.8% (15)
$40,000 to $49,000	3.2% (1)	6.8% (11)	6.2% (12)
$50,000 to $59,000	9.7% (3)	12.3% (20)	11.9% (23)
$60,000 +	22.6% (7)	**50.6% (82)**	**46.1% (89)**
answered question	31	162	**193**
		skipped question	**8**

HEALTHY COMMUNITY SURVEY

How old are you?

	What county do you live in?		
	Montmorency	**Otsego**	**Response Totals**
19-44 years old	**62.5% (20)**	28.8% (36)	35.7% (56)
45-64 years old	34.4% (11)	**65.6% (82)**	**59.2% (93)**
65+	3.1% (1)	5.6% (7)	5.1% (8)
answered question	32	125	**157**
		skipped question	**44**

HEALTHY COMMUNITY SURVEY

SurveyMonkey

In the following list, what do you think are the three most important factors that define a "healthy community"?

	What county do you live in?		
	Montmorency	Otsego	Response Totals
1. Community involvement	26.5% (9)	21.1% (35)	22.0% (44)
2. Low/safe neighborhoods	14.7% (5)	10.2% (17)	11.0% (22)
3. Low levels of child abuse	8.8% (3)	3.6% (6)	4.5% (9)
4. Good schools	**67.6% (23)**	30.7% (51)	37.0% (74)
5. Access to health care*	32.4% (11)	46.4% (77)	44.0% (88)
6. Parks and recreation	8.8% (3)	8.4% (14)	8.5% (17)
7. Clean environment	20.6% (7)	13.9% (23)	15.0% (30)
8. Affordable housing	11.8% (4)	12.0% (20)	12.0% (24)
9. Tolerance for diversity	2.9% (1)	4.8% (8)	4.5% (9)
10. Good jobs and healthy economy	44.1% (15)	**68.1% (113)**	**64.0% (128)**
11. Strong family life	29.4% (10)	26.5% (44)	27.0% (54)
12. Healthy lifestyles	20.6% (7)	33.1% (55)	31.0% (62)

13. Low death rate and disease rates	0.0% (0)	3.6% (6)	3.0% (6)
14. Religious or spiritual values	8.8% (3)	12.7% (21)	12.0% (24)
15. Arts and cultural events	2.9% (1)	1.8% (3)	2.0% (4)
16. Other, please specify	0 replies (0.0%)	4 replies (2.4%)	2.0% (4)
answered question	34	166	**200**
		skipped question	**1**

HEALTHY COMMUNITY SURVEY

SurveyMonkey

In the following list, what do you think are the three most important "health problems" in your county? (These are the problems that have the greatest impact on overall health)

	What county do you live in?		
	Montmorency	Otsego	Response Totals
Motor vehicle crashes	9.1% (3)	1.8% (3)	3.0% (6)
Rape/sexual assault	3.0% (1)	3.0% (5)	3.0% (6)
Mental health issues	15.2% (5)	23.5% (39)	22.1% (44)
Homicides	0.0% (0)	0.6% (1)	0.5% (1)
Child abuse and neglect	24.2% (8)	20.5% (34)	21.1% (42)
Suicide	0.0% (0)	3.0% (5)	2.5% (5)
Teenage pregnancy	18.2% (6)	14.5% (24)	15.1% (30)
Domestic violence	9.1% (3)	9.0% (15)	9.0% (18)
Firearm-related injuries	0.0% (0)	0.6% (1)	0.5% (1)
Sexually transmitted diseases	3.0% (1)	0.6% (1)	1.0% (2)
Infectious disease (TB, Hepatitis)	0.0% (0)	0.6% (1)	0.5% (1)
Lack of physical activity	39.4% (13)	38.0% (63)	38.2% (76)

Alcohol and drug issues	**45.5% (15)**	**59.0% (98)**	**56.8% (113)**
Lack of access to health care*	21.2% (7)	21.1% (35)	21.1% (42)
Chronic diseases (heart disease, cancer, diabetes)	24.2% (8)	25.9% (43)	25.6% (51)
Aging problems (arthritis, hearing/vision loss, etc)	15.2% (5)	12.0% (20)	12.6% (25)
Tobacco use	27.3% (9)	16.9% (28)	18.6% (37)
Homelessness	0.0% (0)	9.6% (16)	8.0% (16)
Obesity	39.4% (13)	35.5% (59)	36.2% (72)
Other, please specify	0 replies (0.0%)	7 replies (4.2%)	3.5% (7)
answered question	33	166	**199**
		skipped question	**2**

ATTACHMENT 2

Quality of Life Project Report

Charlevoix Area Hospital

HEALTH DEPARTMENT of Northwest Michigan

McLaren NORTHERN MICHIGAN

Northern Health Plan

OMH

Appendix A

Otsego County Quality of Life Assessment
Mail Survey Results
November 2011

This survey is designed to measure the quality of life in Otsego County. Quality of life is different for each of us but in general it is an expression that summarizes our opinions about our community and includes attributes like friendliness, health care, safety, recreation, natural resources, educational and employment opportunities which together determine whether our county is a desirable place to live and work.

The purpose of the survey was to obtain public opinion and perception on the quality of life in Otsego County. The survey is one of various ways to collect data for this project. The results will be widely shared in the hopes that individuals and organizations will use the information to take actions which will ensure Otsego County will be a desired place to live and work.

It is important to point out that 70% of the survey respondents are age 50 and over (survey sample was randomly drawn from individuals who voted in the 2008 election). This is a higher proportion than the 2010 census, where only 51% of those eligible to vote, were age 50 and over.

Methodology

1. A 68 question survey was designed by the Advisory Committee based on the county vision statement and 12 broad categories of attributes that contribute to our county's overall quality of life (arts & culture, community & civic engagement, economy, education & lifelong learning, faith-based & spiritual, government & politics, health & wellness, housing, infrastructure, natural resources & environment, recreation & leisure, and safety & security).

2. The draft questionnaire was pilot-tested for concise meaning of each question, clarity of instructions, easy to follow format, and length of time needed to complete the survey.

3. A scientific random sample of registered voters was conducted by Crossroads Industries. Approximately 10% (1167) of those who voted in the 2008 presidential election were selected to take part in the survey.

4. We received 571 completed, useable surveys. This is a 49% return rate which is high for a mailed survey to a broad-based population.

5. Now for some technical jargon. Even though the return rate (49%) is wonderful, it's the random sample that is statistically important. For our county's population size, 378 surveys are needed to make estimates with a sampling error of ±5% at a 95% confidence level. For example, 65% of the respondents are very satisfied with the availability of fresh fruit and vegetables (Q7). We can be quite confident that between 60% and 70% of the people who voted in 2008 are also very satisfied. If we think the rest of the adult population (non-voters) is like our sample, we can make similar estimates for Otsego County adults in general.

A. What is your **level of satisfaction** with the following attributes? Put an X in the box that describes your opinion.	Not Satisfied	Somewhat Satisfied	Very Satisfied	Don't Know
1. Quality of our K-12 public schools No Answer (NA) =6	4%	30%	33%	32%
2. Local access to colleges and vocational training NA=7	3%	28%	54%	16%
3. Public Library service NA=3	1%	14%	78%	7%
4. Availability of high speed Internet access NA=9	26%	27%	35%	12%
5. Quality of drinking water NA=8	9%	23%	62%	6%
6. Quality of water in lakes and streams NA=7	8%	41%	43%	7%
7. Availability of fresh fruit and vegetables NA=4	5%	29%	65%	1%
8. Cultural experiences such as plays, concerts, and art events NA=8	17%	44%	27%	12%
9. Variety of retail shopping NA=6	14%	50%	36%	1%
10. Diversity of local churches to meet spiritual needs NA=7	3%	13%	75%	9%
11. Services and programs for youth NA=8	11%	32%	25%	33%
12. Services and programs for senior citizens NA=7	2%	28%	40%	30%
13 Bike paths NA=6	11%	25%	38%	27%
14. Snowmobile trails NA=15	3%	12%	46%	39%
15. Quality of health care services in Otsego County NA=5	11%	46%	40%	3%
16. Condition of local roads NA=1	35%	53%	12%	0%
17. Affordability of public transportation NA=7	8%	27%	24%	41%
18. Ability of local leaders to meet the challenges facing our Community NA=7	20%	48%	11%	20%
19. Opportunities to get involved / volunteer NA=8	2%	24%	60%	13%

B. What is your **level of concern** for the following issues that affect our quality of life in Otsego County? Put an X in the box that describes your opinion.	No Concern	Low Concern	Medium Concern	High Concern	Don't Know
20 Availability of affordable housing NA=8	10%	16%	34%	26%	14%
21 Access to day care for children NA=9	16%	16%	16%	13%	40%
22. Having enough money to pay my rent/mortgage NA=9	25%	14%	20%	40%	2%
23. Unemployment rate NA=7	3%	1%	13%	78%	4%
24. Jobs that pay a family-sustaining wage NA=5	1%	2%	14%	80%	4%
25. Getting enough exercise NA=10	16%	20%	35%	28%	2%
26. Access to medical care NA=7	13%	19%	28%	39%	1%
27. Access to mental health care NA=6	15%	21%	22%	23%	19%
28. Availability of services so senior citizens can continue to live in their homes NA=6	5%	13%	23%	39%	19%
29. Traffic congestion NA=7	10%	27%	36%	27%	<1%
30. Sidewalk / pedestrian safety NA=6	17%	29%	29%	22%	3%
31. Zoning enforcement NA=7	12%	29%	25%	16%	18%
32. Maintaining our small town sense of community NA=6	12%	21%	31%	33%	3%
33. Access to nature and open space NA=7	23%	19%	21%	37%	1%
34. Air pollution NA=7	18%	26%	20%	35%	2%
35. Water pollution (surface and ground water) NA=6	10%	18%	23%	47%	2%
36. Crime NA=9	5%	14%	29%	50%	1%
37. Jail overcrowding NA=5	9%	19%	30%	31%	11%
38. Youth being bullied NA=8	5%	11%	23%	49%	13%
39. Gasoline prices compared to surrounding counties NA=1	1%	1%	8%	90%	<1%
40. Preserving historic buildings NA=5	10%	28%	34%	23%	5%

C. What is your **level of agreement** with the following statements? Put an X in the box that describes your opinion.	Strongly Disagree	Disagree	Agree	Strongly Agree	Don't Know
41. Otsego County is a welcoming place for "transplants" (people who have moved here from other communities) NA=13	4%	11%	60%	18%	7%
42. This is a great place to raise a family NA=8	1%	3%	56%	36%	4%
43. This is a great place to open a business NA=15	9%	30%	27%	6%	28%
44. I plan to spend my retirement years in Otsego County NA=6	8%	9%	37%	27%	20%
45. In general, I am optimistic about my future NA=13	3%	12%	50%	30%	5%
46. Casinos should be allowed in Otsego County NA=4	35%	15%	23%	19%	8%
47. I enjoy our four-season weather NA=8	3%	9%	44%	44%	0%
48. People here are friendly NA=7	2%	7%	59%	31%	1%
49. Otsego County is intergenerational We connect youth with senior citizens NA=8	2%	15%	44%	13%	26%
50. I can influence our community's future NA=12	4%	15%	43%	11%	26%
51. Gaylord, Vanderbilt, and Johannesburg-Lewiston school systems should consolidate administrative functions NA=7	11%	18%	21%	21%	30%
52. Our local units of government (county, townships, etc.) Should consider consolidating services NA=7	7%	18%	31%	22%	23%
53. Our local festivals help generate community spirit NA=9	1%	7%	51%	36%	5%
54. I would pay a $25 tax assessment per year for access to recycling drop off sites NA=10	21%	22%	25%	24%	7%
55. My neighborhood is safe NA=10	1%	6%	60%	32%	1%
56. My health care needs can be addressed locally NA=11	7%	22%	52%	16%	3%
57. Tourism should be an important part of Otsego County's future NA=11	2%	6%	47%	43%	2%
58. Oil & gas should be an important part of Otsego County's future NA=14	5%	9%	44%	32%	9%
59. The Gaylord Regional Airport provides a needed service to the county NA=7	5%	8%	47%	19%	20%
60. High school students are graduating with the skills and knowledge that meet the needs of employers NA=7	9%	21%	29%	4%	37%
61. Our downtown commercial areas are pedestrian-friendly NA=5	3%	10%	66%	19%	2%

D. **A few questions about you:**

62. Where in Otsego County do you live?

13% City of Gaylord	1% Village of Vanderbilt	19% Bagley Township
6% Charlton Township	6% Chester Township	3% Corwith Township
3% Dover Township	8% Elmira Township	12% Hayes Township
13% Livingston Township	16% Otsego Lake Township	NA=1

63. How long have you lived in Otsego County?

10% Less than 5 years
29% 6 – 15 years
62% Over 15 years
NA=3

64. Gender: 41% Male 59% Female NA=9

65. What is your age?

<1% Under 21 12% 21-35 19% 36-49 37% 50-65 33% Over 65 NA=1

66. Do you have health insurance or Medicare coverage? 91% Yes 9% No NA=11

67. How often do you use Facebook?

52% Never 11% less than once a week 12% weekly 26% daily NA=3

68. Do you have internet access at your home? 82% Yes 18% No NA=6

69. Please use this space for additional comments regarding Quality of Life in Otsego County

222 WRITTEN COMMENTS

Thank you for participating in this questionnaire. Please return your completed survey in the enclosed self-addressed stamped envelope by November 11, 2011

Otsego County
Quality of Life Assessment

NEMCOG
P.O. Box 457
Gaylord, MI 49734

Appendix B

Otsego County Quality of Life Assessment
On-Line Survey Results
February - March 2012

1. How would you rate your overall quality of life? Very Poor 0.6% Poor 1.7%
Neither Poor nor Good 8.0% **Good 48.9%** Very Good 40.9%

2. How would you describe your sense of belonging to Otsego County? Very week 2.3%
Somewhat Weak 19.3% **Somewhat Strong 45.5%** Very Strong 33.0%

Rarely = 1-2 times per year Sometimes = 1-2 times per month Often = 1-2 times per week

3. In the past 12 months, how often have you shopped or dined in downtown Elmira?
Never 62.3% Rarely 29.1% Sometimes 6.9% Often 1.7%

4. In the past 12 months, how often have you shopped or dined in downtown Gaylord?
Never 1.1% Rarely 9.7% **Sometimes 45.5%** Often 43.8%

5. In the past 12 months, how often have you shopped or dined in downtown Johannesburg?
Never 35.4% **Rarely 52.6%** Sometimes 10.9% Often 1.1%

6. In the past 12 months, how often have you shopped or dined in downtown Vanderbilt?
Never 62.3% Rarely 30.3% Sometimes 4.6% Often 2.9%

7. In the past 12 months, how often have you shopped or dined in downtown Waters?
Never 52.0% Rarely 34.7% Sometimes 11.6% Often 1.7%

8. In the past 12 months, how often have you recreated in the Pigeon River State Forest?
Never 44.0% Rarely 36.0% Sometimes 14.9% Often 5.1%

9. How often do you leave Otsego County for shopping?
Never 3.4% **Rarely 50.9%** Sometimes 42.9% Often 2.9%

10. How often do you leave Otsego County for entertainment?
Never 7.5% **Rarely 50.6%** Sometimes 36.2% Often 5.7%

11. How often do you leave Otsego County for medical care?
Never 21.6% **Rarely 58.0%** Sometimes 17.0% Often 3.4%

12. How safe do you feel in your home during the day?
Very Unsafe 1.1% Somewhat Unsafe 0.6% Somewhat Safe 17.1% **Very Safe 81.1%**

13. How safe do you feel in your home after dark?
Very Unsafe 1.1% Somewhat Unsafe 1.7% Somewhat Safe 30.7% **Very Safe 66.5%**

14. How safe do you feel walking alone in your neighborhood during the day?
Very Unsafe 1.1% Somewhat Unsafe 1.7% Somewhat Safe 17.2% **Very Safe 79.9%**

15. How safe do you feel walking alone in your neighborhood after dark?
Very Unsafe 3.4% Somewhat Unsafe 8.0% Somewhat Safe 40.91% **Very Safe 47.7%**

16. What is your level of concern for the following types of crime?
a. Arson **No Concern 50.6%** Low 40.3% Medium 6.8% High Concern 2.3%
b. Assault No Concern 29.0% **Low 51.7%** Medium 17.0% High Concern 2.3%
c. Burglary No Concern 8.0% **Low 44.3%** Medium 40.9% High Concern 6.8%
d. Drunk Driving No Concern 4.0% Low 24.4% **Medium 44.3%** High Concern 27.3%
e. Illegal Drugs No Concern 6.3% Low 21.0% **Medium 36.9%** High Concern 35.8%
f. Murder No Concern 36.9% **Low 51.1%** Medium 7.4% High Concern 4.5%

17. What is your opinion of the following statements related to youth being bullied?
a. It's a serious problem
Strongly Disagree 0.6% Disagree 10.9% Agree 37.1% **Strongly Agree 44.0%** Don't Know 7.4%
b. It's over publicized by media hype
Strongly Disagree 16.2% **Disagree 53.29%** Agree 17.3% Strongly Agree 5.8% Don't Know 7.5%
c. Schools, parents and law enforcement should do more to prevent bullying
Strongly Disagree 0% Disagree 5.1% **Agree 48.6%** Strongly Agree 38.3% Don't Know 8.0%

18. What is your opinion of the following statements related to recycling?
a. Recycling is good for the environment.
Strongly Disagree 0.6% Disagree 0.6% Agree 25.6% **Strongly Agree 73.3%** Don't Know 0%
b. Recycled materials end up in the landfill.
Strongly Disagree 12.5% **Disagree 41.5%** Agree 14.8% Strongly Agree 14.8% Don't Know 16.5%
c. Recycling saves money.
Strongly Disagree 2.3% Disagree 18.9% Agree 32.6% **Strongly Agree 34.9%** Don't Know 11.4%
d. I am willing to take my recycle materials to a drop off site in Otsego County for a fee.
Strongly Disagree 12.6% Disagree 22.3% Agree 29.7% **Strongly Agree 32.6%** Don't Know 2.9%
e. I would participate in a curb side pick up program for an added fee.
Strongly Disagree 8.0% Disagree 17.6% Agree 28.4% **Strongly Agree 42.0%** Don't Know 4.0%

19. Which of the following best describes how well your total income meets your everyday needs for things such as housing, food, clothing and other necessities?
Have more than enough money 16.5% **Enough money 44.9%** Just enough money 28.4%
Not enough money 10.2%

20. How interested are you in knowing what goes on (news/events) in Otsego County?
No interest 0% Low Interest 5.1% Medium Interest 33.0% **High Interest 61.9%**

21. How do you find out what's going on in Otsego County?

	Never	Rarely	Sometimes	Often
Printed materials such as flyers and brochures	5.7% (10)	24.6% (43)	**54.9% (96)**	14.9% (26)
Networking events such as Business After Hours	**35.2% (62)**	**35.2% (62)**	21.0% (37)	8.5% (15)
Social media / Face Book / Twitter	**37.7% (66)**	25.7% (45)	22.9% (40)	13.7% (24)
Otsego County Connections (www.Otsego.org)	**42.4% (75)**	32.2% (57)	22.0% (39)	3.4% (6)
Talking with my friends and family	0.6% (1)	6.2% (11)	42.4% (75)	**50.8% (90)**
Radio – Eagle 101.5 FM	17.6% (31)	18.8% (33)	**34.7% (61)**	29.0% (51)
Gaylord Herald Times	2.3% (4)	8.5% (15)	33.5% (59)	**55.7% (98)**
Our Home Town	**49.7% (87)**	27.4% (48)	16.0% (28)	6.9% (12)
Weekly Choice	15.4% (27)	22.3% (39)	**43.4% (76)**	18.9% (33)
TV Channel 7&4 NBC	13.6% (24)	24.9% (44)	**34.5% (61)**	27.1% (48)
TV Channel 9&10 CBS	14.2% (25)	18.8% (33)	**36.9% (65)**	30.1% (53)
TV Channel 32 Fox	28.6% (50)	28.0% (49)	**29.1% (51)**	14.3% (25)
Church bulletin - announcements	**35.2% (62)**	18.8% (33)	26.7% (47)	19.3% (34)
Internet – Web Sites	16.5% (29)	29.5% (52)	**33.5% (59)**	20.5% (36)
Email	19.8% (34)	27.3% (47)	**32.6% (56)**	20.3% (35)

22. How easy would it be for you to access local help with the following situations (for you or for a friend of yours)?

	Very difficult	Somewhat difficult	Somewhat easy	Very easy	Don't know	Response Count
applying for a job	2.3% (4)	13.7% (24)	**38.9% (68)**	30.9% (54)	14.3% (25)	175
treating substance abuse	2.8% (5)	11.4% (20)	**34.7% (61)**	23.3% (41)	27.8% (49)	176
literacy	1.1% (2)	10.8% (19)	**35.8% (63)**	29.5% (52)	22.7% (40)	176
accessing the county bus	1.1% (2)	2.8% (5)	23.9% (42)	**66.5% (117)**	5.7% (10)	176
enrolling in preschool	0.6% (1)	2.3% (4)	27.0% (47)	**41.4% (72)**	28.7% (50)	174
filling out a social security form	0.6% (1)	10.9% (19)	30.9% (54)	**33.1% (58)**	24.6% (43)	175
getting a cancer screening	1.7% (3)	9.1% (16)	29.5% (52)	**42.6% (75)**	17.0% (30)	176
applying for college scholarships	1.7% (3)	16.6% (29)	**29.7% (52)**	25.1% (44)	26.9% (47)	175
improving your credit score	3.4% (6)	14.3% (25)	24.0% (42)	23.4% (41)	**34.9% (61)**	175
services for the elderly	0.6% (1)	2.8% (5)	27.8% (49)	**49.4% (87)**	19.3% (34)	176
obtaining a GED	0.6% (1)	5.7% (10)	32.0% (56)	28.6% (50)	**33.1% (58)**	175
getting food assistance	2.9% (5)	6.9% (12)	**37.4% (65)**	32.8% (57)	20.1% (35)	174

23. Which of the following best describes how you would like to see the population of Otsego County during the next 10 years? Increase greatly 19.2% **Increase slightly 50.3%** Neither Increase Nor Decrease 20.9% Decrease slightly 5.1% Decrease Greatly 1.1% Don't Know 3.4%

24. A few questions about you: Where in Otsego County do you live?

City of Gaylord 17.3%
Village of Vanderbilt 0.6%
Bagley Township 15.6%
Charlton Township 4.0%
Chester Township 5.8%
Corwith Township 3.5%
Dover Township 2.9%
Elmira Township 9.8%
Hayes Township 8.1%
Livingston Township 19.7%
Otsego Lake Township 12.7%

25. How long have you lived in Otsego County?
Less than 5 years 9.7% 6-15 years 26.7% **Over 15 years 63.8%**

26. What is the primary reason you moved to Otsego County?
Born here 18.5% Moved here as a kid and decided to stay 7.6% **Job 49.7%**
Family 13.4% Retired here 10.8% Other 10.8%

27. Which of the following statements best describe why you chose to remain in Otsego County? Check all that apply
Job 59.2% To be near friends and family 46.7% It's home 53.8%
Natural resource / scenic beauty 51.5% Less expensive than my other options 10.1%

28. Do you currently serve on a board or committee that enhances the quality of life in Otsego County? For example: PTO, township planning, Rotary, scout leader
Yes 53.1% No 46.9%

29. What is your age?
Under 20 0%
20-29 6.8%
30-39 15.8%
40-49 18.6%
50-59 28.2%
60-70 24.3%
Over 70 6.2%

30. Gender
Male 44.0% **Female 56.0%**

31. Are you registered to vote in Otsego County?
Yes 94.9% No 5.1%

ATTACHMENT 3

Health Care Provider Survey Report

Charlevoix Area Hospital

HEALTH DEPARTMENT of Northwest Michigan

McLaren NORTHERN MICHIGAN

Northern Health Plan

OMH

Health Care Provider Survey

1. What county do you live in?

		Response Percent	Response Count
Antrim		5.6%	6
Charlevoix		43.5%	47
Emmet		**47.2%**	**51**
Otsego		0.0%	0
Alpena		0.0%	0
Cheboygan		2.8%	3
Montmorency		0.0%	0
Presque Isle		0.9%	1
		answered question	**108**
		skipped question	**0**

2. Which hospital are you primarily affiliated with?

	Response Percent	Response Count
Charlevoix Area Hospital	**54.2%**	**58**
McLaren Northern Michigan Petoskey Campus	42.1%	45
McLaren Northern Michigan Cheboygan Campus	2.8%	3
Otsego Memorial Hospital	0.0%	0
Other (please specify)	0.9%	1
	answered question	**107**
	skipped question	**1**

3. In the following list, what do you think are the three most important factors that define a "healthy community"?

	Response Percent	Response Count
community involvement	14.8%	16
low levels of child abuse	3.7%	4
access to healthcare	**52.8%**	**57**
clean environment	24.1%	26
tolerance for diversity	10.2%	11
strong family life	28.7%	31
low death rate and disease rate	10.2%	11
arts and cultural events	1.9%	2
low crime/safe neighborhoods	20.4%	22
good schools	25.0%	27
parks and recreation	9.3%	10
affordable housing	8.3%	9
good jobs and healthy economy	**52.8%**	**57**
healthy lifestyles	42.6%	46
religious or spiritual values	5.6%	6
Other (please specify)	0.9%	1
	answered question	**108**
	skipped question	**0**

4. In the following list, what do you think are the three most important health problems in your county?

	Response Percent	Response Count
motor vehicle crashes	1.9%	2
mental health issues	31.5%	34
child abuse and neglect	4.6%	5
teenage pregnancy	3.7%	4
sexually transmitted infections	1.9%	2
lack of physical activity	39.8%	43
lack of access to healthcare	14.8%	16
aging problems	19.4%	21
homelessness	0.0%	0
rape/sexual assault	0.0%	0
obesity	**67.6%**	**73**
suicide	3.7%	4
domestic violence	3.7%	4
infectious disease	0.0%	0
alcohol and drug issues	46.3%	50
chronic disease	25.9%	28
tobacco use	30.6%	33
homicides	0.0%	0
Other (please specify)	8.3%	9
	answered question	**108**
	skipped question	**0**

5. In the following list, what do you think are the top three barriers to care your patients experience?

	Response Percent	Response Count
medications are not affordable	69.5%	73
household budget/financial constraints	**92.4%**	**97**
lack of parenting skills	24.8%	26
lack of self confidence	12.4%	13
struggles with grief and loss	1.9%	2
medical debt	35.2%	37
lack of transportation	27.6%	29
communication barriers	9.5%	10
lack of senior services	11.4%	12
lack of access to adult day care	4.8%	5
	answered question	**105**
	skipped question	**3**

6. What community resources do you routinely refer patients to?

		Response Percent	Response Count
Community Free Clinic		37.0%	34
Community Mental Health Services		39.1%	36
Department of Human Services		31.5%	29
Home care and/or hospice services		**59.8%**	**55**
Intermediate School District or Educational Services District		7.6%	7
Substance abuse treatment		20.7%	19
Women's Resource Center		37.0%	34
		answered question	**92**
		skipped question	**16**

7. On a scale of 1-10 with 1 being the worst and 10 being the best, what is your experience with exchanging patient information among services and providers?

	Response Percent	Response Count
1	1.0%	1
2	1.9%	2
3	5.8%	6
4	11.5%	12
5	18.3%	19
6	9.6%	10
7	16.3%	17
8	**22.1%**	**23**
9	12.5%	13
10	1.0%	1
	answered question	**104**
	skipped question	**4**

8. Is there anything you would like to add?

	Response Count
	20
answered question	**20**
skipped question	**88**

9. Are you interested in participating in county-level meetings to determine local priorities and/or county-level meetings to develop Action Plans? If so, please leave your name and email address and we will follow-up.

	Response Percent	Response Count
Name:	100.0%	10
Email Address:	100.0%	10
answered question		10
skipped question		98

Which hospital are you primarily affiliated with?		
1	Cheb is not a hospital I use mclaren for services	Oct 15, 2012 3:46 PM

In the following list, what do you think are the three most important factors that define a "healthy community"?		
1	Reducing childhood obesity	Oct 15, 2012 2:19 PM

In the following list, what do you think are the three most important health problems in your county?		
1	smoking/drinking	Oct 17, 2012 10:26 AM
2	smoking/drinking	Oct 17, 2012 10:25 AM
3	ACCIDENTAL DROWNINGS in local lakes; a significant preventable public health problem not being systematically addressed	Oct 17, 2012 3:27 AM
4	Pain management	Oct 15, 2012 3:08 PM
5	self inflicting harm "cutting" in adolescence	Oct 15, 2012 8:28 AM
6	poor diet	Oct 15, 2012 8:12 AM
7	Apathy regarding their own health.	Oct 15, 2012 6:28 AM
8	unhealthy diet	Oct 15, 2012 4:44 AM
9	no insurance	Oct 13, 2012 6:40 AM

Is there anything you would like to add?		
1	The greatest detriment to health care among American's is lack of compliance in living a healthy lifestyle and making healthy choices...	Oct 18, 2012 12:37 PM
2	funding for therapy services	Oct 17, 2012 10:26 AM
3	funding for therapy services	Oct 17, 2012 10:25 AM
4	accidental drowning in local lakes is a significant and preventable public health problem in the region and does not appear to be adequately, systematically addressed.	Oct 17, 2012 3:27 AM
5	Lack of transparency and accountability for CMH. Degradation of mental health resources.	Oct 16, 2012 2:06 PM
6	We need to have a standard system to share medical info among providers to help pt care. We need more and better mental health services in northern mich.	Oct 15, 2012 3:46 PM
7	No	Oct 15, 2012 3:31 PM
8	There is a prevailing thought that what works in one community works in another. Not so. Quality is defined by outputs, not inputs.	Oct 15, 2012 3:08 PM
9	Hospital quality outcomes should eventually show improvement (measurable outcomes) in community health standards	Oct 15, 2012 2:19 PM
10	physicians direct is a fantastic tool to benefit the dlivery of health care. Relationshiip with ARMC needs alot of improvement to benefit pt care	Oct 15, 2012 1:46 PM
11	The population in N. Michigan is distinctly unhealthy. Most people consume a disease promoting animal and processed food diet. Until, this changes radically, the health of our population will continue to be abysmal.	Oct 15, 2012 10:20 AM
12	I believe that health care is accessible to a large portion of the population. I see that CAH offers treatment to those who have difficulty and follows up with recommendation for those in need.	Oct 15, 2012 9:02 AM
13	-	Oct 15, 2012 8:38 AM
14	no	Oct 15, 2012 8:29 AM
15	mental health support is so strained, bc of finances and providers. Really need pediatric mental health support	Oct 15, 2012 8:12 AM
16	Electronic medical record has NOT made it easier for providers (RN's) to keep abreast of patient information	Oct 15, 2012 6:47 AM
17	Lack of health care coverage is a barrier for patients.	Oct 15, 2012 6:28 AM
18	I frequently refer patients to Commission on Aging.	Oct 15, 2012 4:56 AM
19	no	Oct 15, 2012 2:18 AM
20	Educating the public regarding disease process is an area we need improvement in	Oct 14, 2012 12:04 PM

ATTACHMENT 4

Forces of Change Assessment Report

Charlevoix Area Hospital

HEALTH DEPARTMENT of Northwest Michigan

McLaren NORTHERN MICHIGAN

Northern Health Plan

OMH

FORCES OF CHANGE ASSESSMENT SUMMARY

Political system forces

- Outcome of the 2012 elections and implications for funding health and social services and implementation of the Affordable Care Act, especially Medicaid expansion

Health care system forces

- Closure of Cheboygan Memorial Hospital/opening of McLaren Northern Michigan–Cheboygan
- Closure of Cheboygan Memorial Hospital Obstetrics Unit
- Threats to women's health services
- Lack of physicians who accept Medicaid
- Closure of Northern Michigan Hospital Lockwood-MacDonald and psychiatric unit
- No psych unit in 8 counties across the Tip of the Mitt
- Lack of parity for mental health services
- Lack of access for mental health services for mild to moderate illness and for children
- Lack of federally qualified health center or free clinic in Otsego County
- Obesity epidemic will strain health care system as baby boomers develop chronic disease
- Expense of end-of-life care

Educational system forces

- Decreases in school funding
- Dropout rates
- Poor quality of school cafeteria offerings
- Conflicts with School Board and intermediate school district in Atlanta

Social/economic forces

- High proportion of older adults and the segment is growing faster in Northern Michigan than elsewhere in the State
- Seasonal, tourism-based economy
- High unemployment rates
- Budget cuts for health and social programs
- Part-time, temporary low-paying jobs without health insurance
- Strong retail sector in Otsego County
- Lack of public transportation
- Large older adult population, and it is growing faster than the population as a whole
- Exodus of young people (noted in Northeast counties only)
- Lack of health literacy
- Easy access to health information via the internet, though all of it is not reliable
- Increase in prescription and synthetic drug use

Technological forces

- Creation/expansion of Aging and Disability Resource Centers (ADRCs)
- Creation/expansion of 211
- Long-distance learning
- Coming or lack of broadband
- Telemedicine
- Adoption of Electronic Medical Records (EMRs)
- Coming Health Information Exchanges (HIEs)

Environmental forces

- Rural area creates isolation
- Lakes, hills, forests attract tourists

Legal forces

- Michigan Marijuana law
- Reduced numbers of police officers on patrol

ATTACHMENT 5

Public Health System Assessment Reports

Charlevoix Area Hospital

HEALTH DEPARTMENT of Northwest Michigan

McLaren NORTHERN MICHIGAN

Northern Health Plan

OMH

NPHPSP

National Public Health Performance Standards Program

Local Public Health System Performance Assessment

Report of Results

Health Department of Northwest Michigan

7/12/2012

Table of Contents

The National Public Health Performance Standards Program

Local Public Health System Performance Assessment
Report of Results

A. The NPHPSP Report of Results

I. INTRODUCTION

The National Public Health Performance Standards Program (NPHPSP) assessments are intended to help users answer questions such as "What are the activities and capacities of our public health system?" and "How well are we providing the Essential Public Health Services in our jurisdiction?" The dialogue that occurs in answering these questions can help to identify strengths and weaknesses and determine opportunities for improvement.

The NPHPSP is a partnership effort to improve the practice of public health and the performance of public health systems. The NPHPSP assessment instruments guide state and local jurisdictions in evaluating their current performance against a set of optimal standards. Through these assessments, responding sites consider the activities of all public health system partners, thus addressing the activities of all public, private and voluntary entities that contribute to public health within the community.

Three assessment instruments have been designed to assist state and local partners in assessing and improving their public health systems or boards of health. These instruments are the:

The NPHPSP is a collaborative effort of seven national partners:

- Centers for Disease Control and Prevention, Office of Chief of Public Health Practice (CDC/OCPHP)
- American Public Health Association (APHA)
- Association of State and Territorial Health Officials (ASTHO)
- National Association of County and City Health Officials (NACCHO)
- National Association of Local Boards of Health (NALBOH)
- National Network of Public Health Institutes (NNPHI)
- Public Health Foundation (PHF)

- State Public Health System Performance Assessment Instrument,
- Local Public Health System Performance Assessment Instrument, and
- Local Public Health Governance Performance Assessment Instrument.

This report provides a summary of results from the NPHPSP Local Public Health System Assessment (OMB Control number 0920-0555, expiration date: August 31, 2013). The report, including the charts, graphs, and scores, are intended to help sites gain a good understanding of their performance and move on to the next step in strengthening their public system.

II. ABOUT THE REPORT

Calculating the scores

The NPHPSP assessment instruments are constructed using the Essential Public Health Services (EPHS) as a framework. Within the Local Instrument, each EPHS includes between 2-4 model standards that describe the key aspects of an optimally performing public health system. Each model standard is followed by assessment questions that serve as measures of performance. Each site's responses to these questions should indicate how well the model standard - which portrays the highest level of performance or "gold standard" - is being met.

Sites responded to assessment questions using the following response options below. These same categories are used in this report to characterize levels of activity for Essential Services and model standards.

NO ACTIVITY	0% or absolutely no activity.
MINIMAL ACTIVITY	Greater than zero, but no more than 25% of the activity described within the question is met.
MODERATE ACTIVITY	Greater than 25%, but no more than 50% of the activity described within the question is met.
SIGNIFICANT ACTIVITY	Greater than 50%, but no more than 75% of the activity described within the question is met.
OPTIMAL ACTIVITY	Greater than 75% of the activity described within the question is met.

Using the responses to all of the assessment questions, a scoring process generates scores for each first-tier or "stem" question, model standard, Essential Service, and one overall score. The scoring methodology is available from CDC or can be accessed on-line at http://www.cdc.gov/nphpsp/conducting.html.

Understanding data limitations

Respondents to the self-assessment should understand what the performance scores represent and potential data limitations. All performance scores are a composite; stem question scores represent a composite of the stem question and subquestion responses; model standard scores are a composite of the question scores within that area, and so on. The responses to the questions within the assessment are based upon processes that utilize input from diverse system participants with different experiences and perspectives. The gathering of these inputs and the development of a response for each question incorporates an element of subjectivity, which can be minimized through the use of particular assessment methods. Additionally, while certain assessment methods are recommended, processes can differ among sites. The assessment methods are not fully standardized and these differences in administration of the self-assessment may introduce an element of measurement error. In addition, there are differences in knowledge about the public health system among assessment participants. This may lead to some interpretation differences and issues for some questions, potentially introducing a degree of random non-sampling error.

Because of the limitations noted, the results and recommendations associated with these reported data should be used for quality improvement purposes. More specifically, results should be utilized for guiding an overall public health infrastructure and performance improvement process for the public health system. These data represent the collective performance of all organizational participants in the assessment of the local public health system. The data and results should not be interpreted to reflect the capacity or performance of any single agency or organization.

Presentation of results

The NPHPSP has attempted to present results - through a variety of figures and tables - in a user-friendly and clear manner. Results are presented in a Microsoft Word document, which allows users to easily copy and paste or edit the report for their own customized purposes. Original responses to all questions are also available.

For ease of use, many figures in tables use short titles to refer to Essential Services, model standards, and questions. If in doubt of the meaning, please refer to the full text in the assessment instruments.

Sites may choose to complete two optional questionnaires - one which asks about priority of each model standard and the second which assesses the local health department's contribution to achieving the model standard. Sites that submit responses for these questionnaires will see the results included as an additional component of their reports. Recipients of the priority results section may find that the scatter plot figures include data points that overlap. This is unavoidable when presenting results that represent similar data; in these cases, sites may find that the table listing of results will more clearly show the results found in each quadrant.

III. TIPS FOR INTERPRETING AND USING NPHPSP ASSESSMENT RESULTS

The use of these results by respondents to strengthen the public health system is the most important part of the performance improvement process that the NPHPSP is intended to promote. Report data may be used to identify strengths and weaknesses within the local public health system and pinpoint areas of performance that need improvement. The NPHPSP User Guide describes steps for using these results to develop and implement public health system performance improvement plans. Implementation of these plans is critical to achieving a higher performing public health system. Suggested steps in developing such improvement plans are:

1. Organize Participation for Performance Improvement
2. Prioritize Areas for Action
3. Explore "Root Causes" of Performance Problems
4. Develop and Implement Improvement Plans
5. Regularly Monitor and Report Progress

Refer to the User Guide section, "After We Complete the Assessment, What Next?" for details on the above steps.

Assessment results represent the collective performance of all entities in the local public health system and not any one organization. Therefore, system partners should be involved in the discussion of results and improvement strategies to assure that this information is appropriately used. The assessment results can drive improvement planning within each organization as well as system-wide. In addition, coordinated use of the Local Instrument with the Governance Instrument or state-wide use of the Local Instrument can lead to more successful and comprehensive improvement plans to address more systemic statewide issues.

Although respondents will ultimately want to review these results with stakeholders in the context of their overall performance improvement process, they may initially find it helpful to review the results either individually or in a small group. The following tips may be helpful when initially reviewing the results, or preparing to present the results to performance improvement stakeholders.

Examine performance scores

First, sites should take a look at the overall or composite performance scores for Essential Services and model standards. These scores are presented visually in order by Essential Service (Figure 1) and in ascending order (Figure 2). Additionally, Figure 3 uses color designations to indicate performance level categories. Examination of these scores can immediately give a sense of the local public health system's greatest strengths and weaknesses.

Review the range of scores within each Essential Service and model standard

The Essential Service score is an average of the model standard scores within that service, and, in turn, the model standard scores represent the average of stem question scores for that standard. If there is great range or difference in scores, focusing attention on the model standard(s) or questions with the lower scores will help to identify where performance inconsistency or weakness may be. Some figures, such as the bar charts in Figure 4, provide "range bars" which indicate the variation in scores. Looking for long range bars will help to easily identify these opportunities.

Also, refer back to the original question responses to determine where weaknesses or inconsistencies in performance may be occurring. By examining the assessment questions, including the subquestions and discussion toolbox items, participants will be reminded of particular areas of concern that may most need attention.

Consider the context

The NPHPSP User Guide and other technical assistance resources strongly encourage responding jurisdictions to gather and record qualitative input from participants throughout the assessment process. Such information can include insights that shaped group responses, gaps that were uncovered, solutions to identified problems, and impressions or early ideas for improving system performance. This information should have emerged from the general discussion of the model standards and assessment questions, as well as the responses to discussion toolbox topics.

The results viewed in this report should be considered within the context of this qualitative information, as well as with other information. The assessment report, by itself, is not intended to be the sole "roadmap" to answer the question of what a local public health system's performance improvement priorities should be. The original purpose of the assessment, current issues being addressed by the community, and the needs and interests for all stakeholders should be considered.

Some sites have used a process such as Mobilizing for Action through Planning and Partnerships (MAPP) to address their NPHPSP data within the context of other community issues. In the MAPP process, local users consider the NPHPSP results in addition to three other assessments - community health status, community themes and strengths, and forces of change - before determining strategic issues, setting priorities, and developing action plans. See "Resources for Next Steps" for more about MAPP.

Use the optional priority rating and agency contribution questionnaire results

Sites may choose to complete two optional questionnaires - one which asks about priority of each model standard and the second which assesses the local health department's contribution to achieving of the model standard. The supplemental priority questionnaire, which asks about the priority of each model standard to the public health system, should guide sites in considering their performance scores in relationship to their own system's priorities. The use of this questionnaire can guide sites in targeting their limited attention and resources to areas of high priority but low performance. This information should serve to catalyze or strengthen the performance improvement activities resulting from the assessment process.

The second questionnaire, which asks about the contribution of the public health agency to each model standard, can assist sites in considering the role of the agency in performance improvement efforts. Sites that use this component will see a list of questions to consider regarding the agency role and as it relates to the results for each model standard. These results may assist the local health department in its own strategic planning and quality improvement activities.

IV. FINAL REMARKS

The challenge of preventing illness and improving health is ongoing and complex. The ability to meet this challenge rests on the capacity and performance of public health systems. Through well equipped, high-performing public health systems, this challenge can be addressed. Public health performance standards are intended to guide the development of stronger public health systems capable of improving the health of populations. The development of high-performing public health systems will increase the likelihood that all citizens have access to a defined optimal level of public health services. Through periodic assessment guided by model performance standards, public health leaders can improve collaboration and integration among the many components of a public health system, and more effectively and efficiently use resources while improving health intervention services.

B. Performance Assessment Instrument Results

I. How well did the system perform the ten Essential Public Health Services (EPHS)?

Table 1: Summary of performance scores by Essential Public Health Service (EPHS)

EPHS		Score
1	Monitor Health Status To Identify Community Health Problems	61
2	Diagnose And Investigate Health Problems and Health Hazards	85
3	Inform, Educate, And Empower People about Health Issues	68
4	Mobilize Community Partnerships to Identify and Solve Health Problems	56
5	Develop Policies and Plans that Support Individual and Community Health Efforts	78
6	Enforce Laws and Regulations that Protect Health and Ensure Safety	80
7	Link People to Needed Personal Health Services and Assure the Provision of Health Care when Otherwise Unavailable	64
8	Assure a Competent Public and Personal Health Care Workforce	50
9	Evaluate Effectiveness, Accessibility, and Quality of Personal and Population-Based Health Services	78
10	Research for New Insights and Innovative Solutions to Health Problems	40
Overall Performance Score		66

Figure 1: Summary of EPHS performance scores and overall score (with range)

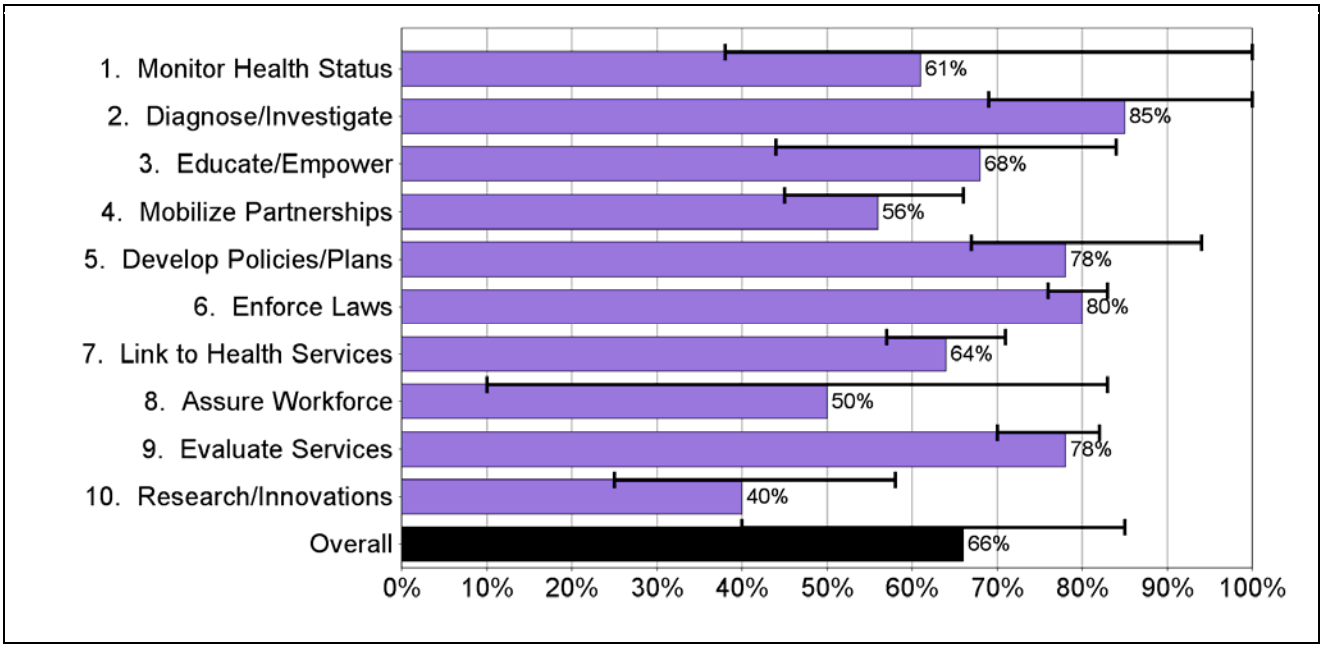


Table 1 (above) provides a quick overview of the system's performance in each of the 10 Essential Public Health Services (EPHS). Each EPHS score is a composite value determined by the scores given to those activities that contribute to each Essential Service. These scores range from a minimum value of 0% (no activity is performed pursuant to the standards) to a maximum of 100% (all activities associated with the standards are performed at optimal levels).

Figure 1 (above) displays performance scores for each Essential Service along with an overall score that indicates the average performance level across all 10 Essential Services. The range bars show the minimum and maximum values of responses within the Essential Service and an overall score. Areas of wide range may warrant a closer look in **Figure 4** or the raw data.

Figure 2: Rank ordered performance scores for each Essential Service

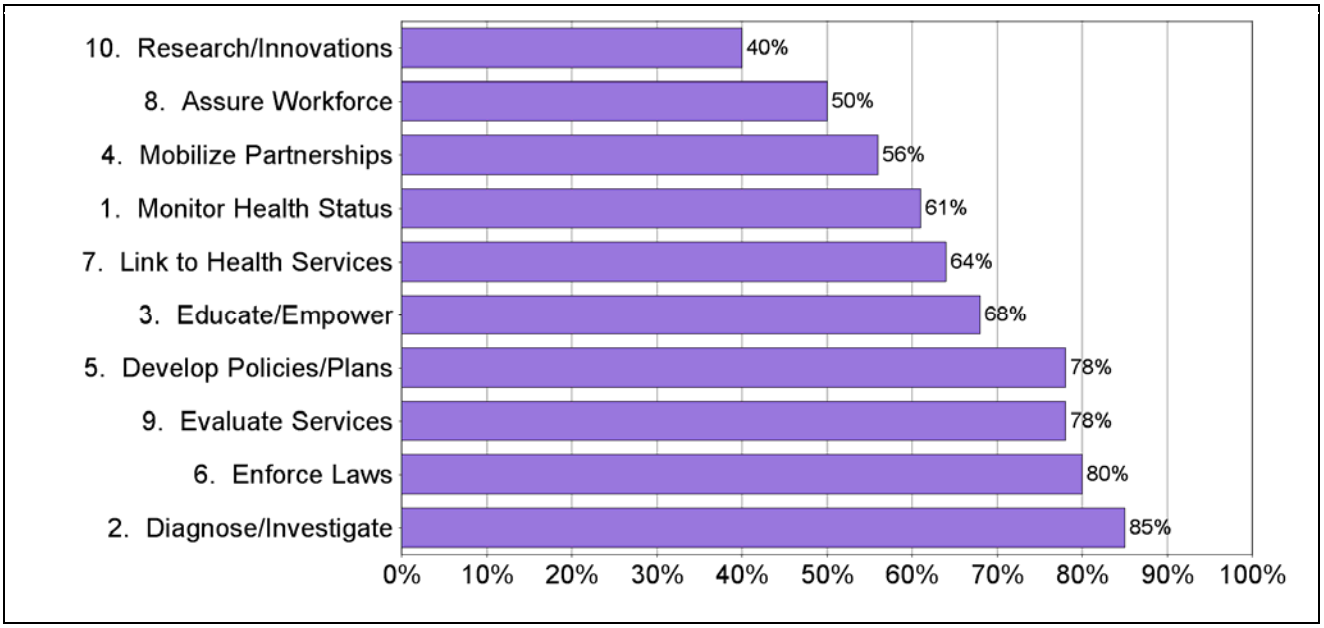


Figure 3: Rank ordered performance scores for each Essential Service, by level of activity

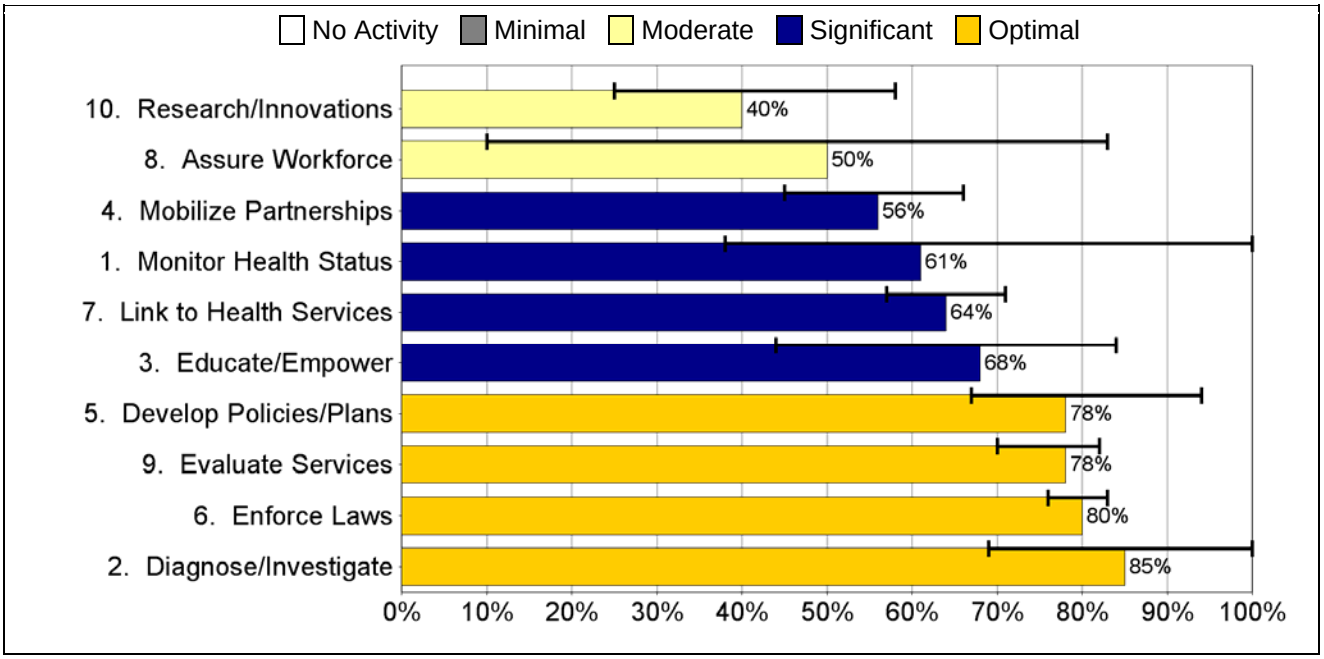


Figure 2 (above) displays each composite score from low to high, allowing easy identification of service domains where performance is relatively strong or weak.

Figure 3 (above) provides a composite picture of the previous two graphs. The range lines show the range of responses within an Essential Service. The color coded bars make it easier to identify which of the Essential Services fall in the five categories of performance activity.

Figure 4 (next page) shows scores for each model standard. Sites can use these graphs to pinpoint specific activities within the Essential Service that may need a closer look. Note these scores also have range bars, showing sub-areas that comprise the model standard.

II. How well did the system perform on specific model standards?

Figure 4: Performance scores for each model standard, by Essential Service

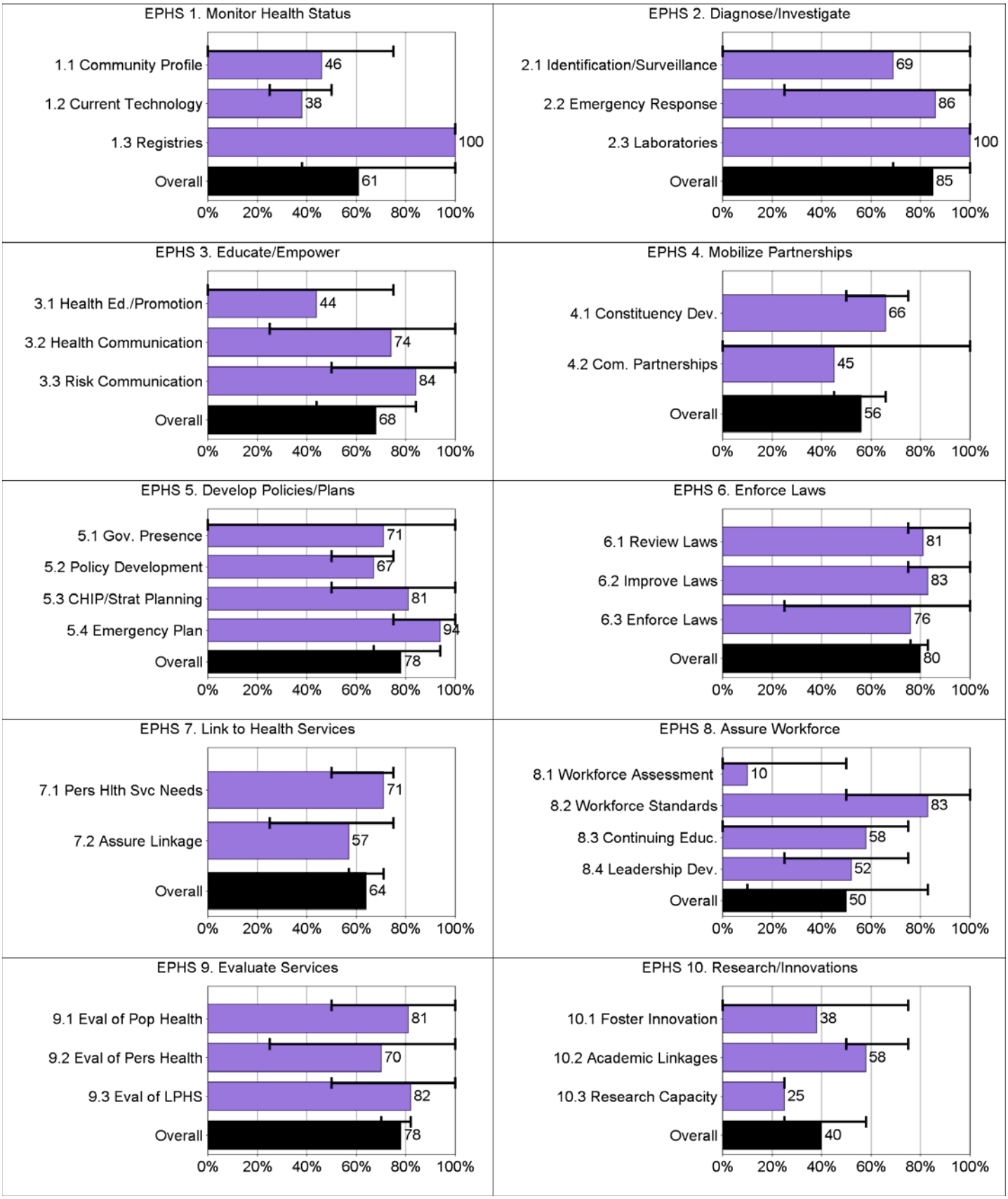


Table 2: Summary of performance scores by Essential Public Health Service (EPHS) and model standard

Essential Public Health Service	Score
EPHS 1. Monitor Health Status To Identify Community Health Problems	61
1.1 Population-Based Community Health Profile (CHP)	46
1.1.1 Community health assessment	47
1.1.2 Community health profile (CHP)	50
1.1.3 Community-wide use of community health assessment or CHP data	42
1.2 Access to and Utilization of Current Technology to Manage, Display, Analyze and Communicate Population Health Data	38
1.2.1 State-of-the-art technology to support health profile databases	38
1.2.2 Access to geocoded health data	50
1.2.3 Use of computer-generated graphics	25
1.3 Maintenance of Population Health Registries	100
1.3.1 Maintenance of and/or contribution to population health registries	100
1.3.2 Use of information from population health registries	100
EPHS 2. Diagnose And Investigate Health Problems and Health Hazards	85
2.1 Identification and Surveillance of Health Threats	69
2.1.1 Surveillance system(s) to monitor health problems and identify health threats	63
2.1.2 Submission of reportable disease information in a timely manner	75
2.1.3 Resources to support surveillance and investigation activities	69
2.2 Investigation and Response to Public Health Threats and Emergencies	86
2.2.1 Written protocols for case finding, contact tracing, source identification, and containment	67
2.2.2 Current epidemiological case investigation protocols	73
2.2.3 Designated Emergency Response Coordinator	100
2.2.4 Rapid response of personnel in emergency / disasters	88
2.2.5 Evaluation of public health emergency response	100
2.3 Laboratory Support for Investigation of Health Threats	100
2.3.1 Ready access to laboratories for routine diagnostic and surveillance needs	100
2.3.2 Ready access to laboratories for public health threats, hazards, and emergencies	100
2.3.3 Licenses and/or credentialed laboratories	100
2.3.4 Maintenance of guidelines or protocols for handling laboratory samples	100
EPHS 3. Inform, Educate, And Empower People about Health Issues	68
3.1 Health Education and Promotion	44
3.1.1 Provision of community health information	25
3.1.2 Health education and/or health promotion campaigns	56
3.1.3 Collaboration on health communication plans	50
3.2 Health Communication	74
3.2.1 Development of health communication plans	65
3.2.2 Relationships with media	71
3.2.3 Designation of public information officers	88
3.3 Risk Communication	84
3.3.1 Emergency communications plan(s)	100
3.3.2 Resources for rapid communications response	75
3.3.3 Crisis and emergency communications training	75
3.3.4 Policies and procedures for public information officer response	88

Essential Public Health Service	Score
EPHS 4. Mobilize Community Partnerships to Identify and Solve Health Problems	56
4.1 Constituency Development	66
4.1.1 Identification of key constituents or stakeholders	72
4.1.2 Participation of constituents in improving community health	69
4.1.3 Directory of organizations that comprise the LPHS	63
4.1.4 Communications strategies to build awareness of public health	63
4.2 Community Partnerships	45
4.2.1 Partnerships for public health improvement activities	63
4.2.2 Community health improvement committee	60
4.2.3 Review of community partnerships and strategic alliances	13
EPHS 5. Develop Policies and Plans that Support Individual and Community Health Efforts	78
5.1 Government Presence at the Local Level	71
5.1.1 Governmental local public health presence	100
5.1.2 Resources for the local health department	63
5.1.3 Local board of health or other governing entity (not scored)	0
5.1.4 LHD work with the state public health agency and other state partners	50
5.2 Public Health Policy Development	67
5.2.1 Contribution to development of public health policies	71
5.2.2 Alert policymakers/public of public health impacts from policies	75
5.2.3 Review of public health policies	54
5.3 Community Health Improvement Process	81
5.3.1 Community health improvement process	93
5.3.2 Strategies to address community health objectives	75
5.3.3 Local health department (LHD) strategic planning process	75
5.4 Plan for Public Health Emergencies	94
5.4.1 Community task force or coalition for emergency preparedness and response plans	88
5.4.2 All-hazards emergency preparedness and response plan	96
5.4.3 Review and revision of the all-hazards plan	100
EPHS 6. Enforce Laws and Regulations that Protect Health and Ensure Safety	80
6.1 Review and Evaluate Laws, Regulations, and Ordinances	81
6.1.1 Identification of public health issues to be addressed through laws, regulations, and ordinances	75
6.1.2 Knowledge of laws, regulations, and ordinances	75
6.1.3 Review of laws, regulations, and ordinances	75
6.1.4 Access to legal counsel	100
6.2 Involvement in the Improvement of Laws, Regulations, and Ordinances	83
6.2.1 Identification of public health issues not addressed through existing laws	75
6.2.2 Development or modification of laws for public health issues	100
6.2.3 Technical assistance for drafting proposed legislation, regulations, or ordinances	75
6.3 Enforce Laws, Regulations and Ordinances	76
6.3.1 Authority to enforce laws, regulation, ordinances	88
6.3.2 Public health emergency powers	100
6.3.3 Enforcement in accordance with applicable laws, regulations, and ordinances	79
6.3.4 Provision of information about compliance	50
6.3.5 Assessment of compliance	63

Essential Public Health Service	Score
EPHS 7. Link People to Needed Personal Health Services and Assure the Provision of Health Care when Otherwise Unavailable	64
7.1 Identification of Populations with Barriers to Personal Health Services	71
7.1.1 Identification of populations who experience barriers to care	75
7.1.2 Identification of personal health service needs of populations	75
7.1.3 Assessment of personal health services available to populations who experience barriers to care	63
7.2 Assuring the Linkage of People to Personal Health Services	57
7.2.1 Link populations to needed personal health services	75
7.2.2 Assistance to vulnerable populations in accessing needed health services	46
7.2.3 Initiatives for enrolling eligible individuals in public benefit programs	75
7.2.4 Coordination of personal health and social services	31
EPHS 8. Assure a Competent Public and Personal Health Care Workforce	50
8.1 Workforce Assessment Planning, and Development	10
8.1.1 Assessment of the LPHS workforce	0
8.1.2 Identification of shortfalls and/or gaps within the LPHS workforce	29
8.1.3 Dissemination of results of the workforce assessment / gap analysis	0
8.2 Public Health Workforce Standards	83
8.2.1 Awareness of guidelines and/or licensure/certification requirements	63
8.2.2 Written job standards and/or position descriptions	75
8.2.3 Annual performance evaluations	75
8.2.4 LHD written job standards and/or position descriptions	100
8.2.5 LHD performance evaluations	100
8.3 Life-Long Learning Through Continuing Education, Training, and Mentoring	58
8.3.1 Identification of education and training needs for workforce development	73
8.3.2 Opportunities for developing core public health competencies	46
8.3.3 Educational and training incentives	63
8.3.4 Interaction between personnel from LPHS and academic organizations	50
8.4 Public Health Leadership Development	52
8.4.1 Development of leadership skills	44
8.4.2 Collaborative leadership	75
8.4.3 Leadership opportunities for individuals and/or organizations	50
8.4.4 Recruitment and retention of new and diverse leaders	38

Essential Public Health Service	Score
EPHS 9. Evaluate Effectiveness, Accessibility, and Quality of Personal and Population-Based Health Services	78
9.1 Evaluation of Population-based Health Services	81
9.1.1 Evaluation of population-based health services	75
9.1.2 Assessment of community satisfaction with population-based health services	100
9.1.3 Identification of gaps in the provision of population-based health services	100
9.1.4 Use of population-based health services evaluation	50
9.2 Evaluation of Personal Health Care Services	70
9.2.1.In Personal health services evaluation	71
9.2.2 Evaluation of personal health services against established standards	100
9.2.3 Assessment of client satisfaction with personal health services	63
9.2.4 Information technology to assure quality of personal health services	44
9.2.5 Use of personal health services evaluation	75
9.3 Evaluation of the Local Public Health System	82
9.3.1 Identification of community organizations or entities that contribute to the EPHS	75
9.3.2 Periodic evaluation of LPHS	92
9.3.3 Evaluation of partnership within the LPHS	83
9.3.4 Use of LPHS evaluation to guide community health improvements	78
EPHS 10. Research for New Insights and Innovative Solutions to Health Problems	40
10.1 Fostering Innovation	38
10.1.1 Encouragement of new solutions to health problems	50
10.1.2 Proposal of public health issues for inclusion in research agenda	0
10.1.3 Identification and monitoring of best practices	75
10.1.4 Encouragement of community participation in research	25
10.2 Linkage with Institutions of Higher Learning and/or Research	58
10.2.1 Relationships with institutions of higher learning and/or research organizations	75
10.2.2 Partnerships to conduct research	50
10.2.3 Collaboration between the academic and practice communities	50
10.3 Capacity to Initiate or Participate in Research	25
10.3.1 Access to researchers	25
10.3.2 Access to resources to facilitate research	25
10.3.3 Dissemination of research findings	25
10.3.4 Evaluation of research activities	25

III. Overall, how well is the system achieving optimal activity levels?

Figure 5: Percentage of Essential Services scored in each level of activity

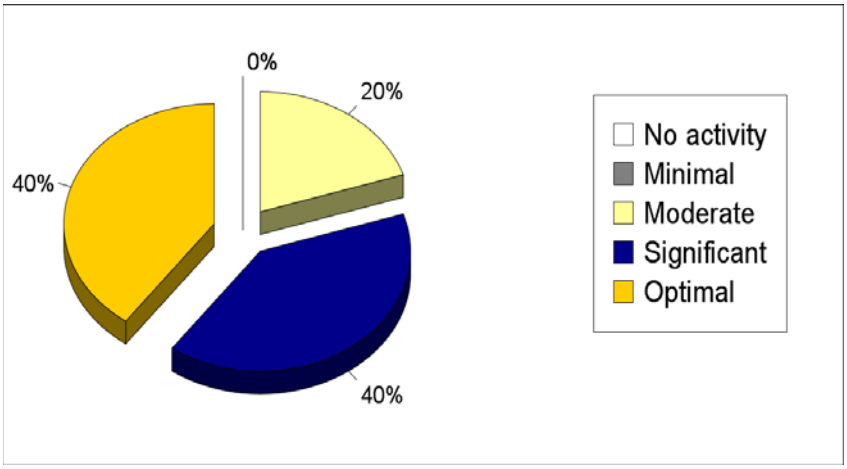


Figure 5 displays the percentage of the system's Essential Services scores that fall within the five activity categories. This chart provides the site with a high level snapshot of the information found in **Figure 3**.

Figure 6: Percentage of model standards scored in each level of activity

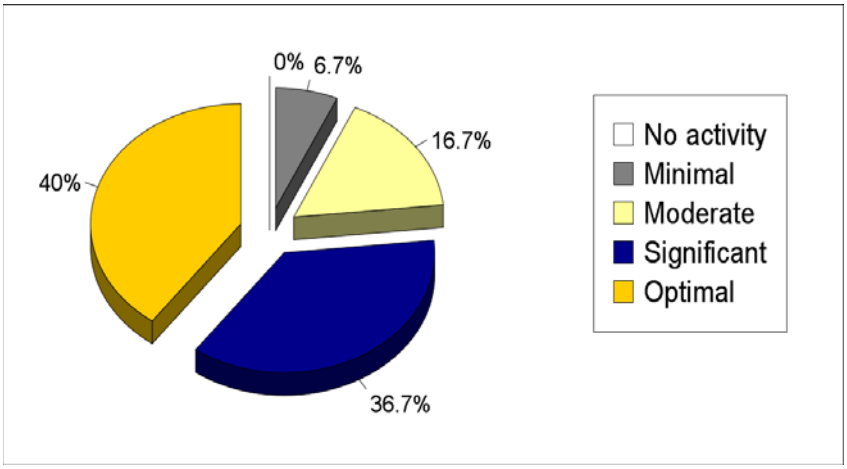


Figure 6 displays the percentage of the system's model standard scores that fall within the five activity categories.

Figure 7: Percentage of all questions scored in each level of activity

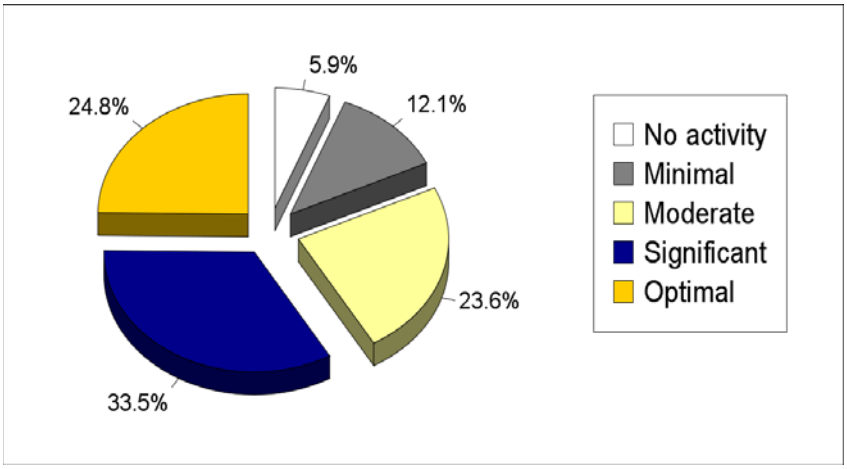


Figure 7 displays the percentage of all scored questions that fall within the five activity categories. This breakdown provides a closer snapshot of the system's performance, showing variation that may be masked by the scores in **Figures 5** and **6**.

D. Optional agency contribution results

How much does the Local Health Department contribute to the system's performance, as perceived by assessment participants?

Tables 5 and **6** (below) display Essential Services and model standards arranged by Local Health Department (LHD) contribution (Highest to Lowest) and performance score. Sites may want to consider the questions listed before these tables to further examine the relationship between the system and Department in achieving Essential Services and model standards. Questions to consider are suggested based on the four categories or "quadrants" displayed in **Figures 10** and **11**.

Quadrant		Questions to Consider
I.	**Low Performance/High Department Contribution**	• Is the Department's level of effort truly high, or do they just do more than anyone else? • Is the Department effective at what it does, and does it focus on the right things? • Is the level of Department effort sufficient for the jurisdiction's needs? • Should partners be doing more, or doing different things? • What else within or outside of the Department might be causing low performance?
II.	**High Performance/High Department Contribution**	• What does the Department do that may contribute to high performance in this area? Could any of these strategies be applied to other areas? • Is the high Department contribution appropriate, or is the Department taking on what should be partner responsibilities? • Could the Department do less and maintain satisfactory performance?
III.	**High Performance/Low Department Contribution**	• Who are the key partners that contribute to this area? What do they do that may contribute to high performance? Could any of these strategies be applied to other areas? • Does the low Department contribution seem right for this area, or are partners picking up slack for Department responsibilities? • Does the Department provide needed support for partner efforts? • Could the key partners do less and maintain satisfactory performance?
IV.	**Low Performance/Low Department Contribution**	• Who are the key partners that contribute to this area? Are their contributions truly high, or do they just do more than the Department? • Is the total level of effort sufficient for the jurisdiction's needs? • Are partners effective at what they do, and do they focus on the right things? • Does the low Department contribution seem right for this area, or is it likely to be contributing to low performance? • Does the Department provide needed support for partner efforts? • What else might be causing low performance?

Table 5: Essential Service by perceived LHD contribution and score

Essential Service	LHD Contribution	Performance Score	Consider Questions for:
1. Monitor Health Status To Identify Community Health Problems	50%	Significant (61)	Quadrant IV
2. Diagnose And Investigate Health Problems and Health Hazards	83%	Optimal (85)	Quadrant II
3. Inform, Educate, And Empower People about Health Issues	83%	Significant (68)	Quadrant II
4. Mobilize Community Partnerships to Identify and Solve Health Problems	75%	Significant (56)	Quadrant I
5. Develop Policies and Plans that Support Individual and Community Health Efforts	94%	Optimal (78)	Quadrant II
6. Enforce Laws and Regulations that Protect Health and Ensure Safety	67%	Optimal (80)	Quadrant III
7. Link People to Needed Personal Health Services and Assure the Provision of Health Care when Otherwise Unavailable	75%	Significant (64)	Quadrant I
8. Assure a Competent Public and Personal Health Care Workforce	69%	Significant (50)	Quadrant IV
9. Evaluate Effectiveness, Accessibility, and Quality of Personal and Population-Based Health Services	75%	Optimal (78)	Quadrant II
10. Research for New Insights and Innovative Solutions to Health Problems	42%	Moderate (40)	Quadrant IV

Table 6: Model standards by perceived LHD contribution and score

Model Standard	LHD Contribution	Performance Score	Consider Questions for:
1.1 Population-Based Community Health Profile (CHP)	75%	Moderate (46)	Quadrant I
1.2 Access to and Utilization of Current Technology to Manage, Display, Analyze and Communicate Population Health Data	50%	Moderate (38)	Quadrant IV
1.3 Maintenance of Population Health Registries	25%	Optimal (100)	Quadrant III
2.1 Identification and Surveillance of Health Threats	100%	Significant (69)	Quadrant II
2.2 Investigation and Response to Public Health Threats and Emergencies	100%	Optimal (86)	Quadrant II
2.3 Laboratory Support for Investigation of Health Threats	50%	Optimal (100)	Quadrant III
3.1 Health Education and Promotion	100%	Moderate (44)	Quadrant I
3.2 Health Communication	75%	Significant (74)	Quadrant II
3.3 Risk Communication	75%	Optimal (84)	Quadrant II
4.1 Constituency Development	75%	Significant (66)	Quadrant II
4.2 Community Partnerships	75%	Moderate (45)	Quadrant I
5.1 Government Presence at the Local Level	75%	Significant (71)	Quadrant II
5.2 Public Health Policy Development	100%	Significant (67)	Quadrant II
5.3 Community Health Improvement Process	100%	Optimal (81)	Quadrant II
5.4 Plan for Public Health Emergencies	100%	Optimal (94)	Quadrant II
6.1 Review and Evaluate Laws, Regulations, and Ordinances	50%	Optimal (81)	Quadrant III
6.2 Involvement in the Improvement of Laws, Regulations, and Ordinances	75%	Optimal (83)	Quadrant II
6.3 Enforce Laws, Regulations and Ordinances	75%	Optimal (76)	Quadrant II
7.1 Identification of Populations with Barriers to Personal Health Services	75%	Significant (71)	Quadrant II
7.2 Assuring the Linkage of People to Personal Health Services	75%	Significant (57)	Quadrant I
8.1 Workforce Assessment Planning, and Development	75%	Minimal (10)	Quadrant I
8.2 Public Health Workforce Standards	75%	Optimal (83)	Quadrant II
8.3 Life-Long Learning Through Continuing Education, Training, and Mentoring	75%	Significant (58)	Quadrant I
8.4 Public Health Leadership Development	50%	Significant (52)	Quadrant IV
9.1 Evaluation of Population-based Health Services	75%	Optimal (81)	Quadrant II
9.2 Evaluation of Personal Health Care Services	75%	Significant (70)	Quadrant II
9.3 Evaluation of the Local Public Health System	75%	Optimal (82)	Quadrant II
10.1 Fostering Innovation	75%	Moderate (38)	Quadrant I
10.2 Linkage with Institutions of Higher Learning and/or Research	25%	Significant (58)	Quadrant IV
10.3 Capacity to Initiate or Participate in Research	25%	Minimal (25)	Quadrant IV

Figure 10: Scatter plot of Essential Service scores and LHD contribution scores

Essential Service data are calculated as a mean of model standard ratings within each Essential Service.

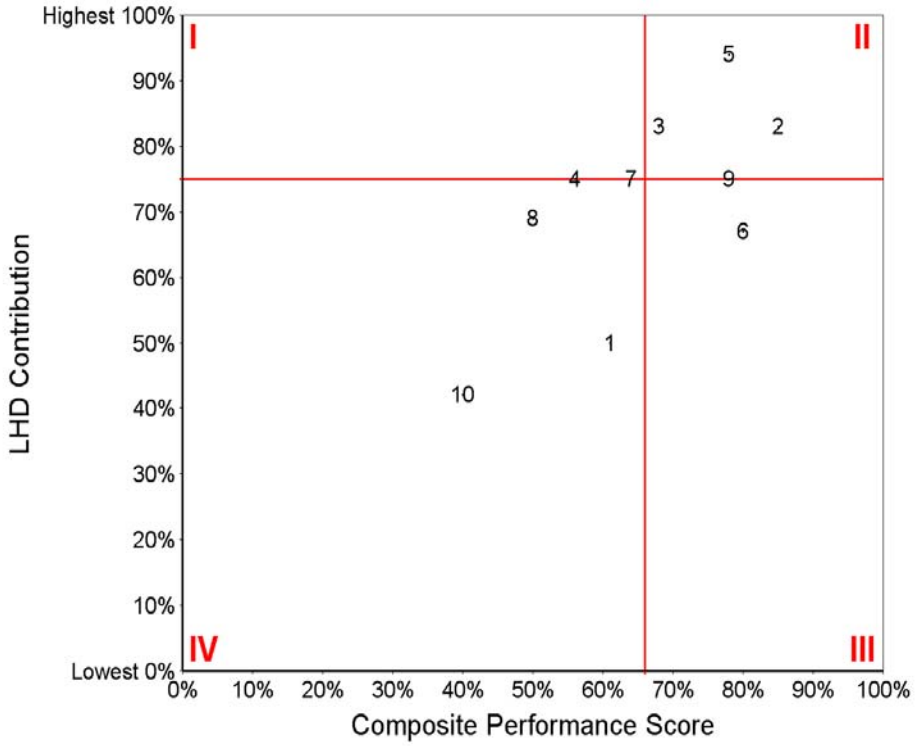
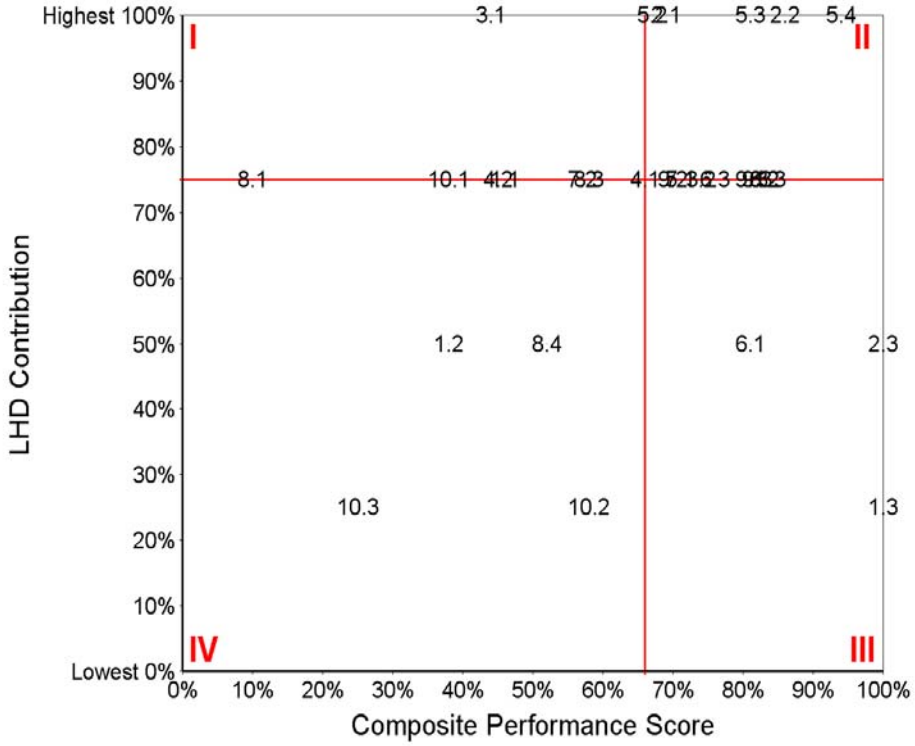


Figure 11: Scatter plot of model standard scores and LHD contribution scores



APPENDIX: RESOURCES FOR NEXT STEPS

The NPHPSP offers a variety of information, technical assistance, and training resources to assist in quality improvement activities. Descriptions of these resources are provided below. Other resources and websites that may be of particular interest to NPHPSP users are also noted below.

- **Technical Assistance and Consultation -** NPHPSP partners are available for phone and email consultation to state and localities as they plan for and conduct NPHPSP assessment and performance improvement activities. Contact 1-800-747-7649 or phpsp@cdc.gov.

- **NPHPSP User Guide -** The NPHPSP User Guide section, "After We Complete the Assessment, What Next?" describes five essential steps in a performance improvement process following the use of the NPHPSP assessment instruments. The NPHPSP User Guide may be found on the NPHPSP website (http://www.cdc.gov/NPHPSP/PDF/UserGuide.pdf).

- **NPHPSP Online Tool Kit -** Additional resources that may be found on, or are linked to, the NPHPSP website (http://www.cdc.gov/NPHPSP/generalResources.html) under the "Post Assessment/ Performance Improvement" link include sample performance improvement plans, quality improvement and priority-setting tools, and other technical assistance documents and links.

- **NPHPSP Online Resource Center -** Designed specifically for NPHPSP users, the Public Health Foundation's online resource center (www.phf.org/nphpsp) for public health systems performance improvement allows users to search for State, Local, and Governance resources by model standards, essential public health service, and keyword.;

- **NPHPSP Monthly User Calls -** These calls feature speakers and dialogue on topic of interest to users. They also provide an opportunity for people from around the country to learn from each other about various approaches to the NPHPSP assessment and performance improvement process. Calls occur on the third Tuesday of each month, 2:00 - 3:00 ET. Contact phpsp@cdc.gov to be added to the email notification list for the call.

- **Annual Training Workshop -** Individuals responsible for coordinating performance assessment and improvement activities may attend an annual two-day workshop held in the spring of each year. Visit the NPHPSP website (http://www.cdc.gov/nphpsp/annualTrainingWorkshop.html) for more information.

- **Public Health Improvement Resource Center at the Public Health Foundation -** This website (www.phf.org/improvement) provides resources and tools for evaluating and building the capacity of public health systems. More than 100 accessible resources organized here support the initiation and continuation of quality improvement efforts. These resources promote performance management and quality improvement, community health information and data systems, accreditation preparation, and workforce development.

- **Mobilizing for Action through Planning and Partnerships (MAPP) -** MAPP has proven to be a particularly helpful tool for sites engaged in community-based health improvement planning. Systems that have just completed the NPHPSP may consider using the MAPP process as a way to launch their performance improvement efforts. Go to www.naccho.org/topics/infrastructure/MAPP to link directly to the MAPP website.

19

ATTACHMENT 6

Community Health Status Assessment

Charlevoix Area Hospital

HEALTH DEPARTMENT of Northwest Michigan

McLaren NORTHERN MICHIGAN

Northern Health Plan

OMH

INDICATOR TITLE	OTSEGO	MONTMORENCY	STATE OF MICHIGAN
DEMOGRAPHIC			
2010 Population	24,164	9,765	9,883,640
2000 Population	23,301	10,315	9,938,444
Net Change in Population (2000-2010)	863	-550	-54,804
Total Number of Households (2006-2010)	9,753	4,335	3,843,997
Population by age group/sex (see demographic age/sex table)			
Population by race/ethnicity (see race/ethnicity table)			
HEALTH			
Adults with Health Insurance	84%	81%	82%
Children with Health Insurance	94.80%	93.50%	94.90%
Primary Care Provider Ratio	910:1	2037:1	874:1
Preventable Hospital Stays per 1,000 Medicare Enrollees	62	56	74
Mental Health Providers	7887:1	10185:1	2853:1
Health System Capacity:			
Licensed dentists (Rate total population)	2060:1	4998:1	2084:1
Licensed General Practice / Family Practice Physicians(Rate total population) > Number of Doctors per 100,000 Population	40.45	40.74	35.5
Licensed optometrists	9	0	1,639
LPNs	97	49	28,595
NPs	11	2	4,449
Licensed internal medicine physicians (Rate total population) > Drs/ 100,000	15.73	0	47.06
Licensed ob/gyn physicians (Rate total population) > Drs/100,000	4.49	0	13.66
Licensed pediatricians (Rate total population) > Drs/ 100,000	11.24	0	17.57
Local health department full time equivalents employees (FTEs): number per total population	103/115	53.1/56	
Total operating budget of local health department	$21,000,000	$4,775,205	
Medicaid dentist availability	3	5	1,668
HOSPITAL			
Emergency Department Admissions (Number of ED Admissions by Hospital) *State is total Number of ED Visits, ** County without hospital	12,594	N/A	4,368,158
Frequency of Hospitalizations (rate per 10,000 population)	1074.7±41.3	1347.7±72.8	1312.3±2.3
Average Length of Hospital Stay (Days)	3.1	N/A	4.7
Inpatient Admission Rates (Discharges per Year)	1,640	N/A	1,168,157
Licensed hospital beds	46	0	28, 504

INDICATOR TITLE	OTSEGO	MONTMORENCY	STATE OF MICHIGAN
Nursing home beds	154	90	45,067
Population served by community/migrant health centers (Number of Section 330 Patients)	519	5,567	514,987
Number of Adult Foster Care Homes/ Homes for the Aged	21	7	4,653
Licensed special care beds	4	0**	2,980
Licensed acute care hospital beds	46	0	26,263
CHRONIC DISEASES			
Cancer:			
Age-adjusted Death Rate due to Breast Cancer (2008)	*	*	24.2±1.2
Age-adjusted Death Rate due to Cancer (MDCH) (2007-2009)	192.0±29.0	198.6±39.9	181.9±2.5
Age-adjusted Death Rate due to Colorectal Cancer (2008)	*	*	16.7±0.7
Age-adjusted Death Rate due to Lung Cancer (2008)	*	*	54.5±1.3
Age-adjusted Death Rate due to Prostate Cancer (2008)	*	*	21.9±1.1
All Cancer Incidence Rate (2005-2009)	498.5 # (462.3, 536.8)	549.4 # (498.6, 605.1)	485.4 # (483.5, 487.2)
Breast Cancer Incidence Rate (2005-2009)	134.3 # (109.3, 163.8)	115.5 # (83.2, 158.9)	120.3 # (119.0, 121.5)
Colorectal Cancer Incidence Rate (2005-2009)	49.5 # (38.5, 63.0)	40.1 # (28.0, 57.5)	46.2 # (45.6, 46.8)
Lung and Bronchus Cancer Incidence Rate (2005-2009	72.1 # (59.1, 87.4)	83.4 # (66.0, 105.6)	72.1 # (71.4, 72.8)
Oral Cavity and Pharynx Cancer Incidence Rate (2005-2009)	15.4 # (9.5, 23.7)	23.7 # (13.8, 39.5)	11.1 # (10.8, 11.4)
Prostate Cancer Incidence Rate (2005-2009)	145.7 # (119.3, 176.5)	163.8 # (129.3, 207.9)	166.5 # (164.8, 168.1)
Age-Adjusted Death Rate due to Kidney Disease per 100,000 (2008-10)	*	*	15.1 ± 0.4
Mammography Screening: Medicare Population	74%	80%	68%
Cellulitis hospitilizations	21	17	16,284
Cellulitis hospitilizations (number/rate per 10, 000 pop. In 2010)	20 / 8.3 ± 3.6	5 / **	16, 284 / 16.5± 0.3
Asthma hospitalizations (Total number/rate per 10, 000 pop. In 2010)	8 / 3.3±2.3	6 / 6.1±4.9	15, 471 / 15.7±0.2
Influenza hospitalizations	1	0	147
Malignant hypertension hospitalizations	5	0	3,599
Perforated/bleeding ulcer hospitalizations	4	8	5,438
Pneumonia hospitalizations (rate per 10,000 population in 2010)	47.2±8.7	47.1±13.6	34.8±0.4
Pyelonephritis hospitalizations (Kidney/Urinary Infections for State Data)	2	0	17,949
Ruptured appendix hospitalizations (Appendicitis for State)	1	5	7,796
Gangrene hospitalizations	3	1	70
Age-adjusted death rate due to Melanoma per 100,000 (* = Suppressed Data, fewer than 16 cases) (2005-2009)	*	*	2.4±0.1
Diabetes:			
Adults with Diabetes	9%	12%	10%

INDICATOR TITLE	OTSEGO	MONTMORENCY	STATE OF MICHIGAN
Diabetic Screening: Medicare Population	81%	87%	84%
Age-adjusted Death Rate due to Diabetes (related causes)2006-10	56.6±12.0	76.6±22.9	78.2±0.7
Heart Disease and Stroke:			
Congestive Heart failure hospitalizations (number/ rate per 100,000 pop. in 2010)	84/ 34.8±7.4	45/ 46.1± 13.5	36,665 / 37.1± 0.4
Age-adjusted Death Rate due to Coronary Heart Disease (per 100,000)	194.3±30.0	259.8±43.4	206.5±2.7
Percentage of Persons who have ever been told they have hypertension	30.20%	35.40%	29.80%
Age-adjusted Death Rate due to Cerebrovascular Disease per 100,000 (Stroke)	54.5±16.2	36.4±15.2	39.9±1.2
Respiratory Diseases:			
Age-adjusted Death Rate due to Chronic Lower Respiratory Diseases	55.4±15.9	67.3±20.8	45.1±1.3
Pneumonia/influenza (Deaths)	2	2	1,540
Percentage of High School students who have ever been told by a doctor or nurse that they have asthma	22.60%	24.80%	23.30%
Chronic obstructive lung disease (MDCH: Chronic Lower Respiratory Disease Deaths)	15	17	4,941
Chronic liver disease and cirrhosis (Deaths)2006-10	2	0	1,130
COMMUNICABLE DISEASES & IMMS:			
Chlamydia Incidence (per 10,000 , Ages 15-90+)	12.7	13.0	61.82
Gonorrhea Incidence (per 10,000, Ages 15-90+)	2.0	1.2	16.2
Age-adjusted Death Rate due to Influenza and Pneumonia	*	*	13.9±0.7
2-year-olds up-to-date vaccines	76%	77%	85.50%
% of 65+ immunized for influenza ONLY for LHDs (for 2011-2012)** State (2010 for ALL)	0.90%	0%	67.50%
Children Vaccinated against Vaccine Preventable Diseases by Age & CDC Guidelines			
0-4 Months	7%	13%	
4-18 Months	9%	8%	
18-71 Months	29%	32%	
72-131 Months	72%	79%	
132-227 Months	62%	71%	
Congenital syphilis	0	0	2
Syphillis cases	0	0	684
Bacterial meningitis	0	0	137
Tuberculosis	0	0	957
Measles	0	0	2
Mumps	0	0	11
Rubella	0	0	0
Tetanus	0	0	5

INDICATOR TITLE	OTSEGO	MONTMORENCY	STATE OF MICHIGAN
Pertussis	0	0	523
Streptococcus Pneumoniae Invasive	1	2	587
Hospital Acquired Infections (HAI) (Do not Delete, may be able to find for next assessment)			
Other Category of MDSS*** (Not including Strep Throat or Head Lice)	3	1	49,304
Hepatitis A	0	0	93
Hepatitis B (Acute & Chronic)	2	0	1,477
Hepatitis C (Acute, Chronic & Unknown)	9	3	8,625
AIDS (reported prevalence)	11	3	14,715
DISABILITY			
Population with a Disability (2006-2010)	3,683	2,609	1,711,231
Percent of Population with a Disability (2006-2010)	15.2%	26.7%	17.3%
FAMILY PLANNING			
Teen Birth Rate	33	28	35
Teen Pregnancy Rate	48.6	*	47.9
Teens who are Sexually Active (MiPhy HS) (who have ever had sex in their lifetime)	44.9%	34.8%	45.6%
Teen pregnancies	39	5	17,237
INJURY AND VIOLENCE PREVENTION			
Age-adjusted Death Rate due to Unintentional Injuries	68.9±19.4	*	35.4±1.2
Work-related deaths	1	0	144
Maternal deaths	0	0	33
Gun-related youth deaths	0	0	37
Youth Violent Crimes (Age 10-24 Arrests for Crimes Against Persons)	46	12	16,406
Youth Property Crimes (Age10-24 Arrests for Crimes Against Property	139	10	29,335
Residential fire deaths (State = Total Number of Fire Deaths)	0	0	123
MATERNAL INFANT and CHILD HEALTH			
Mothers who Received Early Prenatal Care (during 1st Trimester)	80.0%	73.3%	74.3%
Inadequate Prenatal Care (Kessner Index: None/ Or third trimester care only)	4.1%	8.3%	8.3%
Adequate Prenatal Care (Kessner Index: Care received since 1st trimester)	74.1%	68.3%	68.1%
Babies with Low Birth Weight	6.20%	8%	8.30%
Infant Mortality Rate	6.5±4.2	*	7.6± 0.2
C-section rate	28.9	33.3	32.5
Preterm Births	8.1%	*	9.8%
Immunization Rates	70%	72%	81.30%

INDICATOR TITLE	OTSEGO	MONTMORENCY	STATE OF MICHIGAN
WIC recipients	1,474	369	421,605
WIC Initiated Breastfeeding (* =* = percentages not calculated if <100 records are available for analysis after exclusions)	76.70%	*	59.50%
WIC Breastfed at least 6 months (* =* = percentages not calculated if <100 records are available for analysis after exclusions)	29.30%	*	18.40%
WIC Breastfed at least 12 months (* =* = percentages not calculated if <100 records are available for analysis after exclusions)	11.00%	*	8.50%
Births to adolescents (ages 10-19) as percentage of total live births	9.26%	6.66%	9.54%
Neonatal deaths (Per 1000 births)	2.5	0	5.3± 0.2
Live birth rate per 1,000 (Crude)	11.17	6.14	11.61
Fertility rate (per 1,000)	65.12	49.46	59.79
Post neonatal deaths (Per 1000 Births)	2.1	0	2.4 ± 0.1
Child deaths	7	0	1,608
Repeat births to teens	5	0	2,091
Adolescent (15-19) Pregnancy Rate per 1,000	48.6	*	47.9
Blood Lead Testing for Medicaid Children (2YR OLD and 3 YR OLD)	78% and 69%	85% and 82%	70% and 76%
MENTAL HEALTH AND MENTAL DISORDERS			
Age-adjusted Death Rate due to Suicide	*	*	11.3±0.7
Poor Mental Health Days	3.4	4.4	3.7
Treatment for mental disorder (**Bold** & Highlighted = Multiple Counties) (* = Total Number of People Served)	553	**1,431**	
Teen Suicide (15-19)	0	N/A	73
Suicide Rate	*	*	11.7±0.7
Number of Psychiatric admissions for Inpatient Hospitalization (**Bold = Number for Multiple Counties)**	57	**111**	
NUTRITION, PHYSICAL ACTIVITY AND WEIGHT			
Adults who are Obese	31%	32%	32%
Adults who are Sedentary	25%	27%	25%
Percentage of students who are obese (for High School)	12.60%	17.90%	11.90%
Percentage of students who are obese (for Middle School)	21.20%	11.80%	*
Low-Income Preschool Obesity	13.2	21.3	13.87
Teens who Engage in Regular Physical Activity (MiPhy HS)	47.9%	58.6%	46.8%
OLDER ADULTS AND AGING			
Age-adjusted Death Rate due to Alzheimer's Disease (2005-2009)	47.2±11.8	29.1±10.4	22.9±0.9

INDICATOR TITLE	OTSEGO	MONTMORENCY	STATE OF MICHIGAN
% of People 65+ Living Alone	24.6%	25.3%	28.0%
People 65+ Living Alone	1,012	666	381,846
COUNTY HEALTH RANKINGS			
Clinical Care Ranking	20	29	
Health Behavior Ranking	59	27	
Morbidity Ranking	10	52	
Mortality Ranking	68	63	
Physical Environment Ranking	19	15	
Social and Economic Factors Ranking	36	79	
SUBSTANCE ABUSE AND TOBACCO USE			
Adults who Binge Drink	21%	N/A	18%
Adults who Smoke	29%	N/A	21%
Percentage of Substance Abuse Treatment Admissions by Alcohol Abuse	47.30%	51.20%	38.70%
Percentage of Substance Abuse Treatment Admissions by Illegal Drug Abuse	52.70%	48.80%	61.30%
Teens who Binge Drink (MiPhy HS)	16.0%	21.4%	23.2%
Teens who Smoke (MiPhy HS) (Teens who used any tobacco product in the last 30 days)	26.2%	22.5%	25.2%
Teens who use Illegal Drugs, MiPhy HS (cocaine, heroin, club drugs)	5.9%	2.4%	10.7%
Teens who Used Marijuana within the last 30 days (MiPhy HS)	22.4%	10.7%	20.7%
Alcohol related motor vechicle injuries/fatalities	14/1	3/1	5377/274
Drug-related (No Alcohol) mortality rate (per 1,000)	0.165	0.102	0.174
WELLNESS AND LIFESTYLE			
Self-reported General Health Assessment: Poor or Fair	11%	12%	14%
Inadequate Social Support	20%	15%	20%
ECONOMY			
Children Living Below Poverty Level	15.4%	30.9%	20.5%
Families Living Below Poverty Level	8.5%	12.4%	10.6%
People Living Below Poverty Level	12.1%	17.6%	14.8%
People 65+ Living Below Poverty Level	7.9%	7.6%	8.3%
Per Capita Income	22,568	19,102	25,135
Families (of 4) Living Approx. 160% Above Poverty Level	73.7%	61.3%	73.1%
Median Household Income	45,531	34,447	48,432
Renters Spending 30% or More of Household Income on Rent (Total Number / Percentage)	825 / 51%	283 / 64%	493295 / 54%
Homeowner Vacancy Rate	2.8	4.9	3.1

INDICATOR TITLE	OTSEGO	MONTMORENCY	STATE OF MICHIGAN
Homeownership	7,982	3,760	2,852,374
Foreclosure Rate (1 Foreclosure per __ Number of Homes)	683	1101	519
Households with Public Assistance	340	176	135,933
Unemployed (%)	14.8%	19.8%	12.5%
Unemployed in Civilian Labor Force	1,342	625	568,552
% of Students grad who entered 9th grade 3 yrs prior	87.37%	77.82%	74.33%
Language other than English spoken at home	476	213	830,258
Number of Homeless Persons (Unduplicated)	365	27	71,713
Medicaid eligibles	5,615	2,238	1,923,854
Food stamp recipients	4,985	1,976	1,820,699
% of Low-Income Persons receiving SNAP	57%	40%	44.00%
Subsidized housing units	96.0	40.0	157704.0
SNAP Certified Stores	22	12	8,822
Students Eligible for the Free Lunch Program	35%	52%	38%
EDUCATION			
People 25+ with a High School Degree of Higher	89.2%	83.9%	88.0%
People 25+ with a Bachelor's Degree of Higher	19.4%	10.6%	25.0%
High School Graduation	80%	78%	76%
College or higher education (Category: Associate's Degree or Higher)	25.8%	19.4%	33.2%
Student-to-Teacher Ratio	14.60	16.60	16.49
Percentage of Eleventh Graders who did not meet the standards on the Mathematics Portion of the Michigan Merit Exam	46.6%	68.2%	49.6%
Percentage of 4th Grade Students who were below proficient in the MEAP Reading Test	11.0%	6.2%	15.9%
SOCIAL ENVIRONMENT			
% of Single-Parent Households	12.4%	12.0%	16.7%
% of Reported Violent Crimes Involving Alcohol	1.5%	12.5%	6.0%
Violent Crime Rate (per 100,000)	191	149	518
Registered Voters	19,573	7,972	7,286,556
Homicides (Incidents)	2	1	629
Confirmed cases of child abuse and neglect (per 1,000 Children)	24	21	13.8
Aggravated assaults (Incidents)	13	3	26,303
Simple assaults (Incidents)	134	35	87,178
Substantiated Elderly abuse	15	5	2,034
Burglaries (Number of Incident)	119	26	73,871

INDICATOR TITLE	OTSEGO	MONTMORENCY	STATE OF MICHIGAN
Forcible sex (Number of Penetration Incidents)	35	4	6,185
Childcare facilities/preschools (not including after school programs) (State Data includes after school programs)	49	12	11,449
Small/medium businesses (9 employees or less)	1,459	590	533,087
% of Locally Owned Businesses	87.90%	87.69%	90.33%
Locally-owned businesses	1,657	641	590,003
Percentage of Women -owned firms	20.50%	30.10%	30.40%
Minority-owned firms (* = Less than 100 firms)	*	*	13.6
Domestic Violence Rate (per 1,000)	6.91	2.87	10.23
BUILT ENVIRONMENT			
Grocery Store Density per 1,000 population	0.21	0.39	0.27
Fast Food Restaurant Density (per 1,000)	0.85	0.3	0.55
Farmers Market Density (per 1,000)	0.09	0.1	0.03
Recreation and Fitness Facilities Density (per 1,000)	0.13	0	0.09
Low Income and >1 mi. from a Grocery Store	4,343	2,923	975,343
Liquor Store Density (Number of Liquor Stores Per 100,000 population)	8	10	14
ENVIRONMENT			
Annual Ozone Air Quality	*	*	*
Air Pollution: Ozone Days	0	0	3
EPA air standards not met	Met	Met	Met
Air Pollution: Particulate Matter Days	2	1	5
Releases of Recognized Carcinogens into Air (2008 Lbs of Hazardous Air Pollutants Released into Air) * List by type of pollutant also available	1,284,328.77	1,537,413.04	205,691,825.56
% of Children <5 who are tested for lead exposure (Category: Children through age 6 tested for lead)	16.50%	15.70%	17.90%
Children <5 who have blood lead levels >10mcg/dL (Category: Children with Confirmed Elevated Blood Levels≥ 10 µg/dL)	0	0	1,299
Number of critical violations in restaurants	106	24	
Septic tanks/failed septic tanks	58/ 104	5./ 63	
Contaminated Wells (State = Number of Wells Being Monitored)	1	2	207
Animal/vector-borne cases	0	0	221
Shigella	0	0	224
Salmonella	3	2	934
Part 201 Sites of Environmental Contamination (Data from 2010)	17	9	3,460
Hazardous waste sites	0	0	239

INDICATOR TITLE	OTSEGO	MONTMORENCY	STATE OF MICHIGAN
Food Safety-Number foodborne disease cases as categorized by MDSS	23	7	3,874
Fluoridated Water- percent total population with fluoridated water [2006]	0.55%	0%	73.80%
Rabies in animals- number of cases [2009-2011]	0	0	206
TRANSPORTATION and TRANSPORTATION SAFETY			
Mean Travel Time to Work	21.6	24.9	23.7
Workers who Drive Alone to Work	8,710	2,400	3,527,070
Workers Commuting by Public Transportation	47	0	53,244
Households without a Vehicle	535	194	275,799
Seatbelt Use (2008-2010 Combined)	84.70%	89.00%	88.30%
Age-adjusted Death Rate Due to Transport Fatal Injury (by Health Department)	11.2±6.3	21.5±10.2	10.0±0.6
Reported Traffic Crashes	700	265	282,075
Fatal Traffic Crashes	3	1	868
Percent of Fatal Crashes with Drinking Involvement	33.30%	100%	30.20%

ATTACHMENT 7

Identifying Strategic Issues

Charlevoix Area Hospital | HEALTH DEPARTMENT of Northwest Michigan | McLaren NORTHERN MICHIGAN | Northern Health Plan | OMH

NORTHERN MICHIGAN
MOBILIZING FOR ACTION THROUGH PLANNING & PARTNERSHIPS (MAPP)

Identifying Strategic Issues
Sample Agenda
6-9:00 PM

I.	Refreshments/Dinner	
II.	Welcome	Health Officer
III.	Introduction	Staff
IV.	Brainstorm community health issues	Group
V.	Organize issues into categories	Group
VI.	Compare the issues identified with topics of prepared Issue Briefs	Group
VII.	Review Issue Briefs	Small Groups

A. Abuse and Neglect
B. Access to Healthcare
C. Alcohol and Drug Abuse
D. Chronic Disease
E. Maternal and Child Health
F. Mental Health
G. Obesity
H. Substance Abuse
I. Tobacco Use

VIII.	Discuss and report on key questions	Small Groups

A. What themes in the Issue Brief(s) caught your attention?
B. Of those themes, which ones does the community embrace?
C. What would have to change in order to embrace all of them?

IX.	Vote for Strategic Issues	
X.	Identify individuals and organizations to invite to prepare Community Health Improvement Plans for each Strategic Issue	Small Groups
XI.	Adjourn	

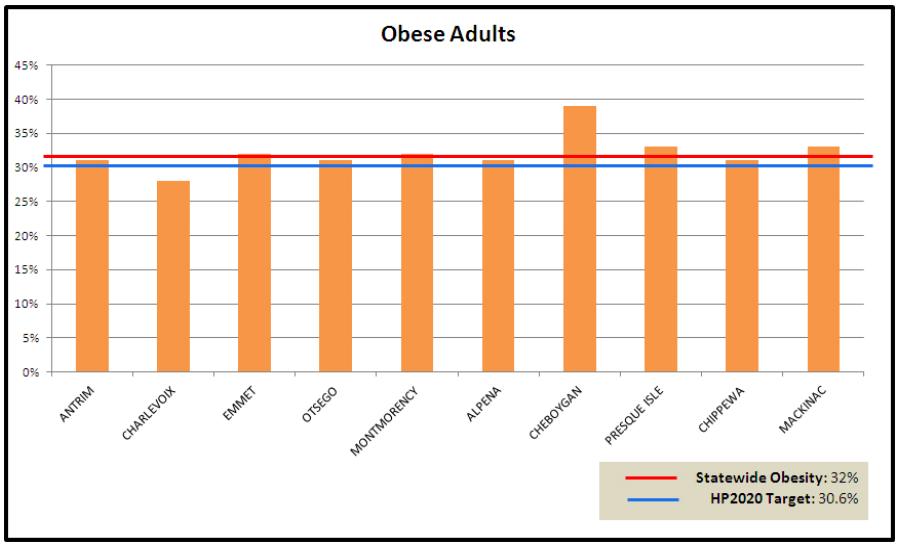
Obesity and Chronic Disease

Managing and preventing chronic disease is the top health challenge of the 21st century. Seven out of every 10 deaths are from chronic diseases, including heart disease, stroke, cancer, diabetes, kidney disease and dementia. Leading a healthy lifestyle can greatly reduce the risk of developing chronic diseases. Four modifiable health risk behaviors—lack of physical activity, poor nutrition, tobacco use, and excessive alcohol consumption—are responsible for much of the illness, suffering and early death related to chronic diseases.

Critical Indicators

Obesity is common, serious, and costly. More than two-thirds of the adult population is overweight or obese. About one in five children are overweight or obese by the time they reach their sixth birthday, and more than half of obese children become overweight at or before age two.

Chronic disease, including heart disease, cancer, stroke and diabetes, accounts for more than 75 percent of our nation's health care spending. These persistent conditions – the nation's leading causes of death and disability – leave in their wake deaths that could have been prevented, lifelong disability, compromised quality of life, and burgeoning health care costs.

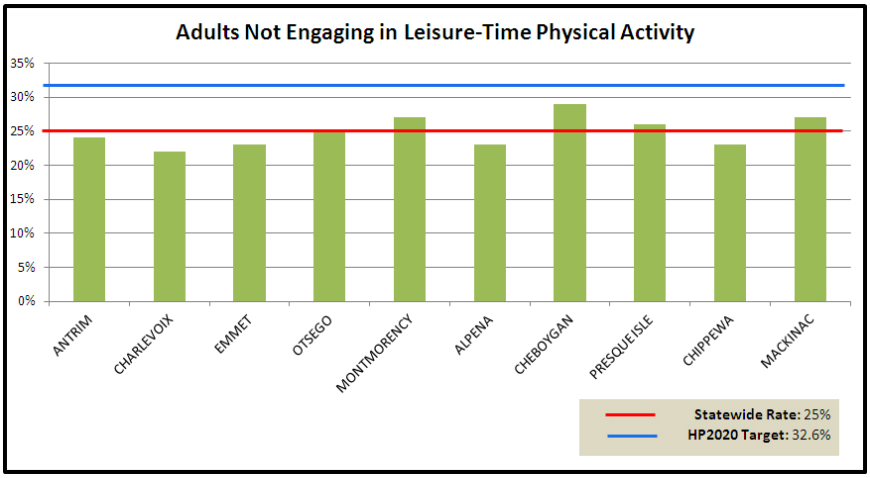


2009 data obtained from County Health Rankings at www.countyhealthrankings.org

Eating healthy can help reduce the risk of heart disease, high blood pressure, diabetes, osteoporosis, and several types of cancer, as well as help to maintain a healthy body weight. Healthy eating is influenced by access to healthy, safe, and affordable foods, as well as by individuals' knowledge, attitudes, and culture. Communities can support healthy eating and make healthy options affordable and accessible, and people can be provided with the information and tools they need to make healthy food choices.

Physical activity is one of the most important things that people can do to improve their health. Even people who do not lose weight get substantial benefits from regular activity, including lower blood pressure.

- Physical inactivity is a primary contributor to overweight and obesity.
- Few schools provide daily physical education. Only 13 percent of children walk or bike to school, compared with 44 percent a generation ago.
- The average eight-to-18-year-old is exposed to nearly 7.5 hours of passive screen daily.



2009 data obtained from County Health Rankings at www.countyhealthrankings.org

Who can help?

- State, local and tribal governments
- Businesses and employers
- Health care systems, insurers and clinicians
- Early learning centers, schools and colleges
- Community, non-profit and church organizations
- Individual families
- You!

Questions?
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*Adapted from the **National Prevention Strategy***

Highlights from the 2012 Northern Michigan Community Health Assessment

Community Health Status Assessment

- Obesity rates in the 10-county region exceed State rate of 32% in all but Charlevoix County, where 28% of adults are obese.
- Teen obesity rates range from 10% in Presque Isle County to 19% in Cheboygan County
- About one-quarter of the population does not engage in any physical activity, ranging from 22% in Charlevoix County to 29% in Cheboygan County.

Community Themes & Strengths

- Northern Michigan residents voiced concerns regarding obesity and the need to prevent chronic disease in focus groups held all across the region. Focus groups were concerned about access to healthy food.
- The following were ranked among the top three health problems in the community:
  - Obesity: 42% of community residents and 68 % of health care providers
  - Lack of physical activity: 32% of community residents and 40% of health care providers
  - Chronic disease: 27% of community residents and health care providers

Forces of Change Assessment

Participants identified the following forces related to access to healthcare:

- Poor quality of school cafeteria offerings
- Many in the large older adult population has at least one chronic disease; as overweight/obese Baby Boomers age, they will develop chronic disease and it is growing faster than the population as a whole

Public Health System Assessment

Health and social service representatives, law enforcement, government and elected officials, grant-makers, and others rated the following as the system's top related to improving access to care:

Optimal Capacities	Significant Capacities
• Developing plans and policies • Evaluating population-based and personal health services	• Mobilize partnerships • Link individuals to needed services

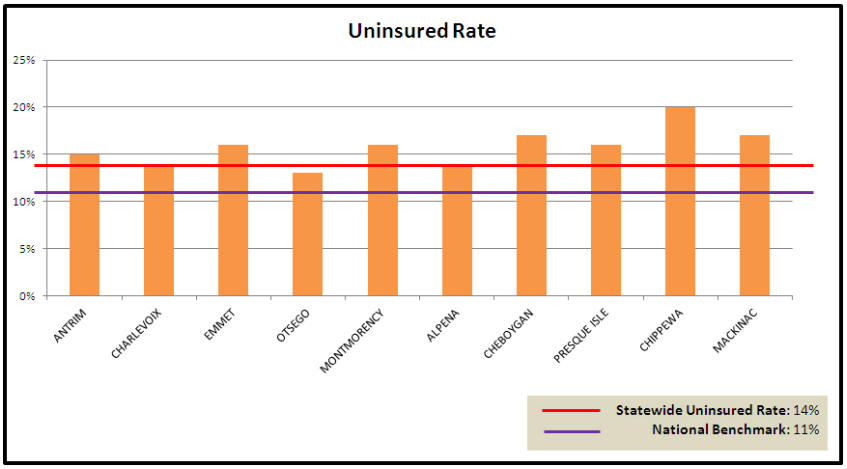
Community groups from across Northern Michigan identified reducing obesity and preventing chronic disease as a top public health priority for their county. The Obesity and Chronic Disease Action Plan of the Northern Michigan Regional Community Health Improvement Plan aligns with Healthy People 2020 goals and objectives:

Healthy People 2020 Goal	Healthy People 2020 Objectives DRAFT AS OF JANUARY 2013
Promote health and reduce chronic disease risk through the consumption of healthful diets and achievement and maintenance of healthy body weights	Reduce the proportion of adults who are obese
	Reduce the proportion of children and adults who are obese
	Increase the proportion of infants who are exclusively breastfed through 6 months of age
Improve health, fitness, and quality of life through daily physical activity	Reduce the proportion of adults who engage in no leisure time physical activity
	Increase the proportion of adults and adolescents who meet physical activity guidelines
	Increase the proportion of adolescents and children who meet physical activity guidelines
	Increase the proportion of the Nation's public and private schools that require daily physical education for all students
	Increase regularly scheduled recess in elementary schools
	Reduce the proportion of adults who engage in no leisure time physical activity

Access to Health Care

Access to health care includes the accessibility of primary care, health care specialists and emergency treatment. While having health insurance is a crucial step toward accessing different aspects of the health care system, health insurance by itself does not ensure access. It is also necessary to have comprehensive coverage, providers that accept the individual's health insurance, relatively close proximity of providers to patients, and primary care providers in the community. There are additional barriers to access in some populations due to lack of transportation to providers' offices, lack of knowledge about preventive care, long waits to get an appointment, low health literacy, and inability to pay the high deductible of many insurance plans and/or co-pays for receiving treatment.

Critical Indicators



2009 data obtained from County Health Rankings at www.countyhealthrankings.org

- People without medical insurance are more likely to lack a source of routine medical care, are more likely to skip medical care due to cost, increasing their risk for serious and disabling health conditions. When they do access health services, they are often burdened with large medical bills and out-of-pocket expenses.
- The uninsured population has a 25 percent higher mortality rate than the insured population. They experience more adverse physical, mental and financial outcomes than insured individuals. The uninsured are less likely to receive preventive and diagnostic health care services, are more often diagnosed at a later disease stage and, on average, receive less treatment for their condition compared to insured individuals.
- Employer-provided health insurance is the largest source of health coverage in the U.S., and many unskilled, low paying, and part-time jobs do not offer health coverage benefits. In general, employment status is the most important predictor of health care coverage.
- Having both a primary care provider and medical insurance can prevent illness by improving access to a range of recommended preventive services across one's lifespan, from childhood vaccinations to screening tests for cancer and chronic diseases, such as diabetes and heart disease.
- Having a primary care provider and medical insurance also plays a vital role in finding health problems in their earliest, most treatable stages, and managing a person through the course of the disease. Lacking access to health services – even for just a short period – can lead to poor health outcomes over time.
- Many mental and emotional disorders are preventable and treatable. Early identification and treatment can help prevent the onset of disease, decrease rates of chronic disease, and help people lead longer, healthier lives. However, in a given year, less than half of people diagnosed with a mental illness receive treatment.
- Prenatal care provided early in a woman's pregnancy and consistently thereafter, plays an important role in keeping women and infants healthy. For low-income women who may lack ongoing preventive health care before pregnancy, timely prenatal care and regular visits are very important: infant mortality rates are higher among women who did not obtain adequate prenatal care.

Who can help?

- State, local and tribal governments
- Businesses and employers
- Health care systems, insurers, and clinicians
- Early learning centers, schools and colleges
- Community, nonprofit and faith-based organizations
- Individual families
- You!

Questions?

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*Adapted with local data from the **2012 County Health Rankings***

Highlights from the 2012 Northern Michigan Community Health Assessment

Community Health Status Assessment	Community Themes & Strengths
• Rates of uninsured in Northern Michigan, ranging from 16% (Otsego County) to 23% (Chippewa County), are among the highest in the state. Only the Metropolitan Detroit region has more uninsured residents. • There are several "Health Professions Shortage Areas" designations for primary care and mental health in the region. Ratio of primary care providers to county population rises up to 3,394:1 (in Presque Isle County) compared to State ratio of 874:1.	• Northern Michigan residents voiced concerns about barriers to primary care, including maternal and child health care, mental health services, and substance abuse treatment at focus groups held all across the region. • In surveys, 27% of community residents and 14% of health care providers identified lack of access to health care, including mental health, as one the top three health problems in their county.

Forces of Change Assessment

Participants identified the following forces related to access to health care:

- Results of the 2012 Presidential election and the implication for implementation of the Affordable Care Act.
- Lack of physicians who accept Medicaid or offer a sliding fee scale.
- Complexities of accessing mental health services, especially for mild to moderately ill residents.
- Changes in the health care system (closure of inpatient psychiatric services, re-opening of Cheboygan hospital for some services)

Public Health System Assessment

Health and social service representatives, law enforcement, government and elected officials, grant-makers, and others rated the following as the system's top related to improving access to care:

Optimal Capacities	Significant Capacities
• Developing plans and policies • Evaluating population-based and personal health services	• Mobilize partnerships • Link individuals to needed services

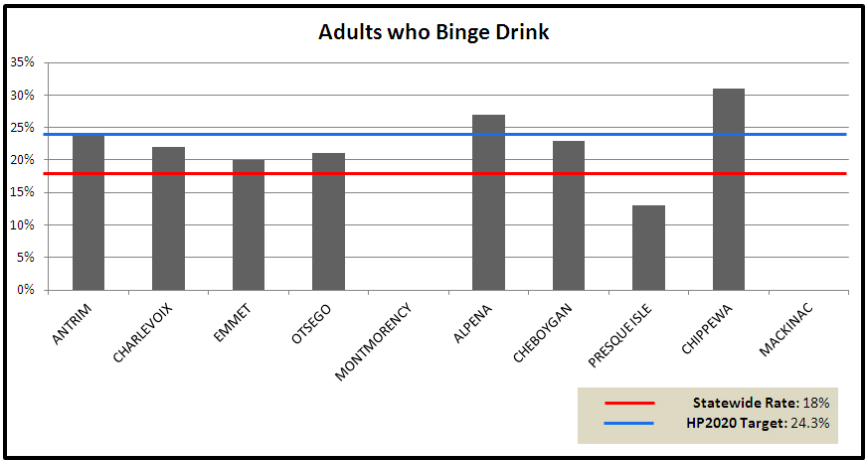
Community groups from across Northern Michigan identified <u>improving access to health care</u> as one of the top public health priorities for the county. The Access to Health care Action Plan of the Northern Michigan Regional Community Health Improvement Plan aligns with Healthy People 2020 goals and objectives:

Healthy People 2020 Goal	Focus	Health People 2020 Objectives **DRAFT AS OF JANUARY 2013**
Improve access to comprehensive, quality health care services	Primary care	Increase proportion of persons with health insurance
		Increase proportion of persons with a usual primary care provider
		Increase proportion of children who have access to a medical home
	Mental health	Increase proportion of primary care facilities that provide mental health services
		Increase proportion of depression screening by primary care providers
		Increase proportion of persons with co-occurring substance abuse and mental health disorders who receive treatment for both disorders
		Increase proportion of persons who need alcohol and/or illicit drug treatment and received specialty treatment in the past year
		Increase proportion of children with mental health problems who receive treatment
	Maternal and child health	Increase proportion of pregnant females who received early and adequate prenatal care

Substance Abuse

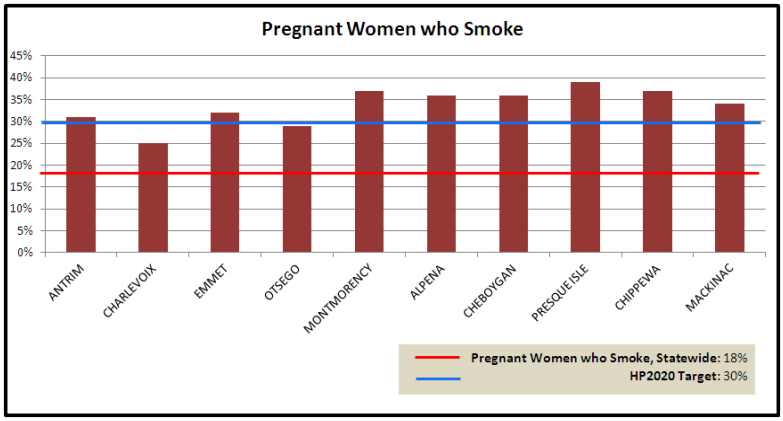
Preventing drug abuse, excessive alcohol use, and tobacco use and exposure increases people's chances of living long, healthy and productive lives. Alcohol and other drug use can impede judgment and lead to harmful risk-taking behavior. Preventing drug abuse and excessive alcohol use improves quality of life, academic performance, workplace productivity and military preparedness, reduces crime and criminal justice expenses, reduces motor vehicle crashes and fatalities, and lowers health care costs for acute and chronic conditions. Tobacco is the leading cause of disease, disability, and death in the U.S. Living tobacco-free reduces a person's risk of developing heart disease, various cancers, chronic obstructive pulmonary disease, periodontal disease, asthma and other diseases, and dying prematurely.

Critical Indicators



2009 data obtained from County Health Rankings at www.countyhealthrankings.org

- Nine percent of children live with at least one parent who abuses alcohol or other drugs. Children of parents with substance use disorders are more likely to experience physical, sexual, or emotional abuse or neglect, and are more likely to be placed in foster care.
- Excessive alcohol use is a leading cause of preventable death in the U.S. among all age groups, contributing to more than 79,000 deaths per year.
- More than half the alcohol consumed by adults and 90 percent of the alcohol consumed by youth occurs during binge drinking.
- Every day, almost 30 people in the U.S. die in motor vehicle crashes that involve an alcohol-impaired driver. Illicit, prescription, or over-the-counter drugs are detected in about 18% of motor vehicle deaths in the U.S.
- Chronic drug use, crime, and incarceration are inextricably connected. At least half of state and federal inmates were active drug users at the time of their arrest.
- Prescription drug abuse is our nation's fastest growing drug problem. In a typical month, approximately 5.3 million Americans use a prescription pain reliever for nonmedical reasons. Emergency department visits involving the misuse or abuse of pharmaceutical drugs have doubled over the past five years.
- Cigarette smoking, the most common form of tobacco use, is expensive in human and financial terms. Approximately 14,500 adults die each year from their own smoking in Michigan. Productivity losses caused by smoking approach $4 billion statewide each year and $3.4 billion in annual medical expenditures are attributable to smoking. Pregnant women who smoke cigarettes risk birth complications like premature delivery, certain birth defects and infant death.



2009 data obtained from County Health Rankings at www.countyhealthrankings.org

Who can help?

- State, local and tribal governments
- Health care systems, insurers, and clinicians
- Early learning centers, schools and colleges
- Community, nonprofit and faith-based organizations
- Individual families
- You!

Questions?

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*Adapted from the **National Prevention Strategy***

Highlights from the 2012 Northern Michigan Community Health Assessment

Community Health Status Assessment

- 18% per cent of adults in the 10-county region drink five or more alcoholic beverages in one sitting.
- 8% of adults (26+) and nearly one-quarter of those 18-25 use illicit drugs
- Adult smoking rates approach or exceed the State rate of 21% and there is a strong correlation between tobacco use and income: over twice as many low-income residents (44%) smoke.
- Maternal smoking rates are high, up to 39% (Presque Isle County) and are even higher among low-income pregnant women.

Community Themes & Strengths

- Northern Michigan residents voiced concerns drug, alcohol and tobacco use in focus groups held all across the region
- Over half (54%) of community residents and nearly half (46%) of health care providers ranked substance abuse as one of the top three health problems in their county.
- 16% of community residents and 31% of health care providers ranked tobacco use as one of the top three health problems in their county

Forces of Change Assessment

Participants identified the following forces related to alcohol, tobacco and other drug use:

- Increase in prescription and synthetic drug use
- New Michigan marijuana law

Public Health System Assessment

Health and social service representatives, law enforcement, government and elected officials, grant-makers, and others rated the following as the system's top related to improving access to care:

Optimal Capacities	Significant Capacities
• Developing plans and policies • Evaluating population-based and personal health services	• Mobilize partnerships • Link individuals to needed services

Community groups from across Northern Michigan identified <u>preventing substance abuse</u> as one of the top public health priorities for the county. The Substance Abuse Prevention Action Plan of the Community Northern Michigan Regional Health Improvement Plan aligns with Healthy People 2020 goals and objectives:

Healthy People 2020 Goal	Healthy People 2020 Objectives **DRAFT AS OF JAN 2013**
Reduce substance abuse to protect health, safety, and quality of life for all, especially children	Reduce proportion of adults aged 18 and older who report they engaged in binge drinking in the last month
	Reduce proportion of high school seniors who reported binge drinking during the past 2 weeks
	Reduce proportion of persons aged 12 or older who reported non medical use of any psychotherapeutic drug in the last year
	Proportion of youth aged 12 to 17 years who have used illicit drugs in the past 30 days.
Reduce illness, disability, and death related to tobacco use and secondhand smoke	Reduce the proportion of adults who are current smokers
	Reduce the proportion of adolescents who smoked cigarettes in the past 30 days
	Reduce the proportion of youth age 3 to 11 who are exposed to secondhand smoke