Michigan Strategic Opportunities for Rural Health Improvement

A State Rural Health Plan
2008-2012

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Acknowledgments and Credits

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- Michigan Nurses Association
- Michigan Osteopathic Association
- Michigan Primary Care Association
- Michigan Rural Health Association
- Michigan State Medical Society
- Michigan State University-Extension Services
- Thumb Rural Health Network
- Upper Peninsula Health Care Network
- USDA Rural Development

To print copies of the Michigan Strategic Opportunities for Rural Health Improvement Plan or view the comprehensive rural community health assessment corresponding to the Plan, visit: [www.mcrh.msu.edu](http://www.mcrh.msu.edu).

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This plan will be submitted to the Centers for Medicare and Medicaid Services (CMS) and the Federal Office of Rural Health Policy based on the requirements of the Medicare Rural Hospital Flexibility Program.

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*Michigan Strategic Opportunities for Rural Health Improvement*
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Michigan Strategic Opportunities for Rural Health Improvement
EXECUTIVE SUMMARY

State Rural Health Plans serve as a guide to those working to improve rural health in their villages, townships, cities, counties, and States. They consist of goals and measurable objectives. State Rural Health Plans can be used by policymakers, health care providers, health care leaders, associations, universities, and communities in their health care planning and development of programs to address identified issues.

In response to Medicare Rural Hospital Flexibility Program grant guidance and Public Act 368 of 1978, the Michigan Center for Rural Health and the Michigan Department of Community Health staff presented the State Rural Health Plan concept to the Michigan Center for Rural Health board of directors at their Annual Planning meeting in January 2007. They approved moving the project forward and entitled it “Michigan Strategic Opportunities for Rural Health Improvement” to accurately reflect the scope and intent of the project.

A Core Workgroup, consisting of staff from the Michigan Center for Rural Health and the Michigan Department of Community Health, was formed in February 2007 to articulate a detailed process for developing the State Rural Health Plan. Integral to the process was the establishment of a 13-member Advisory Group, with representatives from various organizations, trade associations, and rural regions. The Advisory Group, which met 9 times between April 2007 and March 2008, assumed the task of assessing the health status in Michigan’s rural areas based on the Michigan Rural Health Profile, the Delphi Survey results, and the community meeting report. Using this information, they identified the top three rural health issues to be addressed in the MI-SORHI Plan. These priority areas for improving health in rural Michigan are:

- **Availability and Accessibility to Health Care Services (including telehealth & telemedicine), with a focus on:**
  - Primary and Specialty Care
  - Oral Health
  - Mental Health

- **Recruitment and Retention of Health Care Providers (Nurses, Physician Assistants, Dentists, Physicians, and Allied Health) with a focus on:**
  - Provider Shortages
  - Mal-distribution of Providers
  - Provider Education and Training

- **Healthy Lifestyles, with an exclusive focus on:**
  - Nutrition
  - Obesity
  - Physical Activity

Issue Workgroups were formed to further explore each of the priority health issues. Based on the work of the Issue Workgroups, the Advisory Group approved goals and measurable objectives to address the identified priority health issues in rural Michigan. The goals are:

- Increase access to dental care and dental homes for rural residents.
- Increase access to mental health care for rural residents.
- Increase access to primary care and specialty care for rural residents.
- Increase the number of practicing health professionals in rural Michigan.
- Increase targeted education and training opportunities for health professionals in rural Michigan.
- Increase the number of applications from and admissions for rural residents to health profession education and training programs.
- Reduce the rate of obese and overweight adults and children in rural Michigan.
- Increase the number of rural adults and children who engage in moderate physical activity at least 5 days a week for 30 minutes a day.
- Increase the number of rural residents who engage in healthy eating.

This Plan has a 5-year perspective and its success will be measured by tracking the progress on the measurable objectives as well as improved health outcomes in rural Michigan. The Advisory Group will meet annually to monitor the outcomes of the objectives and revise the Plan where necessary.

In order to ensure the success of the Plan it will take the efforts of policymakers, health care providers, health care leaders, associations, universities, and communities to join and become involved. The goals, objectives and strategies listed are a call to action to encourage all to work and improve the health of rural Michigan.
INTRODUCTION

In the spring 2007, the Michigan Center for Rural Health launched Michigan Strategic Opportunities for Rural Health Improvement (MI-SORHI), a collaborative planning endeavor designed to identify rural health focus areas for Michigan and create a State Rural Health Plan for progress in these focus areas. State Rural Health Plans serve as a guide to those working to improve rural health in their villages, townships, cities, counties, and States. They consist of goals and measurable objectives. State Rural Health Plans can be used by policymakers, health care providers, health care leaders, associations, universities, and communities in their health care planning and development of programs to address identified issues.

The Federal Office for Rural Health Policy, through the Medicare Rural Hospital Flexibility Program grant guidance, requires that each state develop a State Rural Health Plan. Public Act 368 of 1978 also requests a State Rural Health Plan be developed and updated. The Michigan Center for Rural Health and the Michigan Department of Community staff presented the State Rural Health Plan concept to the Michigan Center for Rural Health board of directors at their Annual Planning meeting in January 2007. They approved moving the project forward and entitled it “Michigan Strategic Opportunities for Rural Health Improvement” to accurately reflect the scope and intent of the project.

FRAMEWORK FOR MI-SORHI PLANNING PROCESS

The Core Workgroup consisting of staff from the Michigan Center for Rural Health and the Michigan Department of Community Health was formed in February 2007. The Core Workgroup assumed the tasks of:

- Creating and reporting to an Advisory Group;
- Assuming responsibility for meeting logistics and notes;
- Preparing the Michigan Rural Health Profile;
- Coordinating, implementing and summarizing the Delphi Survey;
- Visiting six rural communities for citizen input;
- Coordinating the Issue Workgroup meetings and conference calls; and
- Writing the MI-SORHI Plan.

The 13-member Advisory Group, with representatives from various organizations, trade associations, and rural regions, met 9 times between April 2007 and March 2008. The Advisory Group guided the development and implementation of the MI-SORHI Planning Process, including a comprehensive rural community health assessment for Michigan. This comprehensive health assessment had three components:

- Michigan Rural Health Profile – a review of demographic, health status, and health resource data;
- Delphi Survey of rural experts asked to identify rural priority issues as well as strategies to address these issues. Three hundred and forty-five rural experts participated in the survey.
• Community Meetings throughout rural Michigan in order to assure that rural communities and rural residents participated in this planning endeavor and contributed to the results. Six Community Meetings were held through the Upper and Lower Peninsulas of Michigan.

Through the spring and summer 2007, the Advisory Group review, discussed, questioned, and deliberated the various findings from the comprehensive rural community assessment. In response to themes that emerged through the assessment, the Advisory Group developed the following statements to be included in their recommendations:

• The Advisory Group supports and encourages state and national efforts to increase access to adequate and affordable health insurance coverage. Enhanced access to health insurance coverage will improve access to health care and provide additional monetary resources for rural health providers and health systems. These resources will support efforts to maintain and improve health care quality, incorporate clinical preventive practices into the primary care setting, and support efforts to recruit and retain quality health care providers.

• The Advisory Group encourages a thorough review of reimbursement practices for rural health services and providers, and supports efforts to provide adequate and consistent reimbursement for rural-based services.

• The Advisory Group encourages all individuals throughout rural Michigan to accept responsibility for their own health as well as the health of their families. Individuals have a responsibility to engage in healthy behaviors, appropriately utilize available health care resources and insurance coverage, create a healthy environment for children, and to encourage and support family and friends in efforts to maintain and improve health.

Priority Health Issues

Based upon the findings of the rural community health assessment, the Advisory Group identified three priority issues (strategic opportunities) to address through the MI-SORHI Strategic Plan:

• Availability and Accessibility to Health Care Services, with a focus on:
  o Primary and Specialty Care, Oral Health, Mental Health (including telehealth and telemedicine)

• Recruitment and Retention of Health Care Providers (Nurses, Physician Assistants, Dentists, Physicians, and Allied Health) with a focus on:
  o Provider Shortages
  o Mal-Distribution of Providers
  o Provider Education and Training

• Healthy Lifestyles, with an exclusive focus on:
Nutrition, Obesity, and Physical Activity (and acknowledging the link to Chronic Diseases)

**Issue Workgroups**

Issue Workgroups (IWGs) formed in October 2007 around each of the priority issues. The Advisory Group articulated a **purpose statement** for each Issue Workgroup.

*Availability and Accessibility to Health Care IWG:* To develop goals, objectives, and strategies to improve the availability and access to health care services, in the areas of primary and specialty care, oral and mental health for the residents of rural Michigan.

*Recruitment and Retention IWG:* To develop goals, objectives, and strategies to recruit and retain the appropriate number of practicing health care professionals (physicians, advanced practice nurses, physician assistants, nurses, allied health professionals, and dentists) to meet the health care needs of rural Michigan.

*Health Lifestyles IWG:* To develop goals, objectives, and strategies to engage rural Michigan communities and their residents to achieve a healthier lifestyle in the areas of nutrition, obesity, and physical activity.

The IWGs reviewed relevant information from a multitude of resources (i.e. Rural Healthy People 2010, Healthy People 2010, Michigan Critical Health Indicators) and existing statewide efforts and plans. By utilizing existing tools and efforts, the Issue Workgroups efficiently identified goals, objectives and strategies for each of the priority health issues. At the same time, the IWGs and the Advisory Group interfaced with existing Michigan efforts that address the priority health issues in order to assure that unique rural characteristics will be acknowledged and addressed in those efforts as well.
MICHIGAN RURAL HEALTH PROFILE SUMMARY

As a part of the background information needed to guide the MI-SORHI process, the Michigan Rural Health Profile was developed, which provides data on demographics, socio-economics, health indicators, and available health resources in rural Michigan. Select information from the report was presented to the MI-SORHI Advisory Group over the course of two meetings during summer 2007.

To the extent possible, data in this report will be aggregated and examined using U.S. Office of Management and Budget (US OMB) definitions of metropolitan, micropolitan and rural counties as shown in Figure 1, which has the counties shaded based on their designation under the US OMB definition. The dark shaded counties are the metropolitan counties, the lighter counties are micropolitan, and those with no shading are rural counties.

![Figure 1: Michigan Counties with Metropolitan, Micropolitan, and Rural Designations per the US OMB Definition](image)

**State Characteristics**

For this report, rural Michigan is defined as all counties not in Metropolitan Statistical Areas (MSAs), according to the US OMB. This area accounts for 57 counties, most of which are in the northern part of Michigan. Rural Michigan accounts for about 19% of the state’s population,
75% of the state’s landmass, and have an average population density of 45 people per square mile.

In 2005 the population of the state of Michigan was estimated at over 10 million people. With the exception of the Upper Peninsula, all areas of Michigan saw population growth between 1990 and 2005. In some regions growth was as high as fifteen percent, which is not attributed entirely to an increase in births or decrease in deaths. The annual birth rate has been decreasing in Michigan for many years, while the annual death rate has been increasing. In some areas around rural Michigan the annual birth and death rates are equal to each other, which indicate that the growth is due to other reasons, such as in-migration.

The population of Michigan is aging (see Figures 2 and 3). The population in 1990 had a median age within the 30-34 age group category for metropolitan, micropolitan and rural counties. By 2005 the median age was within the 35-39 age group for metropolitan and micropolitan counties and the 40-44 age group for rural counties. From 1990 to 2005, the percent of the population for aged 45 to 59 increased by at least 50%, while the percent of the population aged 80 years or older increased by as much as 85% throughout Michigan. This trend is especially exaggerated in rural Michigan. During the same time period, the percent for the population aged 10 and under decreased by 10-15%, and it decreased for those aged 25 to 40 by as much as 20%.

In 2000, 16.6% of the state population (for those aged 25 or older) had less than a high school diploma (or GED equivalent), which is an improvement from 1990, when 25% of the state population had less than a high school diploma. Rural county residents tend to have less education than residents in metropolitan and micropolitan counties. In 2000, 19.3% of rural county residents had not completed high school (or equivalent) compared to the 16.5% of metropolitan county residents and 15.5% of micropolitan county residents. A lower percentage of the population in rural counties had some college education in 2000 (40.6%) compared to metropolitan county residents (53.8%) and micropolitan county residents (47.9%) . (See Figures 4 and 5)
Rural counties in Michigan have higher percentages of poverty and unemployment than metropolitan counties. In 2006, Michigan’s unemployment rate was approximately 7%, while rural counties it was closer to 9%. According to the 2000 US Census, about 25% of the population in metropolitan counties was below 200% of the Federal Poverty Level (FPL), while micropolitan counties had about 28% of the population under 200% FPL, and rural counties had about 32%. In other words, less than a fourth of the population was below 200% FPL in metropolitan counties, while almost a third of the population was below 200% FPL in rural counties.

Health Indicators

Both metropolitan and non-metropolitan areas have similar leading causes of death, but rural counties have higher crude death rates (see Figure 6). This is due in part to the fact that so many of the leading deaths impact an older population and rural areas tend to be older. Crude death rates reflect the overall burden of disease and death on a community, and the need for health care resources to address disease and disability. Age-adjusted death rates are similar in rural, micropolitan, and metropolitan areas. Age adjustment controls for the variation in the age cohort for different populations.

Figure 6: Crude Death Rates for Michigan’s 10 Leading Causes of Death by Metropolitan, Micropolitan, and Rural Status, 2005
Heart disease and cancer are the two leading causes of death in Michigan, and accounted for 57% of total deaths in 2005. Yet, mortality rates for both causes have been steadily declining since 1990 for all areas in Michigan. By contrast, kidney disease deaths and diabetes deaths have been on the rise.

In Michigan, preventable hospitalizations account for about one-fifth of all hospitalizations. Diagnoses for pneumonia, asthma, cellulitis, diabetes, and dehydration are examples of preventable hospitalizations, which are treatable on an outpatient basis. Micropolitan counties consistently are lower than the rest of Michigan in terms of preventable hospitalization rates.

The profile includes several indicators from the Behavioral Risk Factor Survey regarding healthy lifestyles and behaviors for adults (age 18 and older). For most of these indicators, there was little variation between the metropolitan, micropolitan, and rural areas of Michigan. However, the rate of obesity was significantly higher in rural counties than in other areas of Michigan. Figure 7 shows that over a third of Michigan’s population is considered overweight (BMI 25.0-29.9), and as much as two-thirds of the population are either overweight or obese (BMI 25.0 or more). Nationally, these indicators have been on the rise, according to the Centers for Disease Control and Prevention (CDC). Between 1995 and 2005, the percent of respondents overweight or obese increased from 51.4% to 61.1% in the U.S.

Figure 7: BRFSS: Overweight and Obese Prevalence Estimates by Metropolitan, Micropolitan, and Rural Status, 2002 - 2006

Quite a large array of information is available on maternal and child health for Michigan. Infant mortality, prenatal care, and teen pregnancy rates were all indicators included in the profile. The infant mortality rate remained between 7.0 and 8.0 deaths per 1,000 live births in rural Michigan for the time period of 1990 to 2004, which was consistently lower than metropolitan Michigan. Inadequate prenatal care occurred in just under 6% of pregnancies in rural areas. In metropolitan Michigan 10% of the pregnancies received an inadequate level of care. Teenage pregnancy rates across the state have been declining since 1990, where it peaked at 99.4 pregnancies per 1,000 female teen population.
Childhood health indicators include blood lead levels, immunizations, and oral health. The number of children who have been tested for elevated blood lead levels doubled from 1998 to 2006. While the percentage of children tested increased, the percentage of children with increased blood lead levels has decreased over this time. According to the Michigan Care Improvement Registry (MCIR), at least 70% of the children have their immunizations up to date before the age of three, with more than 75% of the children in rural Michigan up to date on their immunizations. Rural children are more likely than their metropolitan counterparts to have untreated tooth decay and dental caries, along with lower percentages of sealants among third graders.

Healthcare Providers

In Michigan in 2007, there were 272.9 physicians per 100,000 population (222.0 MDs and 50.9 DOs), which is less than sufficient according to Council of Graduate Medical Education (COGME) (see Figure 8). According to COGME, a physician ratio of greater than 300 per 100,000 population will be needed to meet future demand. Rural Michigan only has about half the number of physicians that will be needed with a rate of 165 physicians per 100,000 population. This shortage will be compounded by the fact that 34% of the active physicians practicing in Michigan plan to retire within the next ten years, according to the most recent physician survey report published by Michigan Department of Community Health (2006).

Figure 8: Licensed Physicians and PAs per 100,000 Population, 2007
MICHIGAN RURAL HEALTH RESOURCES

Primary Medical Care (Safety-Net Providers)

Different types of out-patient primary care clinics are available to Michigan’s residents. In some counties, out-patient clinics are the only available health care facilities. Eight counties in the northern part of Michigan (2 Micropolitan, 6 Rural) have no hospital facilities. One additional county has a rehabilitation hospital with no primary care or emergency services available to the public. In these areas, out-patient facilities are crucial for primary medical care and responsive EMS is critical for patient survival in the event of an emergency. Each of the counties without hospital services has out-patient care facilities throughout the county. The following types of facilities are safety-net providers with specific state or federal designations.

Local Health Departments
Local health departments are funded through a State-Federal match program. All counties either have their own health department or are part of a larger district health department. Each department has one main service delivery site, but may also have additional satellite sites spread throughout the county or district. The availability of services varies with each department, but they all have a minimum level of primary care services they provide, such as immunizations, etc.

Free Clinics
Free Clinics are non-profit clinics that typically do not charge for their services which are provided by physicians who volunteer their time at the clinic. These clinics serve the uninsured, and Medicaid patients, on occasion. Michigan has 53 different sites listed with the Free Clinics of Michigan organization. The services offered at the clinics vary and depend upon the expertise and specialties of the volunteering providers. Sixteen clinics of the 55 are located in non-metropolitan counties (9 micropolitan, 7 rural), and these clinics are only located in cities or towns with a hospital.

Figure 9: Michigan’s Free Clinics
Federally Qualified Health Centers (FQHCs)
FQHCs and FQHC Look-Alikes (FQHC-LAs) are primary care facilities and are federally designated. These facilities are required to see all patients regardless of their ability to pay. The FQHCs receive grant funding from section 330 of the Public Health Service (PHS) Act, which includes Community Health Centers, Migrant Health Centers, Health Care for the Homeless Health Centers, and School-based Health Centers. The facilities are required to have an extensive array of services available to patients, including primary medical care, dental and mental health. These facilities also need to provide prescriptions services, x-rays, lab work, and transportation to and from the facility. With the exception of some Migrant Health Centers, all FQHCs and FQHC-LAs are located in areas with Medically Underserved Area or Population designations (MUA or MUP).

In Michigan, there are 30 FQHC and FQHC-LA organizations that provide care at 156 sites. Table 1 shows the distribution of practice site locations by metropolitan, micropolitan, and rural county status. The vast majority of these sites are located in the metropolitan counties, with fewer than 30% of the sites located in micropolitan or rural Michigan.

<table>
<thead>
<tr>
<th>Area</th>
<th># Organizations</th>
<th># Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michigan</td>
<td>30</td>
<td>156</td>
</tr>
<tr>
<td>Metropolitan</td>
<td>25</td>
<td>113</td>
</tr>
<tr>
<td>Micropolitan</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Rural</td>
<td>10</td>
<td>36</td>
</tr>
</tbody>
</table>

Figure 10: Michigan’s Federally Qualified Health Centers (FQHCs)
Rural Health Clinics (RHCs)

The Rural Health Clinic Program was established in 1977 to address an inadequate supply of providers who serve Medicare and Medicaid beneficiaries in rural areas. The RHCs are designated by the federal government. To be eligible for certification, the site applying for RHC designation must be in a rural area of the state, as defined by the U.S. Census Bureau, and in a federally designated shortage or underserved area.

RHCs may be provider-based or an independent facility. Michigan has 156 RHCs throughout the state. The focus of the RHC is to provide the out-patient primary medical care services that would be provided in a physician’s office, and allows access to these services for Medicaid and Medicare patients. The facility must be able to provide basic lab tests (blood glucose levels, pregnancy tests, urine tests, etc.) and act as a first responder in the event of an emergency. A RHC is required to have a physician’s assistant, nurse practitioner, or certified nurse midwife on site, seeing patients at least 50% of the time that the practice is open.
**Acute Care**

Across Michigan, hospitals offer varying types of services and specialized care. The number of hospital beds tends to indicate the size of a hospital and the availability of advanced services. Only the largest facilities offer programs such as open heart surgery, pediatric surgery, transplants and Level 1 trauma care. All of the facilities that are 25 beds or less are Critical Access Hospitals. Small and mid-size rural hospitals (non-CAHs) tend to be under 100 beds.

Two-thirds of Michigan’s hospitals are located in metropolitan counties. The remaining one-third are distributed in a 60-40 split among rural and micropolitan counties. Forty percent of all hospitals are located in the urbanized southeastern part Michigan. Table 2 shows the distribution of hospitals in metropolitan, micropolitan, and rural areas of Michigan by hospital size, which is denoted by the number of licensed hospital beds.
Table 2: Hospital Size by Number of Beds

<table>
<thead>
<tr>
<th></th>
<th>Large Hospital (100+ Beds)</th>
<th>Small and/or Rural Hospital (25-100 Beds)</th>
<th>Critical Access Hospital (&lt;25 Beds)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michigan</td>
<td>77</td>
<td>71</td>
<td>34</td>
<td>182</td>
</tr>
<tr>
<td>Metropolitan</td>
<td>67</td>
<td>49</td>
<td>6</td>
<td>122</td>
</tr>
<tr>
<td>Micropolitan</td>
<td>9</td>
<td>9</td>
<td>6</td>
<td>24</td>
</tr>
<tr>
<td>Rural</td>
<td>1</td>
<td>13</td>
<td>22</td>
<td>36</td>
</tr>
</tbody>
</table>

**Critical Access Hospitals**
Legislation enacted as part of the Balanced Budget Act (BBA) of 1997 established a mechanism to designate Critical Access Hospitals (CAHs) through the Centers for Medicaid and Medicare Services (CMS). As CAHs, these facilities are small hospitals (25 beds or less), with limited services available. In order to be designated by CMS, they are required to have a referral or networking agreement with larger, tertiary hospitals, and thus, creating a referral system for more advanced care.

A CAH must be in a rural area, and more than 35 miles from the nearest hospital or designated as a “necessary provider” (prior to December 31, 2005). They also need to provide 24-hour emergency care services for local patients. Michigan has a total of 34 CAHs providing care throughout rural Michigan.

**Rural Hospitals (Non-CAH facilities)**
Michigan’s rural non-CAH hospitals vary in size and availability of care. All of these facilities offer basic hospital care, but may also offer more advanced services like open heart surgery or trauma care. Rural tertiary hospitals offer the most advanced care of Michigan’s rural hospitals. These are the regional facilities located in the larger cities throughout rural Michigan. They network with the smaller facilities for referrals on more advanced care.

**Services Provided**
Many types of services are provided in rural Michigan hospitals. The MDCH Certificate of Need (CON) office certifies both diagnostic and therapeutic services (16 in all) for hospitals. Table 3 is information collected from the Annual Statistical Questionnaire which is conducted by the CON Program. The information in the table is broken out between non-CAHs in rural Michigan and all CAHs.

Table 3: Services offered by Hospitals and Critical Access Hospitals (CAHs) in rural Michigan

<table>
<thead>
<tr>
<th>Facility Type</th>
<th># of Hospitals</th>
<th>Lithotripsy</th>
<th>CT or MRI Services</th>
<th>Cardiac Catheterization Services</th>
<th>MRT Services</th>
<th>Surgical Services</th>
<th>Trauma Level Certified</th>
<th>Burn Care Certified</th>
<th>Open Heart Surgery</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAH</td>
<td>34</td>
<td>1</td>
<td>33</td>
<td>3</td>
<td>32</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Rural Non-CAH</td>
<td>32</td>
<td>7</td>
<td>30</td>
<td>6</td>
<td>31</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>
According to the Table 3, most of the CAHs offer CT or MRI diagnostic services. They also offer surgical services. Only three of the CAHs offer cardiac catheterization, while only one facility offers lithotripsy. One of the facilities also offers MRT cancer treatment.

The other (non-CAH) hospitals have the full spectrum of services available, except none of those hospitals are Burn Care certified. The three largest hospitals in rural Michigan offer open heart surgical services, as well. Most of the facilities included in the data offer CT, MRI, and surgical services. Less than a quarter of the facilities offer lithotripsy, MRT, and cardiac catheterization services, while only two of the facilities have Trauma certification.

Emergency Medical Care

Emergency Medical Services (EMS)

In non-metropolitan counties, there are 148 licensed ambulance service providers. The providers offer service areas ranging from multi-county zones to single townships. There are 22 full county providers and 9 multi-county providers. (See Table 4.)

<table>
<thead>
<tr>
<th>Service Area:</th>
<th>Total Ambulance Service Providers: 148</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Providers with:</td>
<td>Full County</td>
</tr>
<tr>
<td>Volunteer Staff</td>
<td>22</td>
</tr>
<tr>
<td>Paid Staff</td>
<td>60</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Service Provider Care Level:</th>
<th>Basic</th>
<th>Limited Advanced</th>
<th>Advanced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Service Providers with:</td>
<td>78</td>
<td>8</td>
<td>62</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Vehicles:</th>
<th>Ground Transport</th>
<th>Air Transport</th>
<th>Non-Transport</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Service Providers with:</td>
<td>436</td>
<td>2</td>
<td>64</td>
</tr>
</tbody>
</table>

About half of the service providers (68 of 148) have full-time, paid staff, while the rest of the service providers have volunteer staff (60) or an arrangement with another organization (20). Throughout non-metropolitan Michigan, there are 436 ground transport ambulances, 2 helicopters, and 64 non-transport vehicles. The level of care provided by an ambulance service (basic, limited advanced, or advanced) is determined by the type of EMS professional working for the provider. Emergency Medical Technicians (EMTs) are qualified to perform Basic Life Support (BLS), and EMT Specialists perform Limited Advanced Life Support (Limited ALS). To be certified for Advanced Life Support (ALS), the service provider must have a licensed paramedic on staff. In non-metropolitan counties, 78 service providers offer basic life support, 8 offer limited advanced life support, and 62 offer advanced life support.

Air-Ambulance

In Michigan, seven air-ambulance service providers are certified by the MDCH Certificate of Need (CON) office, including two service providers from Toledo, Ohio. The bases of operations for these services are the larger hospitals, which include Munson Medical Center in Traverse City, the service provider north of Saginaw. Services in Lower Michigan cover all of the non-metropolitan areas. Service in Grand Rapids extends far enough north to overlap with the Traverse City service area, covering the majority of western non-metropolitan Michigan.

Areas not readily covered by air-ambulance include the eastern portion in the Northern Lower Peninsula and the Upper Peninsula. Services in Wisconsin near Michigan’s border are not currently certified in Michigan. According to a table published by ADAMS (Atlas and Database of Air Medical Services) in the Air Medical Journal (July/August 2005), 66.1% of
the land area in Michigan is covered by the 30-minute flight circles of the various services in Michigan. This effectively covers 95.4% of the population, based on the 2000 Census.

Table 5: Michigan’s Air Ambulance Coverage

<table>
<thead>
<tr>
<th>Assessment of Air Medical Coverage in Michigan</th>
<th>10-Min Fly Circle</th>
<th>20-Min Fly Circle</th>
<th>30-Min Fly Circle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of square miles within the fly circle. Michigan has 54,446 total square miles</td>
<td>22.89%</td>
<td>49.25%</td>
<td>66.10%</td>
</tr>
<tr>
<td>Percentage of population within the fly circle utilizing 2000 data of 9,938,444</td>
<td>41.15%</td>
<td>89.71%</td>
<td>95.37%</td>
</tr>
</tbody>
</table>

For the years 2004-2006, there was a reported 16,635 patient transports in Michigan. About 20% of the transports were pre-hospital, where a patient was taken from an original site to a hospital. The other 80% transports were hospital-to-hospital transfers. North Flight, the sole non-metropolitan based air ambulance service provider, experienced a notably greater percent of pre-hospital transports than the other air-ambulance service providers.

Table 6: Michigan’s Air Ambulance Transports

<table>
<thead>
<tr>
<th>Facility Information</th>
<th>Pre-Hospital Transports</th>
<th>Inter-Facility Transports</th>
<th>Total Patient Transports</th>
<th>% of Transports</th>
</tr>
</thead>
<tbody>
<tr>
<td>AeroMed Spectrum Health</td>
<td>442</td>
<td>1,417</td>
<td>1,859</td>
<td>11.2%</td>
</tr>
<tr>
<td>Flight Care</td>
<td>299</td>
<td>1,167</td>
<td>1,466</td>
<td>8.8%</td>
</tr>
<tr>
<td>LifeNet</td>
<td>208</td>
<td>951</td>
<td>1,159</td>
<td>7.0%</td>
</tr>
<tr>
<td>Midwest Medflight</td>
<td>123</td>
<td>1,112</td>
<td>1,235</td>
<td>7.4%</td>
</tr>
<tr>
<td>North Flight</td>
<td>321</td>
<td>494</td>
<td>815</td>
<td>4.9%</td>
</tr>
<tr>
<td>ProMedica Air (Toledo)</td>
<td>53</td>
<td>1,011</td>
<td>1,064</td>
<td>6.4%</td>
</tr>
<tr>
<td>Life Flight - St. Vincent (Toledo)</td>
<td>1,086</td>
<td>2,740</td>
<td>3,826</td>
<td>23.0%</td>
</tr>
<tr>
<td>Survival Flight</td>
<td>373</td>
<td>2,967</td>
<td>3,340</td>
<td>20.1%</td>
</tr>
<tr>
<td>West Michigan Air Care</td>
<td>330</td>
<td>1,541</td>
<td>1,871</td>
<td>11.2%</td>
</tr>
<tr>
<td>Total Transport</td>
<td>3,235</td>
<td>13,400</td>
<td>16,635</td>
<td></td>
</tr>
</tbody>
</table>

**Emergency Department**
From 2002 to 2004, the statewide average for Emergency Room (ER) visits was just under 4 million a year (3,915,885 visits). Of these visits, a third of the patients (1.3 million) were admitted to the hospital for further treatment and/or observation. Table 7 shows the average number of visits broken down for several categories, including trauma, drug-related, psychiatric, and asthma. For the purpose of the MDCH CON Annual Hospital Statistical Questionnaire, pediatric visits are all patients under 15 years of age, and adult visits include all patients aged 15 years or older.
Rural Michigan accounts for 20 percent of the total annual number of ER visits in Michigan. About 80 percent of patients are adults, particularly in categories like trauma, cardiac, obstetric, and alcohol. Of the categories that have been named in the table, the top four categories for all hospitals types are 1) upper respiratory infection, 2) trauma, 3) asthma, and 4) cardiac. These four categories account for one-sixth of all ER visits in rural hospitals.

<table>
<thead>
<tr>
<th>ER Visits</th>
<th>Total (66)</th>
<th>CAHs (34)</th>
<th>Micropolitan Non-CAH (18)</th>
<th>Rural Non-CAH (14)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ER Visits</td>
<td>807,246</td>
<td>287,040</td>
<td>305,076</td>
<td>215,130</td>
</tr>
<tr>
<td>ER Admissions</td>
<td>92,416</td>
<td>22,112</td>
<td>46,763</td>
<td>23,541</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ER Visits</th>
<th>Total</th>
<th>Adult</th>
<th>Pediatric</th>
<th>Adult</th>
<th>Pediatric</th>
<th>Adult</th>
<th>Pediatric</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trauma</td>
<td>30,344</td>
<td>24,587</td>
<td>5,757</td>
<td>6,094</td>
<td>1,494</td>
<td>9,207</td>
<td>2,152</td>
</tr>
<tr>
<td>Cardiac</td>
<td>22,881</td>
<td>22,795</td>
<td>86</td>
<td>7,328</td>
<td>36</td>
<td>9,624</td>
<td>32</td>
</tr>
<tr>
<td>Obstetric</td>
<td>10,160</td>
<td>10,134</td>
<td>26</td>
<td>2,297</td>
<td>8</td>
<td>5,838</td>
<td>13</td>
</tr>
<tr>
<td>Drug</td>
<td>991</td>
<td>954</td>
<td>37</td>
<td>438</td>
<td>18</td>
<td>230</td>
<td>13</td>
</tr>
<tr>
<td>Alcohol</td>
<td>2,251</td>
<td>2,210</td>
<td>41</td>
<td>547</td>
<td>22</td>
<td>1,277</td>
<td>12</td>
</tr>
<tr>
<td>Poisoning</td>
<td>8,737</td>
<td>6,772</td>
<td>1,965</td>
<td>2,351</td>
<td>813</td>
<td>2,552</td>
<td>761</td>
</tr>
<tr>
<td>Psychiatric</td>
<td>14,909</td>
<td>14,288</td>
<td>621</td>
<td>3,994</td>
<td>154</td>
<td>6,686</td>
<td>312</td>
</tr>
<tr>
<td>Asthma</td>
<td>24,856</td>
<td>18,518</td>
<td>6,338</td>
<td>7,563</td>
<td>2,404</td>
<td>6,740</td>
<td>2,511</td>
</tr>
<tr>
<td>Upper Respiratory</td>
<td>57,040</td>
<td>33,103</td>
<td>23,937</td>
<td>12,391</td>
<td>8,504</td>
<td>11,053</td>
<td>9,379</td>
</tr>
<tr>
<td>Other Medical</td>
<td>635,077</td>
<td>508,309</td>
<td>126,766</td>
<td>188,047</td>
<td>42,537</td>
<td>188,535</td>
<td>48,149</td>
</tr>
<tr>
<td>Total</td>
<td>807,246</td>
<td>641,670</td>
<td>165,576</td>
<td>231,050</td>
<td>55,990</td>
<td>241,742</td>
<td>63,334</td>
</tr>
</tbody>
</table>

The ICD-9-CM Codes for these categories are as follows:
- Trauma: 800.00-959.9, 987.9 (smoke inhalation), and all ED deaths including DOA
- Cardiac: 410.0-415.1; 424.1-428.9
- Obstetric: 630.0-676.9
- Psychiatric: 290-302;306-316
- Asthma: 493.0-493.9
- Upper Respiratory Infection: 460-476
- Allergy: 278.0, 346.2, 360.19, 370.62, 372.14, 477.0-477.9, 495.2-495.9, 500-508, 518.3, 535.4, 558.9, 597.89, 691.8, 692.5, 692.9, 693.1, 708.0, 716.2, 995.1-995.4, 995.6

Overall, one in five patients in the ER is under the age of fifteen. More pediatric visits in rural hospitals have to do with upper respiratory infection and asthma than all other single categories combined. The upper respiratory infection, asthma, and trauma categories combined account for 20 percent of all pediatric visits to the ER.

**Long-Term Care Facilities**

In Michigan, there are four different long-term care facilities licensed by MDCH. These are Nursing Homes, Hospital based Long-term Care Units (LTCUs), County Medical Care Facilities (CMCF), and Veterans Long-Term Care Facilities (VA-LTCFs).

<table>
<thead>
<tr>
<th>Area/Region</th>
<th># Facilities</th>
<th>% Total</th>
<th># Licensed Beds</th>
<th>% Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michigan</td>
<td>465</td>
<td>48,208</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metropolitan</td>
<td>328</td>
<td>71%</td>
<td>36,032</td>
<td>75%</td>
</tr>
<tr>
<td>Micropolitan</td>
<td>70</td>
<td>15%</td>
<td>6,739</td>
<td>14%</td>
</tr>
<tr>
<td>Rural</td>
<td>67</td>
<td>14%</td>
<td>5,437</td>
<td>11%</td>
</tr>
</tbody>
</table>
Nursing homes are nursing care facilities that provide organized nursing care and treatment. A nursing home has seven or more beds to care for unrelated individuals suffering or recovering from illness, injury, or infirmity. These do not include hospitals or hospital LTC units, county medical care facilities, veteran’s facilities, hospice, or state correctional facilities. Nursing homes can be for profit or non-profit organizations.

The LTCU is a nursing care facility run as a part of a hospital, and physically located at a hospital. This unit has seven or more beds to care for unrelated individuals suffering or recovering from illness, injury, or infirmity.

A CMCF is a licensed nursing care facility owned by the county or a group of counties, not a hospital or other private entity. Michigan has 36 CMCFs throughout the state. All of these facilities take Medicaid and Medicare, and have skilled nursing beds, which may be used just for rehabilitation purposes, for long-term care, or both.

A Veteran’s Long-Term Care Facility is a nursing care facility which provides organized nursing care and medical care to veterans of the U.S. military suffering or recovering from illness, injury or infirmity.
As of the beginning of 2007, Michigan had more than 350 (171 primary medical care, 68 mental health, and 113 dental) areas and facilities that were either designated as Health Professional Shortage Areas (HPSAs), or were pending federal approval. The HPSA types are listed in Table 9.

<table>
<thead>
<tr>
<th>Counties with HPSAs</th>
<th>Full/Partial County</th>
<th>Facility</th>
<th>Tribal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metropolitan (26)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Area 7 LIP 3 Both</td>
<td>3 Full, 21 Partial</td>
<td>32</td>
<td>2</td>
</tr>
<tr>
<td>12 Without</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Micropolitan (23)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17 LIP 2 Area 1 Both</td>
<td>13 Full 9 Partial</td>
<td>25</td>
<td>7</td>
</tr>
<tr>
<td>3 Without</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural (34)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 LIP 10 Area 2 Both</td>
<td>27 Full 6 Partial</td>
<td>28</td>
<td>4</td>
</tr>
<tr>
<td>2 Without</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Counties with HPSAs</th>
<th>Full/Partial County</th>
<th>Facility</th>
<th>Tribal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Medical Care HPSAs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental HPSAs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dental HPSAs</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Each of the columns in Table 9 identify different counts for HPSA designations, which lists the county designations, the number of designations based on partial or full county service areas, and the facility and tribal designations. Under the column heading “Counties with HPSAs,” the county counts differentiate between Geographic Area (Area) and Low-Income Population (LIP) designations. The column heading “Full/Partial County” distinguishes between the service areas, whether it is a full or partial county service area.

Most facility designations are for state facilities (mental health hospital/clinic, correctional facility, etc), Federally Qualified Health Centers, and Rural Health Clinics. Private and hospital-based clinics can have facility designations as well.

**Primary Medical Care HPSAs**
Throughout the state, 66 counties have some type of Primary Medical Care HPSA, 43 of which have full county designations. Fourteen of Michigan’s 26 metropolitan counties have a Primary Medical Care HPSA designation. Most micropolitan (20 of 23) and rural (32 of 34) counties have service area designations. There are 85 facilities with a Primary Medical Care HPSA designation, and 13 tribal designations.

**Dental HPSAs**
Of the 83 counties in Michigan, 61 have some type of Dental HPSA, 49 of which have full county designations. There are 37 facilities with a Dental HPSA designation, four of which are located in a county without a service area designation. All but two of the designations are low-income population groups, as opposed to Geographic Area. Half (13 of 26) of the metropolitan counties have designations, but only five are full county designations. Two-thirds (16 of 23) of
micropolitan counties have a designation, and all but one are full county service areas. Most (32 of 34) rural counties have a designation, and 29 of those designations (90%) are full county service areas.

**Mental Health HPSAs**
Mental Health HPSAs are found predominantly in rural areas. Only six counties have some form of designation in metropolitan counties, five of which are full county service areas. There are 23 Mental HPSA facility designations in metropolitan areas, and 14 are located in counties without HPSA designations. In rural Michigan, 41 counties have Mental HPSA designations (72%). Of the 41 Mental HPSA designations, all are full county service areas but one.

**Benefits of HPSA designations**
A Health Professional Shortage Area (HPSA) is designated by the Health Resources and Services Administration (HRSA). A recruitment tool available to facilities located in shortage areas is physician placement. In Michigan, placement programs associated with HPSA designations include:
- National Health Service Corps, Scholarship & Loan Repayment (NHSC)
- State Loan Repayment Program
- State Conrad 30 J-1 Visa Waiver Program

The National Health Service Corps (NHSC) Program places scholars in HPSAs. The NHSC also awards loan repayment funding to qualified physicians working in shortage areas. Each year the NHSC Program places about 250 scholars and gives out 2,000 loan repayment awards, nationally.

| Table 10: Michigan’s State Loan Repayment Program Placements, 2000-2006 |
|-----------------|----------------|----------------|-----------------|----------------|----------------|
|                 | # Placements | % of Total Placement | # Counties Served | Average Placement/County | # of Counties Served | % Counties Served |
| Total           | 227          | 55               | 4.1             | 83               | 66.3%           |
| Metropolitan    | 92           | 40.5%            | 15              | 6.1              | 26              | 57.7%           |
| Micropolitan    | 43           | 18.9%            | 14              | 3.1              | 23              | 60.9%           |
| Rural           | 92           | 40.5%            | 26              | 3.5              | 34              | 76.4%           |

The Michigan State Loan Repayment Program (MSLRP) is administered by MDCH. Each year, loan repayment awards are available to primary care providers working in shortage areas. Between 2000 and 2006, MDCH awarded funding for loan repayment to 227 providers. Almost 60 percent of these providers were located in non-metropolitan Michigan.

The J-1 Visa Waiver program is available for international medical graduates who are training in the U.S. on a J-1 Visa. This program grants up to 30 waivers a year to physicians who have completed their training on the J-1 Visa. In exchange for the waiver of their two year return home requirement, the physician must agree to work in a federally designated shortage area for three years.

*Michigan Strategic Opportunities for Rural Health Improvement* 21
Table 11: Michigan’s Conrad State 30 Placements, 1995-2007

<table>
<thead>
<tr>
<th></th>
<th>Primary Care</th>
<th>Psychiatry</th>
<th>Sub-Specialty</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metropolitan</td>
<td>170</td>
<td>4</td>
<td>28</td>
<td>202</td>
</tr>
<tr>
<td>Micropolitan</td>
<td>26</td>
<td>4</td>
<td>6</td>
<td>36</td>
</tr>
<tr>
<td>Rural</td>
<td>47</td>
<td>1</td>
<td>7</td>
<td>55</td>
</tr>
<tr>
<td>Multi-Site Metro-Rural</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>243</td>
<td>9</td>
<td>43</td>
<td>295</td>
</tr>
</tbody>
</table>

Since the inception of the program, MDCH has placed 295 physicians in Michigan, including 93 physicians in rural areas. The majority of placements (78%) have been for primary care providers (family practice, general practice, internal medicine, ob-gyn, and pediatrics). Sub-specialty providers include: neurologists, cardiologists, pathologists, hem/oncologists, radiologists, and specialty surgeons.
MI-SORHI PRIORITY HEALTH ISSUES

Recruitment & Retention

Recruitment and Retention of health care professionals is a challenge for rural areas. Nationally, there is a projected provider shortage along with a projected increase in demand for services, as the baby-boomer population reaches retirement age. Recruitment and Retention was identified as an issue in all three components of the rural community health assessment that was completed as part of the MI-SORHI planning process.

During the Community Meetings, a common theme was the difficulty in attracting and retaining a sufficient amount of providers, ranging from physicians and dentists, nurses and physician assistants, to mental health care, emergency care and ancillary providers. Important distinctions for providers practicing in rural vs. urban settings were also discussed. In many cases, providers in rural areas will need to have a greater degree of independence and may not have the same peer support systems compared with their urban counterparts.

In the Delphi Study, respondents indicated that it can take up to 2 years or longer to fill a vacancy. In addition to problems recruiting providers, respondents indicated that it was difficult to retain them. The population of providers is getting older, and as they retire, additional providers are needed to fill in the vacancies and address the needs in these communities.

The Michigan Rural Health Profile provides data on the supply of health care providers in rural areas, and also provides information on Health Professional Shortage Areas (HPSAs). In Michigan, 91% of the counties have some type (Primary Medical Care, Mental Health Care, and/or Dental Health Care) of HPSA designation, reiterating the need for primary care providers. Information provided by the annual physician and nursing surveys conducted through the MDCH Bureau of Health Professions indicates that a large percentage of the physician and nurse population are approaching retirement age, and intend to retire in the next ten years, which, without explicit actions, will further exacerbate the current shortage of providers.

Availability & Accessibility to Healthcare Services

Access to, and availability of health care is a significant issue in rural Michigan. This issue was identified as a top issue through the Delphi Study and all the Community Meetings. Concerns were raised regarding access and availability to primary and specialty care, oral health care, and mental health care for rural residents.

The Delphi Study and Community Meetings also identified several factors that contribute to the lack of access to, or availability of, healthcare services including: lack of resources, too small of a population to maintain a service, geographic isolation, providers not taking new patients, a patient’s inability to pay for services, and providers not accepting types of coverage. Provider shortage also plays a role in the lack of services, along with reimbursement policies, long waits for appointments, and long distances to travel for services.
As a result of provider shortages, low reimbursement, and large increases in enrollment, the Michigan Medicaid population faces additional challenges in accessing needed medical care. The enrollment in Medicaid in Michigan’s rural counties has increased by 36% between 1999 and 2004. Further straining the rural delivery system is the increase in Medicare enrollment, which experienced a 9% increase between 1999 and 2005. Medicaid and Medicare enrollment rates are higher in rural Michigan than metropolitan Michigan.

Healthy Lifestyles

The leading causes of death in rural Michigan are heart disease, cancer, and stroke. Although these are also the leading causes of death in metropolitan Michigan, the death rates from these causes of death are notably higher in rural Michigan, indicating that the burden of these diseases is more acute in rural Michigan.

Whereas the Michigan Rural Health Profile describes the leading causes of death, the tremendous opportunity to prevent these causes of death through healthy behaviors and healthy lifestyle choices (physical activity, eating healthy, and maintaining a healthy weight) was clearly communicated through the Community Meetings and the Delphi Study. Throughout Michigan, and the nation, the rate of obesity has been increasing, drawing considerable attention as the new epidemic. Among the states, Michigan has one of the highest rates of obesity in the nation, and Michigan’s rural areas have a significantly higher rate of obesity than the urban areas.

Supporting and engaging rural Michigan communities and their residents in eating healthy, being physically active, and achieving and maintaining a healthy weight should reduce the burden of chronic disease and also contribute to an improved quality of life. Collaborative efforts involving communities, schools, worksites, families, and others are needed to create environments that support sustainable healthy behaviors.
MI-SORHI PLAN: GOALS AND OBJECTIVES

Recruitment and Retention

Goal A: Increase the number of practicing health professionals in rural Michigan

- **Objective A-1**: By 2010, increase by 20% the number of rural health sites approved as Michigan State Loan Repayment sites (MSLRP).
- **Objective A-2**: By 2010, increase by 10% the number of rural providers participating in the State Loan Repayment Program.
- **Objective A-3**: By 2010, increase by 20% the number of rural health sites approved as National Health Service Corps sites; from 127 to 152.
- **Objective A-4**: By 2010, increase by 10% the number of National Health Service Corps provider placements at rural sites.
- **Objective A-5**: By 2012, develop a retention model to assist rural hospitals, certified rural health clinics and federally qualified health centers in their retention planning efforts.
- **Objective A-6**: By 2010, develop a rural component to the “Practice Michigan” campaign to promote the benefits and positive aspects of rural practice.

Goal B: Increase targeted education and training opportunities for health professionals in rural Michigan.

- **Objective B-1**: By 2011, increase by 25% the number of continuing education contact hours provided by the Michigan Center for Rural Health to health professionals in rural Michigan.
- **Objective B-2**: By 2010, four continuing education contact hours focusing on rural practice issues will be provided annually to oral health professionals in rural Michigan.
- **Objective B-3**: By 2009, convene a panel of experts to review policies and practices that impact rural training opportunities and recommend action steps to increase the availability of training opportunities in rural Michigan.

Goal C: Increase the number of applications from and admissions for rural residents to health profession education and training programs.

- **Objective C-1**: By 2011, increase the number of Health Occupational Students of America (HOSA) chapters in rural Michigan from 26 to 34 and increase the number of students from rural Michigan that are members of HOSA.
• **Objective C-2**: By 2011, increase the number of high school students from rural Michigan participating in Health Opportunities for Today and Tomorrow (HOTT).

• **Objective C-3**: By 2012, increase the number of rural high school students admitted to the Michigan State University College of Osteopathic Medicine OsteoChamps Program.

• **Objective C-4**: By 2012, increase by 25% the admission of students from rural areas of Michigan to Michigan State University medical schools.

• **Objective C-5**: By 2012, increase by 25% the admissions of MSW students from rural areas of Michigan to the MSU School of Social Work.

• **Objective C-6**: By 2012, increase by 25% the admissions of students from rural areas of Michigan to the MSU College of Nursing.

• **Objective C-7**: By 2012, increase by 25% the admissions of students from rural areas of Michigan to physician assistant programs, nurse practitioner programs and dental schools in Michigan.

**Availability and Accessibility to Health Care Services**

**Goal A**: Increase access to dental care and dental homes for rural residents.

• **Objective A-1**: By 2012, increase the participation in Healthy Kids Dental to all rural counties.

• **Objective A-2**: By 2012, increase the utilization of Healthy Kids Dental Services in rural counties among eligible children.

• **Objective A-3**: By 2011, increase rural Michigan Community Dental Clinics (MCDC) sites from 14 to 22.

• **Objective A-4**: By 2011, increase rural Public Act 161 sites that provide dental care from 5 to 9.

• **Objective A-5**: By 2012 increase the number of rural federally qualified health centers (FQHC) sites providing dental care from 17 to 22.

**Goal B**: Increase access to mental health care for rural residents.

• **Objective B-1**: By 2012, train 45 rural primary care providers to screen for mental health disorders.

• **Objective B-2**: By 2012, double the number of certified rural health clinics (RHCs) that provide a multidisciplinary approach to behavioral health issues.
• **Objective B-3**: By 2012, double the number of rural facilities that provide tele-psychiatry from 7 to 14.

• **Objective B-4**: By 2012, increase the number of FTEs providing mental health care in rural FQHCs from 14 to 18.

**Goal C**: *Increase access to primary care and specialty care for rural residents.*

• **Objective C-1**: By 2011, increase the number of certified Rural Health Clinics from 144 to 160.

• **Objective C-2**: By 2012, expand services in at least 4 established rural FQHCs and develop at least 4 new FQHC delivery sites.

• **Objective C-3**: By 2012, increase the number of school-based, school-linked health centers in rural communities from 6 to 12.

• **Objective C-4**: By 2011, increase by 25% the number of rural hospitals that provide telemedicine for specialty services in rural Michigan.

• **Objective C-5**: By 2011, increase by 15% the number of telemedicine encounters in rural hospitals for specialty care.

**Healthy Lifestyles**

**Goal A**: *Reduce the rate of obese and overweight adults and children in rural Michigan*

• **Objective A-1**: By 2012, work with at least 20 rural communities including 10 CAH communities to establish a committee to assess their policy and environmental support for healthy eating and physical activity, through the use of a community assessment toolkit (PAC, HCC, or NEAT) and develop an action plan to improve community-wide policies. (Same as B-1 and C-1)

• **Objective A-2**: By 2012, adapt existing educational materials regarding risk, prevention, and long-term effects of obesity for rural communities and disseminate to at least 20 rural communities including 10 CAH communities. (Similar to B-4 and C-4)

• **Objective A-3**: By 2011, medical nutrition therapy services provided by Registered Dietitian will be reimbursed by Medicaid, Medicare, managed care plans, and other payers.

• **Objective A-4**: By 2011, health risk appraisals provided in primary care and public health department settings will be reimbursed by Medicaid, Medicare, managed care plans, and other payers.
Goal B: Increase the number of rural adults and children who engage in moderate physical activity at least 5 days a week for 30 minutes a day.

- Objective B-1: By 2012, work with at least 20 rural communities including 10 CAH communities to establish a committee to assess their policy and environmental support for healthy eating and physical activity, through the use of a community assessment toolkit (PAC, HCC, or NEAT) and develop an action plan to improve community-wide policies. (Same as A-1 and C-1)

- Objective B-2: By 2012, increase by 20% the number of worksites that establish a worksite wellness program and utilize a worksite assessment tool to advance physical activity for employees.

- Objective B-3: By 2012, increase by 10% the number of rural school districts who establish a school health committee (Coordinated School Health Team) and implement environmental and policy changes to advance physical activity.

- Objective B-4: By 2010, adapt existing educational materials regarding the health benefits of moderate physical activity for rural communities and disseminate to at least 20 rural communities including 10 CAH communities. (Similar to A-2 and C-4)

Goal C: Increase the number of rural residents who engage in healthy eating (including adequate fruit, vegetable, and calcium intake; reduce trans fats)

- Objective C-1: By 2012, work with at least 20 rural communities including 10 CAH communities to establish a committee to assess their policy and environmental support for healthy eating and physical activity, through the use of a community assessment toolkit (PAC, HCC, or NEAT) and develop an action plan to improve community-wide policies. (Same as A-1 and B-1)

- Objective C-2: By 2010, increase by 25 the number of rural communities that have taken steps to increase demand for, and improve access to, healthy foods.

- Objective C-3: By 2012, increase by 10% the number of school districts that establish a school health committee (Coordinated School Health Team) and implement environmental and policy changes to advance nutrition in the schools (similar to B-3)

- Objective C-4: By 2010, adapt existing educational materials regarding healthy eating and nutrition for rural communities and disseminate to at least 20 rural communities including 10 CAH communities. (Similar to A-2 and B-4)
**Priority Health Issue: Recruitment and Retention**

**Purpose Statement:** To recruit and retain the appropriate number of practicing health care professionals (physicians, advance practice nurses, physician assistants, nurses, allied health professionals, and dentists) to meet the health care needs of rural Michigan.

**Goal A:** Increase the number of practicing health professionals in rural Michigan

**Objective A-1:** By 2010, increase by 20% the number of rural health sites approved as Michigan State Loan Repayment sites (MSLRP).

**Strategies:**
2) The Michigan Department of Community Health will establish and maintain an “Approved MSLRP Practice Site Vacancy List” that will allow rural employers to advertise job openings at eligible practices sites to providers seeking loan repayment.  
3) The Michigan Department of Community Health and its marketing partners will promote the site vacancy list through e-mails, websites, newsletters, training sessions, 3RNet, annual meetings, and conferences.

**Objective A-2:** By 2010, increase by 10% the number of rural providers participating in the State Loan Repayment Program.

**Strategies:**
2) The Michigan Health Council will include MSLRP information in their informational materials and on their website.  
3) The Michigan Department of Community Health and Michigan Center for Rural Health and other marketing partners will explore and promote options for increasing rural employer & community contributions that will be matched with existing federal dollars to recruit and retain needed medical, dental, and mental health care providers in rural Health Professional Shortage Areas (HPSAs).

**Objective A-3:** By 2010, increase by 20% the number of rural health sites approved as National Health Service Corps sites; from 127 to 152.

**Strategies:**
1) The Michigan Department of Community Health, Michigan Center for Rural Health, Michigan Health Council, Michigan Primary Care Association, Michigan Health & Hospital Association and others will promote the program to eligible rural site managers and administrators.  
2) The Michigan Center for Rural Health will promote the NHSC Loan Repayment Program (LRP) by exhibiting at the Annual Michigan Rural Health Conference and the Michigan Strategic Opportunities for Rural Health Improvement 29
Annual Michigan Critical Access Hospital Conference. 3) The Michigan Department of Community Health and Michigan Center for Rural Health will develop a series of articles highlighting the NHSC LRP in the monthly CAH Chronicle and the MCRH quarterly newsletter.

**Objective A-4:** By 2010, increase by 10% the number of National Health Service Corps provider placements at rural sites.

**Strategies:** 1) The Michigan Center for Rural Health and Michigan Department of Community Health will present the NHSC Scholar and Loan Repayment Program to medical students at the four Michigan medical schools. 2) The Michigan Center for Rural Health and Michigan Department of Community Health will develop an informational letter promoting NHSC LRP benefits to all Michigan residency programs. 3) The Michigan Health Council will disseminate NHSC informational materials to employers and primary care providers. The Michigan Center for Rural Health, Michigan Department of Community Health, Michigan Primary Care Association and the Michigan Health Council will provide information and presentations on the NHSC to primary care residency programs in Michigan.

**Objective A-5:** By 2012, develop a retention model to assist rural hospitals, certified rural health clinics and federally qualified health centers in their retention planning efforts.

**Strategies:** The Michigan Center for Rural Health will survey rural hospitals and certified Rural Health Clinics to determine use of current retention models and work with National Rural Recruitment and Retention Network to research best practices and existing national retention models, and develop a retention plan.

**Objective A-6:** By 2010, develop a rural component to the “Practice Michigan” campaign to promote the benefits and positive aspects of rural practice.

**Strategies:** The Michigan Center for Rural Health and the Michigan Health Council (and other partners) will develop rural-focused components to the “Practice Michigan” campaign.

**Goal B:** Increase targeted education and training opportunities for health professionals in rural Michigan.

**Objective B-1:** By 2011, increase by 25% the number of continuing education contact hours provided by the Michigan Center for Rural Health to health professionals in rural Michigan.

**Strategies:** The Michigan Center for Rural Health will with Michigan State University, Upper Peninsula Telehealth Network, and REMEC increase the number of Grand Rounds provided to health professionals.

**Objective B-2:** By 2010, four continuing education contact hours focusing on rural practice issues will be provided annually to oral health professionals in rural Michigan.
**Strategies:** The Michigan Center for Rural Health will work with the Michigan Dental Association, Michigan Dental Hygienist Association, Michigan Department of Community Health Oral Health Program and the Michigan Schools of Dentistry to provide appropriate courses and contact hours.

**Objective B-3:** By 2009, convene a panel of experts to review policies and practices that impact rural training opportunities and recommend action steps to increase the availability of training opportunities in rural Michigan.

**Strategies:** The Michigan Center for Rural Health will convene a time-limited panel comprised of representatives from the Michigan Health Council, Michigan Health & Hospital Association, Michigan Department of Community Health, Institute for Health Care Studies, Michigan Primary Care Association, educational and training institutions, rural community hospitals, and others to review professional training policies and practices and develop recommendations to increase the availability of training opportunities in rural Michigan.

**Goal C:** Increase the number of applications from and admissions for rural residents to health profession education and training programs.

**Objective C-1:** By 2011, increase the number of Health Occupational Students of America (HOSA) chapters in rural Michigan from 26 to 34 and increase the number of students from rural Michigan that are members of HOSA

**Strategies:** 1) The Michigan Center for Rural Health Recruitment Services Manager and Flex Program Coordinator will distribute Health Occupational Students of America materials and discuss the programs with administrators during their annual hospital and certified Rural Health Clinic visits. 2) The Michigan Center for Rural Health, Michigan Health Council and Michigan Academy of Physician Assistants will sponsor 15 hospital-based Career Days/Job Opportunity Days by 2011.

**Objective C-2:** By 2011, increase the number of high school students from rural Michigan participating in Health Opportunities for Today and Tomorrow (HOTT).

**Strategies:** 1) The Michigan Center for Rural Health Recruiter and Flex Program Coordinator will distribute Health Opportunities for Today and Tomorrow materials and discuss the programs with administrators during their annual hospital and certified Rural Health Clinic visits. 2) The Michigan Center for Rural Health, Michigan Health Council and Michigan Academy of Physician Assistants will sponsor 15 hospital-based Career Days/Job Opportunity Days by 2011.

**Objective C-3:** By 2012, increase the number of rural high school students admitted to the Michigan State University College of Osteopathic Medicine OsteoChamps Program.

**Strategies:** The Michigan Center for Rural Health will initiate dialogue with MSU OsteoChamps regarding recruitment of high school students from rural areas.
Objective C-4: By 2012, increase by 25% the admission of students from rural areas of Michigan to Michigan State University medical schools.

Strategies: The Michigan Center for Rural Health will initiate dialogue with the Deans of Michigan State University medical schools regarding increasing recruitment of students from rural areas.

Objective C-5: By 2012, increase by 25% the admissions of MSW students from rural areas of Michigan to the MSU School of Social Work.

Strategies: The Michigan Center for Rural Health will initiate dialogue with the Chairperson of the Michigan State University School of Social Work regarding increasing recruitment of students from rural areas.

Objective C-6: By 2012, increase by 25% the admissions of students from rural areas of Michigan to the MSU College of Nursing.

Strategies: The Michigan Center for Rural Health will initiate dialogue with the Dean of Michigan State University College of Nursing regarding increasing recruitment of students from rural areas.

Objective C-7: By 2012, increase by 25% the admissions of students from rural areas of Michigan to physician assistant programs, nurse practitioner programs and dental schools in Michigan.

Strategies: The Michigan Center for Rural Health will initiate dialogue with the Deans and Chairs of the Michigan’s physician assistant programs, nurse practitioner programs and dental schools.
PRIORITY HEALTH ISSUE: *Availability and Accessibility to Health Care Services*

*Purpose Statement:* To improve the availability and access to health care services, in the areas of primary and specialty care, oral and mental health for the residents of rural Michigan.

**Goal A:** Increase access to dental care and dental homes for rural residents.

**Objective A-1:** By 2012, increase the participation in Healthy Kids Dental to all rural counties.

**Strategies:** The Michigan Dental Association, Michigan Dental Hygienists Association, Michigan Oral Health Coalition, Michigan Center for Rural Health and other partners will work to educate legislators and advocate for the remaining rural counties to be added to Healthy Kids Dental.

**Objective A-2:** By 2012, increase the utilization of Healthy Kids Dental Services in rural counties among eligible children.

**Strategies:** 1) The Michigan Dental Association, Michigan Dental Hygienists Association, Michigan Oral Health Coalition, Michigan Center for Rural Health will develop a marketing plan to increase the awareness of Healthy Kids Dental and the importance of oral health care. 2) The Michigan State University Extension Office will incorporate information on Healthy Kids Dental and the importance of oral hygiene into their Nutrition Education Program.

**Objective A-3:** By 2011, increase rural Michigan Community Dental Clinics (MCDC) sites from 14 to 22.

**Strategies:** 1) The MCDC and other partners will provide education to Local Health Departments, federally qualified health centers and other community partners on ways to enhance access to oral health care through MCDC or similar organizations. 2) Dental partners will promote the utilization of State Loan Repayment, National Health Service Corp, retired and semi-retired dentists, and other recruitment and retention tools to attract and retain qualified dental providers for MCDC sites.

**Objective A-4:** By 2011, increase rural Public Act 161* sites that provide dental care from 5 to 9.

**Strategies:** 1) The Michigan Oral Health Coalition, Dental Hygienist Association, and other professional associations will educate and promote the Public Act 161 program to dentists, dental hygienists, provider organizations, and communities. 2) The Michigan Department of Community Health in collaboration with oral health partners will manage program expansion to assure that dental patients of PA 161 providers are provided a dental home and can access needed care from a licensed dentist.

*Public Act 161 (PA 161) was passed into law in 2005. Under PA 161, dental hygienists maintain a supervisory relationship with a dentist, may perform preventive oral health care
without prior authorization of the supervisory dentist, and make referrals for patients in need of additional dental care to the supervisory dentist. The policy allows dental hygienists approved by the director of community health to provide preventive care in a public or nonprofit entity, or a school or nursing home that administers a program of dental care to a dentally underserved population.

**Objective A-5:** By 2012, increase the number of rural federally qualified health centers (FQHC) sites providing dental care from 17 to 22.

**Strategies:** 1) The Michigan Primary Care Association and the Michigan Department of Community Health will provide on-going technical assistance to FQHCs seeking oral health service expansion grant opportunities. 2) Dental partners will promote the utilization of community dental health coordinators, Michigan Community Dental Clinics, retired and semi-retired dentists, and PA 161 hygienists employed by FQHCs to expand the reach of existing facilities.

**Goal B:** Increase access to mental health care for rural residents.

**Objective B-1:** By 2012, train 45 rural primary care providers to screen for mental health disorders.

**Strategies:** 1) The Michigan State University Department of Psychiatry will: a) educate rural primary care providers on how to screen for mental health disorders, and b) establish a partnership with local health care institutions to provide telemedicine opportunities. 2) The Michigan State University Department of Psychiatry and the Michigan Center for Rural Health will encourage development and promotion of a standard screening tool to use in the primary care setting for mental health disorders.

**Objective B-2:** By 2012, double the number of certified rural health clinics (RHCs) that provide a multidisciplinary approach to behavioral health issues.

**Strategies:** 1) The Michigan Center for Rural Health will survey RHCs to determine the number of clinics that provide a multidisciplinary approach to behavioral health issues. 2) The Michigan Rural Health Clinic Organization, Michigan Primary Care Association and the Michigan Center for Rural Health will: a) educate RHCs on the opportunities of integrating behavioral health into the RHC practice, and b) review with the Medical Services Administration behavioral health payment policy.

**Objective B-3:** By 2012, double the number of rural facilities that provide tele-psychiatry from 7 to 14.

**Strategies:** 1) The Michigan Center for Rural Health will inform rural facilities of the MSU Department of Psychiatry tele-psychiatry program. 2) The Michigan Telehealth Group and partners will assist in educating providers on correct CPT coding. 3) The Midwest Alliance for Telehealth and Telemedicine Resources (MATTeR) will provide opportunities for workforce development and assist in deployment of tele-psychiatry programs.
Objective B-4: By 2012, increase the number of FTEs providing mental health care in rural FQHCs from 14 to 18.

Strategies: The Michigan Primary Care Association and the Michigan Department of Community Health will: a) provide on-going technical assistance to FQHCs seeking mental health expansion grant opportunities, b) provide on-going education to FQHCs about the importance of treating co-morbid physical and mental disorders, and c) expand partnerships between community mental health agencies and FQHCs to provide collocated care and improve management of shared patient populations.

Goal C: Increase access to primary care and specialty care for rural residents.

Objective C-1: By 2011, increase the number of certified Rural Health Clinics from 144 to 160.

Strategies: 1) The Michigan Center for Rural Health and the Michigan Rural Health Clinic Organization will: a) educate current non-RHC sites (private practices) of the advantages of being an RHC, b) provide educational information to hospital administrators on RHC status, c) meet with the Free Clinics of Michigan to explore opportunities to establish RHCs, and d) educate communities and partner with local access to care coalitions on benefits of RHC programs (outreach activity, access of services, PSA’s). 2) The Michigan Department of Community Health will review Governor designated health professional shortage areas for the purpose of RHC designation and recommend designation for eligible rural counties.

Objective C-2: By 2012, expand services in at least 4 established rural FQHCs and develop at least 4 new FQHC delivery sites.

Strategies: The Michigan Primary Care Association and the Michigan Department of Community Health will: a) provide on-going technical assistance to existing rural FQHCs and to rural communities interested in the development of an FQHC and b) assist rural health centers in applying for federal FQHC funds.

Objective C-3: By 2012, increase the number of school-based, school-linked health centers in rural communities from 6 to 12.

Strategies: The Michigan Department of Community Health and the School-Community Health Alliance of Michigan will provide technical assistance to rural communities and schools interested in developing a school-based, school-linked health center.

Objective C-4: By 2011, increase by 25% the number of rural hospitals that provide telemedicine for specialty services in rural Michigan.

Strategies: The Michigan Center for Rural Health partners with Midwest Alliance for Telehealth and Technology Resources (MATTeR) for telemedicine promotion and HIT analysis in rural hospitals.
**Objective C-5:** By 2011, increase by 15% the number of telemedicine encounters in rural hospitals for specialty care.

**Strategies:** 1) MATTeR surveys facilities for telemedicine encounters. 2) The Michigan Center for Rural Health and MATTeR can educate, promote the use, and assist with development / implementation of telehealth.
PRIORITY HEALTH ISSUE: Healthy Lifestyles

Purpose Statement: To support and engage rural Michigan communities and their residents in eating healthy, being physically active, and achieving and maintaining a healthy weight.

Goal A: Reduce the rate of obese and overweight adults and children in rural Michigan

Objective A-1: By 2012, work with at least 20 rural communities including 10 CAH communities to establish a committee to assess their policy and environmental support for healthy eating and physical activity, through the use of a community assessment toolkit (PAC, HCC, or NEAT) and develop an action plan to improve community-wide policies. (Same as B-1 and C-1)

Toolkit:
- PAC – Promoting Active Communities Assessment;
- HCC – Healthy Community Checklist
- NEAT – Nutrition Environment Assessment Tool


Strategies: MCRH, MDCH-CVD, LHD, and local communities partner to develop an obesity prevention plan, and ways to help support the reduction of obesity within the CAH communities and other rural communities for both adults and children (pilot project to begin in a couple communities and replicate in other rural areas over time)

Objective A-2: By 2012, adapt existing educational materials regarding risk, prevention, and long-term effects of obesity for rural communities and disseminate to at least 20 rural communities including 10 CAH communities. (Similar to B-4 and C-4)

Strategies: (Communities) 1) Increase awareness among local partners that designing healthy, livable communities is essential for preventing obesity and other chronic diseases; 2) Engage communities in obesity awareness campaigns; 3) Educate communities on the long-term economic and health impact of obesity; 4) Make available to local partners the information on community assessment tools through MDCH. (Schools) 1) Encourage schools to screen for high risk students (look at F.I.T. Kids Model); 2) Encourage schools to utilize a quality health education curriculum, such as the Michigan Model; (Worksites) Prepare and disseminate a fact sheet to worksite HR/Wellness programs about the cost of obesity to industry for the distribution to local employers. (Families) Prepare and disseminate to families a fact sheet about the cost of obesity and the risk of developing chronic health conditions.

Objective A-3: By 2011, medical nutrition therapy services provided by Registered Dietitian will be reimbursed by Medicaid, Medicare, managed care plans, and other payers.
Strategies: The MI-SORHI Advisory Group Members will advocate through policy and/or legislation for inclusion of, and reimbursement for, services provided by registered dietitians into managed care health plan and health insurance benefits.

Objective A-4: By 2011, health risk appraisals provided in primary care and public health department settings will be reimbursed by Medicaid, Medicare, managed care plans, and other payers.

Strategies: The MI-SORHI Advisory Group Members will advocate through policy and/or legislation for inclusion of, and reimbursement for, health risk appraisals services into managed care health plan and health insurance benefits.

Goal B: Increase the number of rural adults and children who engage in moderate physical activity at least 5 days a week for 30 minutes a day.

Objective B-1: By 2012, work with at least 20 rural communities including 10 CAH communities to establish a committee to assess their policy and environmental support for healthy eating and physical activity, through the use of a community assessment toolkit (PAC, HCC, or NEAT) and develop an action plan to improve community-wide policies. (Same as A-1 and C-1)

Toolkit:
- PAC – Promoting Active Communities Assessment;
- HCC – Healthy Community Checklist;
- NEAT – Nutrition Environment Assessment Tool


Strategies: 1) MCRH, MDCH-CVD, LHD, and local communities will partner to develop an obesity prevention plan, and ways to help support the reduction of obesity within the CAH communities for both adults and children (pilot project to begin in 4-5 communities the first year and replicate in other rural areas in the remaining years). 2) Encourage assessing communities for age-related physical activity opportunities, and possible grant opportunities for walking/ biking trails. 3) Assist communities in the creation and promotion of recreational activities that encourage active lifestyles. 4) Encourage communities to open school facilities (e.g. gym, track, etc) for public use to increase physical activity in rural communities since schools are often the hub of these communities.

Objective B-2: By 2012, increase by 20% the number of worksites that establish a worksite wellness program and utilize a worksite assessment tool to advance physical activity for employees.

Assessment Tools:
- DHEW – Designing Healthy Environments at Work
- PAC – Promoting Active Communities Assessment (Michigan Steps-Up Website)
- Worksite Wellness Toolkit
Health Risk Assessment (HRA) for Worksites

**Strategies:** MCRH, MDCH-CVD, LHD and local partners to develop a worksite campaign aimed to enhance opportunities for physical activities using the CDC Community Guide as a guideline. Encourage employers to create a worksite wellness team (if not already present) and develop plans with their employees, which may include: 1) the use of alternate workstations to encourage more movement during the workday, 2) on-site physical activity programs or classes, 3) incentive-based activity programs (i.e., the employee receives $$ for so much time spent in the company walking program), 4) company-based sports teams for local leagues, and/or 5) Using the Stairs campaigns. Develop and promote an awareness campaign for small businesses about the economic benefits of healthy employees (i.e., sick time, productivity, etc). Create a forum with MDCH-CVD for information exchange & dissemination of evidence-based tools for business wellness. Provide guidance & technical assistance to worksite wellness teams that use DHEW.

**Objective B-3:** By 2012, increase by 10% the number of rural school districts who establish a school health committee (Coordinated School Health Team) and implement environmental and policy changes to advance physical activity.


**Strategies:** 1) Encourage schools to utilize the Healthy School Assessment Tool (or similar assessment tool) to determine what changes are needed within the school. 2) Encourage the use of quality physical education curricula such as EPEC in rural schools. 3) Encourage schools in rural communities to require daily physical activity for all students.

**Objective B-4:** By 2010, adapt existing educational materials regarding the health benefits of moderate physical activity for rural communities and disseminate to at least 20 rural communities including 10 CAH communities. (Similar to A-2 and C-4)

**Strategies:**  (Communities) 1) Educate communities about existing resources for increasing motivation for daily physical activity; 2) Increase awareness and understanding of how physical activity can be incorporated into an individual’s daily routine; 3) Increase awareness of importance of limiting screen time (TV, video games, computer); 4) Make available to local partners the information on community assessment tools through MDCH; 5) Gather information about and create a best practices program for rural communities, 6) posting the information on the MCRH website. (Schools) Raise awareness of need for physical education 5 times a week for 30 minutes using quality physical education curriculum; (Worksites) Awareness campaign for small businesses. (Families) Create web resource for families in rural Michigan that links to state-wide physical activity efforts and information.
**Goal C**: Increase the number of rural residents who engage in healthy eating (including adequate fruit, vegetable, and calcium intake; reduce transfats)

**Objective C-1**: By 2012, work with at least 20 rural communities including 10 CAH communities to establish a committee to assess their policy and environmental support for healthy eating and physical activity, through the use of a community assessment toolkit (PAC, HCC, or NEAT) and develop an action plan to improve community-wide policies. (Same as A-1 and B-1)

**Toolkit:**
- PAC – Promoting Active Communities Assessment;
- HCC – Healthy Community Checklist;
- NEAT – Nutrition Environment Assessment Tool


**Strategies**: MCRH, MDCH-CVD, LHD, and local communities partner to develop an obesity prevention plan, and ways to help support the reduction of obesity within the CAH communities for both adults and children (pilot project to begin in 4-5 communities the first year and replicate in other rural areas in the remaining years); Encourage opportunities for social support for healthy eating; Identify rural areas where access to healthy food is limited, and develop strategies to expand access in those locations; Educate school lunch program managers, vendors, and/or lunch program decision makers on nutrition through participating hospitals, local health departments, or other local resource.

**Objective C-2**: By 2010, increase by 25 the number of rural communities that have taken steps to increase demand for, and improve access to, healthy foods.

**Strategies**: (Communities) 1) Identify rural area where access to fresh fruits/vegetables is limited and develop strategies to expand access to those locations through farmers’ markets and community gardens; 2) Educate communities about the health affects of different eating options (food choices, food amounts, etc.); 3) Increase demand for nutritious food through information about preparation of healthy foods; 4) Encourage restaurants to promote healthy eating (flyers); 5) label menu options with nutritional data. (Schools) 1) Encourage a partnership with the local CAH, LHD, and ISD to promote more fruits and vegetables within the schools; 2) Promote youth farm stand projects. (Worksites) Encourage employers to adopt strategies to improve healthy eating opportunities at the worksite.

**Objective C-3**: By 2012, increase by 10% the number of school districts that establish a school health committee (Coordinated School Health Team) and implement environmental and policy changes to advance nutrition in the schools (similar to B-3)
Strategies: Encourage schools to utilize the Healthy School Assessment Tool (or similar assessment tool) to determine what changes are needed within the school. Encourage a partnership with the local hospital, LHD, local farm markets, and ISD to promote fruits and vegetables within the schools; Encourage schools to replace vending machine pop with healthier alternatives; Encourage schools to share assessment results with meal contractors; Encourage schools to utilize a quality health education curriculum, such as the Michigan Model; Encourage schools to implement 2 activities to promote healthy lunches (both at-school and home-packed); Encourage schools and local health partners (LHD and Hospital) to work together to adapt quick reference healthy menus for parents and families.

Objective C-4: By 2010, adapt existing educational materials regarding healthy eating and nutrition for rural communities and disseminate to at least 20 rural communities including 10 CAH communities. (Similar to A-2 and B-4)

Strategies: (Communities) Increase awareness of the importance of eating 5 servings of fruits & vegetables daily; Create opportunities to educate communities about existing resources for increasing the motivation for health eating; Make available to local partners the information on community assessment tools through MDCH. (Families) Create web resource for families in rural Michigan that links to state-wide nutritional efforts and information; Provide information on healthy food/nutrition (radio spots, flyers).
NEXT STEPS

The release of the MI-SORHI State Rural Health Plan moves us into the next phase of this rural health improvement initiative. During the 14 months of collaborative efforts which led to the establishment of this Plan, it has been understood by the many partners that this document will need to be a ‘living’ document for it to have a significant and long-lasting impact on the health of rural Michigan.

The Michigan Center for Rural Health and the Michigan Department of Community Health have already begun to track progress on the many measurable goals and objectives included in the Plan. Tracking and reporting systems are being developed, and progress reports will be issued each year. Although many of the objectives are 5 year objectives, actions are needed today in order to achieve these targets. As progress is tracked, targets will be re-visited and adjusted as needed to reflect current realities. The Advisory Group will re-convene annually to review the progress on the goals and objectives and revise the Plan where necessary.

In order to ensure the success of the Plan, it will take the efforts of policymakers, health care providers, health care leaders, associations, universities, and communities across rural Michigan to join and become involved. The goals, objectives and strategies included in this Plan are a call to action to encourage all to work and improve the health of rural Michigan.
Appendix A: MI-SORHI Roster

Advisory Group
Kurt Anderson, D.O., Michigan Osteopathic Association
Amy Barkholz, Michigan Health & Hospital Association
Sarah Bates, Michigan Health Council
Mark Bertler, Michigan Association for Local Public Health
Tom Bissonette, Michigan Nurses Association
Rebecca Blake, Michigan Medical Society
Dr. Tom Coon, Michigan State University-Extension Services
Angel Goodwin, Michigan Primary Care Association
William J. Hart, Michigan Department of Community Health
Carol Parker Lee, Michigan Rural Health Association
Gerald Messana, Upper Peninsula Health Care Network
Lonnie Stevens, Thumb Rural Health Network
Frank J. Tuma, USDA Rural Development

Core Planning Work Group
John E. Barnas, Michigan Center for Rural Health
Lonnie Barnett, Michigan Department of Community Health
Angie Emge, Michigan Center for Rural Health
Ellen Speckman-Randall, Michigan Department of Community Health
Traci Wightman, Michigan Department of Community Health

Issue Work Groups

Recruitment & Retention of Health Care Providers
Dr. Kurt Anderson, Michigan Osteopathic Association
Sarah Bates, Michigan Health Council
Rebecca Blake, Michigan State Medical Society
Lisa Corpe, REMEC
Mike DeGrow, Michigan Academy of Physician Assistants
Robert Esdale, Michigan Department of Community Health
Ian Horste, Michigan Department of Community Health
Kathleen Kessler, Michigan State University College of Nursing
Kevin Kihn, Blue Cross / Blue Shield of Michigan
Gerald Messana, Upper Peninsula Health Care Network
Ken Miller, Michigan Department of Community Health
Jennifer Mora, Graduate Medical Education, Inc.
Carol Parker Lee, Michigan Rural Health Association
Susan Sanford, Michigan Health Council
Sheila Semler, Michigan Department of Community Health
DeAnna Warren, Michigan Primary Care Association
Faye Thiel, Michigan Primary Care Association
Availability & Accessibility to Health Care Services

Teri Aldini, Michigan Peer Review Organization
Brian Brasser, Spectrum Health – Kelsey Campus
Roianne Brown, Health Access
Cheri Burley, Michigan Council of Nurse Practitioners
Connie Harris, Lakeview Family Care
Tom Kochheiser, Michigan Dental Association
Stacie Kucera, Upper Peninsula Health Access Coalition
Jed Magen, Ph.D., Michigan State University Department of Psychiatry
Bonnie Nothoff, Michigan Dental Hygienist Association
Susan Phillips, Schoolcraft Memorial Hospital
Valerie Przywara, Michigan Universal Health Care
Lonnie Stevens, Thumb Rural Health Network
Kacie Wiersma, Michigan Oral Health Coalition
Frank Woods, Health Access
Joanne Riebschleger, Michigan State University School of Social Work
Sharon Roels, REMEC
Rebecca Cienki, Michigan Primary Care Association
Rose Young, Midwest Alliance for Telehealth and Telemedicine Resources

Healthy Lifestyles

Amy Barkholz, Michigan Health & Hospital Association
Sally Davis, Marquette General Health System
Patricia Fanberg, Muskegon County Health Department
Gwendoline Imes, Michigan Department of Community Health
Cathy Maxwell, Health Key
Vanessa Mulnix, Eaton Rapids Medical Center
Frank Tuma, USDA Rural Development
Melissa White, Medical Care Access Coalition
Linda Yaroch, Northwest Michigan Community Health Agency
Emily Henning, Health Key
Nancy Staffield, Eaton Rapids Medical Center
Appendix B: MI-SORHI Overview

The Overview: MiSORHI

Legend
- Activity
- Product
- Group created for process

Updated 3/7/07

Michigan’s Strategic Opportunities for Rural Health Improvement, 2008-2012
Appendix C: MI-SORHI Timeline
Appendix D: The Delphi Study

A two-phase Delphi Study was conducted by Survey Consultants, Inc. under contract with the Michigan Center for Rural Health. The Delphi Study was used to identify health issues encountered in rural Michigan, as well as possible strategies to address these issues. The Delphi Study was used in conjunction with other information to identify rural health issues that are addressed in the Michigan Strategic Opportunities for Rural Health Improvement document. Rural people throughout the state were invited to participate in the study. In the first phase, the study respondents identified specific rural health issues they felt needed to be addressed in the next three years. First phase respondents who agreed to participate in the second phase of the Delphi Study were sent a second survey. During this second phase of the study, the respondents identified their choice of the top five rural health issues, selected from the sixteen top-ranked issues identified from the first phase, as well as specific outcomes (objectives) and the strategies to accomplish those outcomes. Figure 1 summarizes the Delphi Surveying process.

**Delphi Survey**

**Survey Participants**

The Delphi Phase I Survey was distributed to those who attended the Annual Rural Health Conference in April 2007 (170 people attended the conference). The Michigan Center for Rural Health staff also identified approximately 1500 persons considered knowledgeable about rural health issues in Michigan based on the MCRH mailing list. These included: hospital CEOs, hospital Directors of Nursing and Quality, community mental health facility directors, Emergency Medical Service organization directors, county health department directors, rural nursing and senior center directors, rural county MSU extension directors, rural physicians and RHC clinic managers. The Delphi Phase I Survey II was e-mailed to those who completed and returned the Delphi Phase I Survey and indicated that they would be willing to participate in the next phase of the study.

**Data Collection**

The Delphi Survey Phase I survey was a one-page document (a copy of the survey can be found in Appendix E). The Delphi Phase I Survey was presented at the 10th Annual Rural Health Conference in April of 2007. At that time, conference attendees were invited to participate in the study and to either return the completed survey to the registration desk or to the Michigan Center for Rural Health. The purpose of the study was explained and conference attendees were assured that participation was voluntary and their responses would be kept confidential. No follow-up was done.

Those persons identified as knowledgeable about rural health issues were sent a pre-survey letter and the Delphi Phase I Survey in April 2007. The pre-survey letter explained the purpose of the study and assured recipients that participation was voluntary and that their responses would be kept confidential. The Delphi Phase I Survey was sent one-week after the pre-survey letter. A follow-up letter and survey was sent to those who did not return the survey two weeks after the initial mailing (copies of these documents are located in Appendix E: Delphi Survey Tools).

Respondents of the Delphi Phase I Survey who indicated they would participate in the second round of the Delphi Survey were emailed a cover letter and the Delphi Phase II Survey in July 2007 (see Appendix E: Delphi Survey Tools). This survey consisted of four pages. MCRH sent an email reminder to follow-up with non-respondents.
Data Analysis

The 16 most frequently cited health issues were identified from the Delphi Phase I Survey responses. These top 16 health issues were placed in a summary table. The Delphi Phase II Survey’s 16 health issues were summarized in a rank order table. The health issue that received the highest number of votes had the highest ranking, followed by the health issue with the next highest number of votes, and so on.

Limitations

There are several limitations in this study. These include:

1. Only those respondents who completed the Delphi Phase I Survey and indicated that they would participate in the Delphi Phase II Survey were e-mailed surveys.
2. There were limited follow-up attempts made to those who did not return their surveys, which likely limited response rates.
3. The information collected was self-reported, and thus based solely on the respondent’s perception of health issues at a point in time.

Survey Results

Response Rate

At the 10th Annual Rural Health Conference in April 2007, 22 attendees completed and returned the Delphi Phase I Survey (13% response rate = 22/170). Between April 16 and 20, MCRH mailed out 1,504 pre-survey letters with 62 return-to-senders. Then MCRH mailed out 1,484 surveys between April 23 and 26, 2007, with thirteen return-to-senders. On May 10-14, MCRH mailed out 1,289 follow-up letters and surveys to those who had not returned the original survey. A total of 345 Phase I surveys were returned by mail (23% response rate = 345/1471). Of the 367 (345+22) respondents, 324 agreed to participate in Phase II (88% = 324/367). Of the 324 Phase I participants, 76 Phase II surveys were returned (25% response rate = 76/324).

Survey Results

Table 1 lists the top 16 health issues identified in the first phase of the study. The top five health issues identified in Phase II of the Delphi Study, based on the number of votes and point totals,
include: (1) Reimbursement, (2) Availability / Accessibility to Health Care, (3) Health Insurance Coverage, (4) Recruitment / Retention of Health Care Providers, and (5) Healthy Lifestyles. The rank order of the top 16 health issues based on number of votes is also summarized in Table 1.

**Conclusions and Recommendations**
The top 16 health issues that were identified in the Delphi Study, as well as specific outcomes (objectives) and the strategies to accomplish those outcomes, were presented to the Advisory Group for review and selection of those to be included in the MI-SORHI document.

Table 1. Delphi Survey II Results: Top 16 Health Issues by Total Points

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<th>Issue</th>
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<th>2</th>
<th>3</th>
<th>4</th>
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<td>8</td>
<td>4</td>
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<td>3</td>
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<td>Totals</td>
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<td>76</td>
<td>76</td>
<td>73</td>
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Appendix E: Delphi Study Tools

Pre-Survey Letter

Hello,

The Michigan Center for Rural Health and the Michigan Department of Community Health are developing a comprehensive “Michigan Strategic Opportunities for Rural Health Improvement” (MI-SORHI) plan. The purpose of the plan is to assess Michigan’s rural health care needs, to identify three to five rural health areas that can be improved by the end of five years, and to recommend strategies that will be used to guide the rural health efforts in our state that will lead to measurable improvements. This final plan will be presented at the April 2008 Annual Rural Health Conference in Mt. Pleasant.

You are invited to voluntarily participate in the Delphi Study because of your work in rural health. I value your expertise and viewpoints and hope you will agree to participate in the study. The Delphi Survey is the first part of a two-round Delphi Study. In this survey you are asked to identify the top five rural health issues in Michigan. The second round of the Delphi Study will be a second survey that will ask you to select the top five rural health issues from a list of the top 15 issues identified from the first survey. The second survey will also ask you to identify strategies that can be used to address each of the health issues you selected.

The Delphi Study will assist the MI-SORHI Advisory Group in the development of strategies that can guide Michigan’s rural health efforts. Next week you will receive a one-page Delphi Survey. Please take a few minutes to list your top five rural health issues; your responses will remain confidential and results from this survey will be reported in aggregate format.

If you have any questions related to this survey, please call me at (517) 432-1066 or Email me at barnas@msu.edu

Sincerely,

John E Barnas
Executive Director
You are invited to voluntarily participate in this Delphi Survey because of your expertise in rural health issues in Michigan. This study will assist in the development of a “Michigan Strategic Opportunities for Rural Health Improvement” plan (MiSORHI) by identifying major rural health issues.

In this survey you are asked to identify the top five rural health issues in Michigan. If you agree to participate, you will be contacted in about a month to complete the second round of the study. In round two, you will be asked to complete a second survey in which you will select the top five rural health issues from a list of the top 15 issues identified in the first survey. You will be asked to identify those issues in which a significant difference can be made within three to five years. Each survey will take about five to ten minutes to complete.

Please mail or fax (517-432-0007) your completed survey to the Michigan Center for Rural Health, B-218 W. Fee Hall, Michigan State University, East Lansing, Michigan 48824, no later than May 4, 2007.

Top Five Rural Health Issues

1. _____________________________________________
2. _____________________________________________
3. _____________________________________________
4. _____________________________________________
5. _____________________________________________

If you are willing to participate in the next round of the Delphi Study, please provide the following information (print clearly). If NOT, please describe your occupation only.

Name: _______________________________________
Occupation: __________________________________
Address: _____________________________________
City, St, Zip: ___________________________________
Telephone: ___________________________________
E-mail Address: _______________________________

Thank you for your participation!

If you have any questions related to this survey, please contact John Barnas, Executive Director, MCRH, at 517-432-1066 or at barnas@msu.edu.
Delphi Survey—Round Two

This survey is the final part of the two-round Delphi Survey. Please rank from the list below your top five rural health issues in which a significant difference (impact) can be made within three to five years. The list of the top 16 issues identified from the first Delphi Survey are presented in random order.

For each rural health issue you have selected and ranked, would you summarize what you want to accomplish (measurable outcome) in the next three to five years and what approach(es) you would use to achieve it (strategy to be used). Please limit your summaries to one paragraph in length. This survey will take approximately 30 – 60 minutes to complete.

Please e-mail your completed survey to mcrh@msu.edu OR mail to: Michigan Center for Rural Health, B-218 West Fee Hall, Michigan State University, East Lansing, Michigan 48824, OR fax to 517-432-0007. Surveys are due by Wednesday, August 1, 2007.

If you have any questions related to this survey, please contact John Barnas, Executive Director, MCRH, at 517-432-1066 or at barnas@msu.edu.

### Rural Health Issues Delphi Survey Phase 2

<table>
<thead>
<tr>
<th>Rural Health Issues</th>
<th>Ranking</th>
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<tbody>
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<td>Emergency Medical Services and Urgent Care</td>
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<tr>
<td>Technology Needs</td>
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</tr>
<tr>
<td>Chronic Disease (cancer-stroke-diabetes-heart disease)</td>
<td></td>
</tr>
<tr>
<td>Availability and Accessibility to Health Care</td>
<td></td>
</tr>
<tr>
<td>Health Insurance Coverage</td>
<td></td>
</tr>
<tr>
<td>Dental/Oral Health</td>
<td></td>
</tr>
<tr>
<td>Health Care Provider/ Personnel Shortages</td>
<td></td>
</tr>
<tr>
<td>Affordable Prescriptions</td>
<td></td>
</tr>
<tr>
<td>Mental Health Services</td>
<td></td>
</tr>
<tr>
<td>Patient/Client Health Education</td>
<td></td>
</tr>
<tr>
<td>Substance Abuse (alcohol, tobacco and other drugs)</td>
<td></td>
</tr>
<tr>
<td>Health Care Provider/ Personnel Education and Training</td>
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<tr>
<td>Non-Emergency Transportation</td>
<td></td>
</tr>
<tr>
<td>Healthy Lifestyles (Nutrition, Obesity, Physical Activity)</td>
<td></td>
</tr>
<tr>
<td>Reimbursement</td>
<td></td>
</tr>
<tr>
<td>Recruitment &amp; Retention of Health Care Providers</td>
<td></td>
</tr>
</tbody>
</table>

1. Rural Health Issue:

*Michigan Strategic Opportunities for Rural Health Improvement*
Accomplishment in 3 – 5 years (specific measurable outcome):

Strategies (please limit to one paragraph):

2. Rural Health Issue:
Accomplishment in 3 – 5 years (specific measurable outcome):

Strategies (please limit to one paragraph):

3. Rural Health Issue:
Accomplishment in 3 – 5 years (specific measurable outcome):

Strategies (please limit to one paragraph):

4. Rural Health Issue:
Accomplishment in 3 – 5 years (specific measurable outcome):

Strategies (please limit to one paragraph):

5. Rural Health Issue:
Accomplishment in 3 – 5 years (specific measurable outcome):

Strategies (please limit to one paragraph):

THANK YOU FOR YOUR SUPPORT AND PARTICIPATION IN THE DELPHI SURVEY!

Please visit the Michigan Center for Rural Health website for updated MiSORHI information at www.com.msu.edu/micrh.
Appendix F: Community Meetings Report

Michigan Strategic Opportunities for Rural Health Improvement Community Meetings Report

The Community Meetings Report is one of three deliverables from the Core Planning Workgroup to the Advisory Group for the Michigan Strategic Opportunities for Rural Health Improvement process. The other two deliverables were the “Michigan Rural Health Profile” and the “Delphi Study.”

The sites for the Community Meetings were selected by the Core Planning Workgroup in March 2007. The site criteria included:

- Regional representation,
- Communities with a hospital,
- Familiarity with hospital administrator, and
- If the community was located near a MCRH board member.

Eight sites were selected, five in the Lower Peninsula, and three across the Upper Peninsula. These sites were: (Lower Peninsula) Sandusky, Hillsdale, Cheboygan, Fremont, Tawas, and (Upper Peninsula) Manistique, Sault Ste Marie, and Houghton. All the sites were visited in May and June with the exception of Tawas (they completed a community process in June and sent their materials) and Houghton (a date could not be arranged). The following section lists the issues identified from each meeting; the meetings are listed in chronological order.

Sandusky
Sandusky was visited on Tuesday, May 15 at 12 noon; the location was Maggie’s Restaurant and nineteen people were in attendance. The issues identified were:

- Access to a Specialist
- Childhood Obesity (far too many of the children are obese and do not exercise)
- Community Education on Health
- Cost of Health Care
- Cost of Insurance (people cannot afford to purchase policies and co-pays continue to increase)
- Cost of Medications (prescription drugs are expensive; some people go without or take half the dosage)
- Cost of Nursing Homes (nursing home care is expensive and it draws down all the patient finances)
- Dental Care Issues (dentists do not accept Medicaid and there is a shortage of dentists)
- Educational Issues
- EMS Issues (squads receive very poor reimbursement)
- Health Care Availability
- Medicare D-Complications (seniors continue to have difficulty understanding how Part D works and the “donut hole”)
- Mental Health Issues (there a shortage of mental health providers and people have to travel very far to one)
- Number of Uninsured (the manufacturing job losses continue)
- Physical Activities/ Lifestyle
- Poor Economy
• Preventative Care
• Senior Citizen Issues
• Transportation Issues (many people lack reliable transportation, they skip scheduled appointments, it’s difficult to travel out of town to see the specialist, there is no public transportation)

Hillsdale
Hillsdale was visited on Wednesday, May 23 at 7:00 a.m.; the location was the Dow Center on the Hillsdale College campus and twenty-nine people were in attendance. The issues identified were:
• Childhood Obesity
• Chronic Disease Issues
• Cost of Health Care
• Cost of Insurance (community members cannot afford insurance; premiums and deductibles are too high)
• Cost of Medical Equipment (hospital-based equipment cost is very costly; may lead to patient leaving community hospital for procedures/care)
• Dental Care Issues (area dentists will not accept Medicaid and the uninsured)
• DSH Money for Rural areas (increase the amount available to rural hospitals)
• ER Visits (tied to number of uninsured)
• Formulary Issues (they keep changing and it confuses the patient)
• Handicap Opportunity (increase the number of employment opportunities)
• Health Care Availability
• Infant Mortality Rate (area rate is too high)
• Issues of taking Medicaid Medicare (physicians not accepting)
• Mental Health Issues
• Number of Uninsured (auto manufacturing plants continue to close in the general area)
• Poor Economy
• Preventative Care
• Reimbursement for Uninsured/Insured
• School Nutrition Program
• Scope of Practice
• Substance abuse (lack of providers to see substance abuse patients; number of patients is high)
• Transportation Issues (difficult to visit out of town specialist; there is no county transportation authority)
**Cheboygan**
Cheboygan was visited on Monday, June 4 at 6:00 p.m.; the location was the Physician Practices Building on the campus of Cheboygan Memorial Hospital and twenty-seven people were in attendance. The issues identified were:

- Access to a Specialist
- Childhood Obesity
- Chronic Disease Issues
- Cost of Health Care
- Cost of Insurance
- Cost of Medications
- Dental Care Issues
- Educational Issues
- EMS Issues
- ER Visits
- Health Care Availability (the number of providers accepting Medicaid; specialist availability)
- Issues of taking Medicaid Medicare
- Medicare D-Complications
- Mental Health Issues (there is a lack of providers – regardless of insurance type)
- Number of Uninsured (every year this number continues to grow)
- Preventative Care
- Substance Abuse (growing number of people with this problem)
- Telemedicine
- Transportation Issues (people have difficulty making appointments with specialists)

**Manistique**
Manistique was visited on Tuesday, June 5 at 6:30 p.m.; the location was the Comfort Inn and sixteen people were in attendance. The issues identified were:

- Access to a Specialist
- Childhood Obesity
- Community Education on Health (people need to become aware of the consequences of poor habits/health and take responsibility)
- Cost of Health Care
- Cost of Insurance
- Cost of Medications (prescription drug costs are very expensive)
- Dental Care Issues (area dentists do not accept Medicaid)
- Health Care Availability (there is a lack of specialists)
- Issues of taking Medicaid Medicare
- Number of Uninsured
- Physical Activities/ Lifestyle
- Poor Economy
- Preventative Care
- Senior Citizen Issues
- Telemedicine
- Transportation Issues (people have difficulty traveling out of town to specialists)
- Veteran's Issues (the distance that area veteran travel for care – to Iron Mountain – is very far and can be difficult during winter)
**Sault Ste Marie**
Sault Ste Marie was visited on Wednesday, June 6 at 7:00 a.m.; the location was the Walker Cisler Student & Conference Center on the Lake Superior State University campus and three people were in attendance. The issues identified were:

- Access to a Specialist
- Childhood Obesity
- Chronic Disease Issues
- Cost of Insurance
- Cost of Medications
- Dental Care Issues
- Health Care Availability
- Issues of taking Medicaid Medicare
- Medicare D-Complications (area seniors find this program very confusing)
- Mental Health Issues
- Physical Activities/Lifestyle
- Poor Economy

**Fremont**
Fremont was visited on Wednesday, June 20 at 8:00 a.m.; the location was the Intermediate School Building and twenty-three people were in attendance. The issues identified were:

- Access to a Specialist
- Behavioral/Mental Health Issues
- Childhood Obesity
- Chronic Disease Issues
- Cost of Insurance
- Dental Care Issues
- Educational Issues
- ER Visits
- Issues of taking Medicaid Medicare
- Number of Uninsured
- Physical Activities/Lifestyle
- Poor Economy
- Reimbursement for Uninsured/Insured
- School Nutrition Program
- Senior Citizen Issues
- Substance abuse
- Transportation Issues
### Community Meeting Topics Grid

<table>
<thead>
<tr>
<th>Topic</th>
<th>Sandusky</th>
<th>Hillsdale</th>
<th>Cheboygan</th>
<th>Manistique</th>
<th>Sault Ste. Marie</th>
<th>Fremont</th>
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Hillsdale Community Health Center
Michigan Department of Community Health
and the Center for Rural Health

Invite you to join us for a
Rural Health Care Breakfast
Wednesday, May 23, 2007 • 7:00 a.m.
Dow Conference Center, Rooms A and B
(on the campus of Hillsdale College)

Speaker: John Barnas,
Executive Director of the
Michigan Center for Rural Health

Topic: Concerning Health Care Issues

Eight community meetings will be held throughout the State of Michigan with Hillsdale being selected as a site. Please bring your health care concerns with you.

Call Judy Gabriele at 437-5236 to make your reservation.

Hillsdale Community Health Center

“Large enough to be of service... small enough to care.”
Federally Qualified Rural Referral Center
www.hchc.com
We invite you to join us for a

Rural Health Care Breakfast

Wednesday, June 20, 2007 * 8:00 AM—9:30 AM

Career Tech Center, Hesperia Room
4747 West 48th St, Fremont

SPEAKER: John Barnas
Executive Director of the
Michigan Center for Rural Health

TOPIC: Concerning Health Care Issues

Eight community meetings will be held throughout the State of Michigan with Fremont being selected as a site. Please bring your healthcare concerns with you.

The following worksheet template was a tool used by the Issue Workgroups to assist with the development of goals, objectives, and strategies. Efforts were made to have *measurable* goals and objectives whenever possible. This worksheet is a *sample* that was provided to the workgroup facilitators, and *does not reflect recommendations that emerged through this planning process*.

**MI-SORHI**  
**EVALUATION PLANNING WORKSHEET**

**Identified Issue:** Availability and Accessibility to Health Care Services: Oral Health

**GOAL** (statement of impact): By 2010, increase in the number of dental providers in rural Michigan by 20% as measured by MDCH Licensing and monitored by MCRH.

- **Conditions:** By 2010, an increase in the number of dental health providers in rural Michigan.
- **Target Group** (population(s) of impact): dental health providers
- **Measure/ Indicator** (evidence of impact): increase in the number of dental health providers as measured by MDCH Licensing
- **Criteria for Success** (standard for meeting goal): 20% increase in dental providers

**Evaluation Strategy** (instruments, personnel, design, etc.): Monitored by MCRH

**OBJECTIVE** (statement of measurable outcome): By 2010, there will be a 15% increase in rural dental residency slots.

- **Conditions:** By 2010, there will be an increase in rural dental slots at local health departments.
Target Group (population(s) of impact): Rural local health departments and dental schools

Measure/ Indicator (evidence of impact): Number of rural dental residency slots as measured by dental schools.

Criteria for success (standard for meeting goal): A 15% increase in rural dental residency slots at local health departments.

Evaluation Strategy (instruments, personnel, design, etc.): Monitored by MDA, MCRH and MALPH.

Activities (to insure objective is met):
a) MALPH will facilitate meetings between dental schools and LHDs.
b) MCRH will provide presentations to dental schools regarding the need for rural dentists.

OBJECTIVE (statement of measurable outcome) ___________________________________________________________

Conditions _______________________________________________________

Target Group (population(s) of impact) _____________________________________________________________

Measure/ Indicator (evidence of impact) _____________________________________________________________

Criteria for success (standard for meeting goal) _____________________________________________________

Evaluation Strategy (instruments, personnel, design, etc.) _______________________________________________

Activities (to insure objective is met) ____________________________________________________________________
## Appendix H: Acronym List

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALS</td>
<td>Advanced Life Support</td>
</tr>
<tr>
<td>BBA</td>
<td>Balanced Budget Act (of 1997)</td>
</tr>
<tr>
<td>BLS</td>
<td>Basic Life Support</td>
</tr>
<tr>
<td>BMI</td>
<td>Body Mass Index</td>
</tr>
<tr>
<td>BRFSS</td>
<td>Behavioral Risk Factor Surveillance Survey</td>
</tr>
<tr>
<td>CAH</td>
<td>Critical Access Hospital</td>
</tr>
<tr>
<td>CDC</td>
<td>Centers for Disease Control and Prevention</td>
</tr>
<tr>
<td>CLRD</td>
<td>Chronic Lower Respiratory Disease</td>
</tr>
<tr>
<td>CMCF</td>
<td>County Medical Care Facilities</td>
</tr>
<tr>
<td>CMS</td>
<td>Centers for Medicare and Medicaid Services</td>
</tr>
<tr>
<td>COGME</td>
<td>Council of Graduate Medical Education</td>
</tr>
<tr>
<td>CON</td>
<td>Certificate of Need</td>
</tr>
<tr>
<td>CPT</td>
<td>Current Procedural Terminology Codes</td>
</tr>
<tr>
<td>CSHT</td>
<td>Coordinated School Health Team</td>
</tr>
<tr>
<td>CT</td>
<td>Computed Tomography Scanner</td>
</tr>
<tr>
<td>CVD</td>
<td>Cardiovascular Disease Section of MDCH</td>
</tr>
<tr>
<td>DHEW</td>
<td>Designing Healthy Environments at Work</td>
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<tr>
<td>DHHS</td>
<td>U.S. Department of Health and Human Services</td>
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<tr>
<td>DHS</td>
<td>Michigan Department of Human Services</td>
</tr>
<tr>
<td>DO</td>
<td>Osteopathic Physician</td>
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<tr>
<td>ED</td>
<td>Emergency Department</td>
</tr>
<tr>
<td>EMS</td>
<td>Emergency Medical Services</td>
</tr>
<tr>
<td>EMT</td>
<td>Emergency Medical Technician</td>
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<tr>
<td>EPEC</td>
<td>Exemplary Physical Education Curriculum</td>
</tr>
<tr>
<td>ER</td>
<td>Emergency Room</td>
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<tr>
<td>F.I.T. Kids</td>
<td>Fitness Initiative Targeting Kids</td>
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<td>FLEX</td>
<td>Michigan Medicare Rural Hospital Flexibility Program</td>
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<td>FPL</td>
<td>Federal Poverty Level</td>
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<td>FQHC</td>
<td>Federally Qualified Health Center</td>
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<tr>
<td>FQHC-LA</td>
<td>FQHC Look-Alike</td>
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<tr>
<td>FTE</td>
<td>Full-Time Equivalent</td>
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<tr>
<td>GME</td>
<td>Graduate Medical Education</td>
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<tr>
<td>HCC</td>
<td>Healthy Community Checklist</td>
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<tr>
<td>HIT</td>
<td>Health Information Technology</td>
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<td>HOSA</td>
<td>Health Occupational Students of America</td>
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<td>HOTT</td>
<td>Health Opportunities for Today and Tomorrow</td>
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<td>HPSA</td>
<td>Health Professional Shortage Area</td>
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<td>HRA</td>
<td>Health Risk Assessment</td>
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<td>HRSA</td>
<td>Health Resources and Services Administration</td>
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<td>HSAT</td>
<td>Healthy School Assessment Tool</td>
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<tr>
<td>IGA</td>
<td>Interested Governmental Agency</td>
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<tr>
<td>ISD</td>
<td>Intermediate School District(s)</td>
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<td>IWG</td>
<td>Issue Workgroup</td>
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<td>LHD</td>
<td>Local Health Department(s)</td>
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<td>LIP</td>
<td>Low-Income Population</td>
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<tr>
<td>LRP</td>
<td>Loan Repayment Program</td>
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<td>LTC</td>
<td>Long-term Care</td>
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<td>Description</td>
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<tr>
<td>LTCU</td>
<td>Long-term Care Units</td>
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<td>MATTeR</td>
<td>Midwest Alliance for Telehealth and Telemedicine Resources</td>
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<td>Michigan Community Dental Clinics</td>
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<td>MCIR</td>
<td>Michigan Care Improvement Registry</td>
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<td>MCRH</td>
<td>Michigan Center for Rural Health</td>
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<td>MD</td>
<td>Allopathic Physician</td>
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<td>MDA</td>
<td>Michigan Dental Association</td>
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<td>Michigan Strategic Opportunities for Rural Health Improvement</td>
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<td>MRI</td>
<td>Magnetic Resonance Imaging Scanner</td>
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<td>Megavoltage Radiation Therapy</td>
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<td>MSA</td>
<td>Metropolitan Statistical Area</td>
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<td>Michigan State Loan Repayment Program</td>
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<td>MSU</td>
<td>Michigan State University</td>
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<td>MSW</td>
<td>Masters of Social Work</td>
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<td>Medically Underserved Area</td>
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<td>Nutrition Environment Assessment Tool</td>
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<td>Public Act 161</td>
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<td>Promoting Active Communities Assessment</td>
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<td>Public Health Service (Act)</td>
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<td>Rural Health Clinic(s)</td>
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<td>Registered Nurse</td>
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<td>U.S. Office of Management and Budget</td>
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