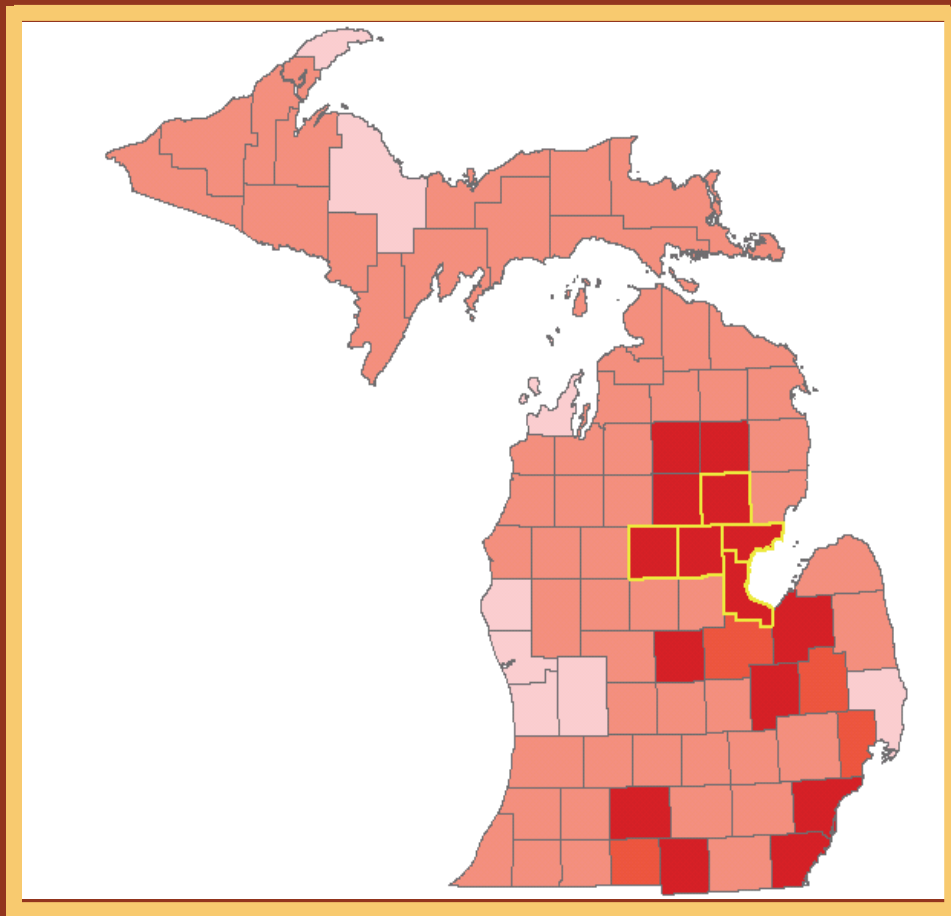


Five County Cardiovascular Project Summary Report



October 2011

INTRODUCTION

The Michigan Department of Community Health (MDCH) received funding in 2007 from the Centers for Disease Control and Prevention (CDC) to build Michigan's capacity to reduce the impact of heart disease and stroke. As part of the funding, the *Impact of Heart Disease and Stroke in Michigan* was published in 2008. The purpose of the document was to provide a comprehensive report on cardiovascular disease (CVD) and its risk factors for Michigan. As a result of the report being published, there was a five-county contiguous area (Arenac, Bay, Clare, Gladwin and Ogemaw) identified as having a higher rate of hospitalization for CVD, coronary heart disease and heart failure. Repeated analysis in 2010 and further exploration of demographic, socioeconomic, and CVD risk factors supported the conclusion that this was a higher risk area.

To further explore explanations for this "hot spot region," the Five County Cardiovascular Disease Project was developed. The goal of the project was to gather feedback and the perceptions of local stakeholders through community meetings. The meetings were planned collaboratively by MDCH, the Michigan Public Health Institute (MPHI) and local health departments. Materials were developed for each meeting: a PowerPoint including local-level cardiovascular data, fact sheets, and meeting evaluation forms for participants to complete.

Three local health departments serve the five counties: Bay County Health Department, Central Michigan Health Department, and District Health Department #2. Three community meetings were conducted in August and September 2011, one in each health department's jurisdiction. This report is a summary of the qualitative data gathered during the meetings. The local health departments plan to use the data contained in this report to support their existing or future efforts to reduce heart disease in their jurisdictions.

The following are the MDCH project team members from the Heart Disease and Stroke Unit: Rochelle Hurst, section manager; Christi Demitz, public health consultant; Adrienne Nickles, epidemiologist; and Henry Miller, evaluator. MPHI was contracted by MDCH to assist with the community meetings, synthesize the information gathered, and produce this report.

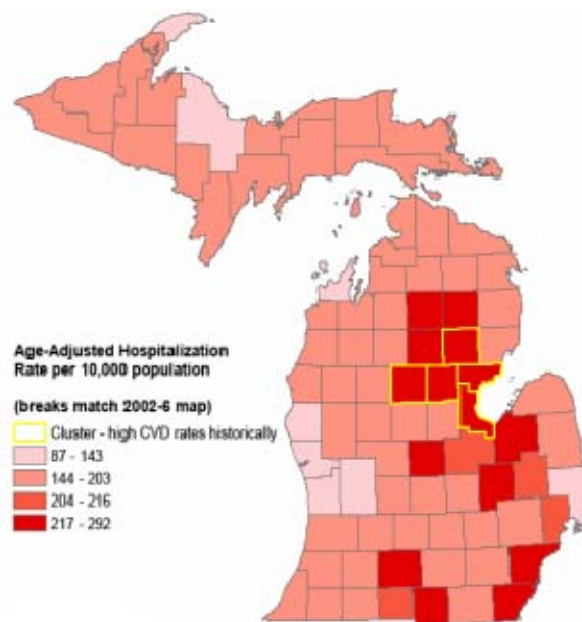
BACKGROUND

The Five County Cardiovascular Disease Project began with the identification of the problem by MDCH staff and formulation of the plan to receive community input regarding the reasons for the high rate of cardiovascular disease and possible community-level solutions.

Problem Identification

Cardiovascular disease (made up of heart diseases and stroke) is the number one cause of death in the United States and in Michigan. The mortality rate for cardiovascular disease in Michigan has been consistently higher than the national rate, particularly deaths due to coronary heart disease, which is a highly preventable form of heart disease.

Some counties in Michigan were found to have higher hospitalization and death rates related to cardiovascular disease, heart disease, coronary heart disease, and heart failure. This pattern has persisted since at least 2002 (see map with highlighted area). For more detailed information, please see the PowerPoint presentations in the Appendix.



The counties in the yellow bordered cluster are: Arenac, Bay, Clare, Gladwin and Ogemaw.

Major Epidemiological Findings

Analysis revealed that the five counties within the cluster remain among those with the highest cardiovascular disease hospitalization and mortality rates in the state. Further, these rates do not seem to be decreasing. In addition to the risk factors presented below, a high percentage of these counties' residents had limited or no access to health care.

Health Behaviors:

- A higher percent of residents in these counties were affected by cardiovascular risk factors such as smoking, high blood cholesterol, insufficient fruit and vegetable intake, and insufficient participation in physical activity.

Health:

- The combined 2002-2006 and 2004-2008 hospitalization data showed Arenac, Bay, Clare, Gladwin, and Ogemaw to be among the top ten counties with the highest age-adjusted hospitalization rates of cardiovascular disease, heart disease, coronary heart disease, and heart failure.
- The 2004-2008 age-adjusted cardiovascular disease hospitalization rates per 10,000 and rank by county were as follows: Arenac (291.5, 1st), Bay (257.7, 2nd), Ogemaw (257.3, 3rd), Clare (256.1, 4th), and Gladwin (236.1, 10th). County rank for hospitalizations was consistent with 2002-2006 data.

Mortality:

- The five-county cluster also had some of the highest mortality rates for the previously stated diseases. The 2004-2008 age-adjusted cardiovascular disease mortality rate per 100,000 and rank by county were as follows: Arenac (377.1, 2nd), Ogemaw (360.1, 4th), Clare (358.1, 5th), Gladwin (313.0, 16th), and Bay (297.1, 29th).
- Four out of the five counties experienced an increase in mortality rate rank by county in 2004-2008 when compared to 2002-2006 data.

Socioeconomic:

- A high percent of these counties' residents were unemployed, did not have a high school degree or did not have adequate healthcare coverage/access.

Community Meeting Planning

Community meetings were held in three communities in the five county area to gain a better understanding of these data and to gather suggestions for reducing the likely causes of or contributors to the high burden of cardiovascular disease.

To plan the meetings, MDCH and MPHI staff met with the local health departments' staff to discuss the meeting goals, agenda, and materials. Each meeting was tailored to meet the needs of the community. For example, while the same basic set of questions was asked at each community meeting during the facilitated discussion, each community had the opportunity to include additional questions that had particular relevance to the participants. Meeting evaluation forms were also tailored as needed.

Initially, a PowerPoint was developed that consisted of data for all five counties. The presentation was refined for each community to show county-specific data. Each presentation consisted of five topics: Issue Overview, Background, Demographics, Hospitalization/Mortality Data, Cardiovascular Risk Factors, and the facilitated discussion questions. An informed consent was read to forum participants, letting them know the meeting was being audiotaped and notes were being taken.

Fact sheets were developed by MDCH and distributed during the meetings. These sheets included background on the cardiovascular disease burden in the five counties. In addition to providing background information to community members, the fact sheets could also be used by the local health departments to educate other community members and stakeholders during further efforts to address this issue.

Each community meeting began with introductions. Rochelle Hurst, MDCH, gave background on the study and thanked community members for their participation. The project team epidemiologist then presented the PowerPoint. MPHI staff facilitated the discussion questions. Each community meeting was transcribed and analyzed qualitatively for themes and illustrative comments.

COMMUNITY MEETINGS

An overview of each community meeting is presented in a section below. Information is provided on the number of attendees and organizations represented at the meeting, followed by a summary of the facilitated discussion. Finally, for each meeting, evaluation data are presented.

Bay County Community Meeting

The Bay County Community Meeting was held on August 3, 2011, in Bay City. Twenty-two people attended the meeting held at Bay Regional Medical Center. The following organizations were represented:

Bay Arenac Behavioral Health
Bay County Division on Aging
Bay County Health Department
Bay Regional Medical Center
Delta College

Michigan Department of Community Health
(regional epidemiologist)
Michigan State University Extension
Saginaw Valley State University

Bay County Meeting Summary

The community members present at the meeting were not surprised to learn about the high rates of cardiovascular disease in Bay County. Participants identified a number of potential contributing factors for these high rates, which included poor diet and nutrition, depressed industry/economy, insufficient physical activity, lack of preventive measures, and smoking. The community, however, also highlighted a number of strengths on which to draw when addressing this issue, including programs for diet/nutrition, healthcare, physical activity, and prevention programs.

For each question asked by the moderator, summary and illustrative comments are presented.

Discussion Question: What do you think about the high rates of CVD in this area?

The consensus of the group was that these high rates are not new information. These rates have been high historically in Bay County.

“From the health department perspective I don’t think this is going to be much of a surprise.”

“We’ve always been the he highest in the state with heart disease.”

“We have been looking at this for years.”

Discussion Question: What factors do you think contribute to these rates?

The meeting participants discussed a number of factors, related to diet and nutrition, industry/economy, physical activity, prevention, and smoking.

Diet/Nutrition: Participants talked about consumption of alcohol, fast food, and unhealthy school food.

“There is less access to fruits and vegetables and more access to fast food and unhealthy choices.”

“There’s a lot of fast food restaurants, a lot of convenience stores ... food high in fat content high in salt content. People just have that stuff that they can get very quickly and it’s gotten a lot easier.”

“Healthy food choices for children in schools is something that needs to be looked at. We have an opportunity to talk to some of our younger residents ... we might have an impact and make some change there.”

Cultural influences on food choice were also mentioned.

“Some of it has to do with our culture. We have a strong Polish and German culture ... the diet is fried foods, gravies, those types of things.”

One participant remarked about the lack of good food preparation skills.

“We have some young mothers that don’t know how to cook what you give them [from the food pantry].”

Industry/Economy: A manufacturing culture has historically dominated Bay County. Low income residents are at particular risk for developing cardiovascular disease. For example, one participant talked about people who may delay treatment because of barriers related to income.

“We hear about patients that did not seek preventative care for economic reasons so by the time they come to us they are very ill.”

Physical Activity: The participants brought up the issue of sedentary lifestyles. While youth lack physical activity in school and spend time with technology instead of playing outside, seniors choose sedentary activities as well.

“We choose to have a sedentary lifestyle. I work with the senior community and the biggest complaint is why is all the parking taken so close to the building? We have senior Olympics we have osteo exercise class ... competing with the bus ride to the casino where they just sit ... a cultural issue that we have to deal with. “

Prevention: Several participants voiced concerns over the loss of prevention programming due to funding restraints.

“The money just isn’t there for prevention ... let’s take care of you when you get sick.”

“Prevention seems to be the first thing that everyone cuts when money is tight.”

Smoking: A participant discussed the role of smoking on cardiovascular disease, noting that there may be a decrease in smoking rates with the smoke-free law and increased tobacco tax.

“It’ll be interesting to see how the smoke free law will have an impact on some of the data in years to come. Maybe we will see a decrease in the number of people that are smoking with the increase in the cigarette tax and not being able to smoke in bars and restaurants, maybe that will encourage people to stop smoking.”

Discussion Question: Do you think these high rates are the result of the same families living in the area?

The population of the county has been decreasing due to the lack of jobs. A participant reported that while educated young people are leaving the county to obtain work, those remaining in the county are from families that have been there for generations.

“We all live here and stay here. Being one of the largest employers in Bay County I don’t think that you can find an employee that doesn’t have a relation working here already. We have some families that stay here. The young people I think are moving out because they can’t find jobs but the older families, parents, grandparents, stay in this community.”

One person noted that heredity is a risk factor, as well as culture, lifestyle, and compliance.

“It’s more than just culture. Heredity plays a huge role in cardiovascular disease. We’ve got heredity, we’ve got lifestyle, we’ve got compliance issues, education.”

Discussion Question: What do you think are some of the strengths in this region?

This question prompted discussion around diet/nutrition, healthcare, physical activity and prevention programs.

Diet/Nutrition: The availability of farmers' markets (and Project Fresh) and the trend toward home gardens were noted. Participants also highlighted improved nutritional offerings at schools (breakfast programs and decreased availability of sugary food and soda). For the home-bound, there is delivery of meals county-wide.

Several participants mentioned the availability of food and nutrition classes offered by the Michigan State University Extension and WIC programs.

"We have a pretty robust WIC program. Our staff does a very good job in educating ... a cookbook using WIC foods to help educate their clients. They are also doing cooking shows (with) some easy recipes ... [for] these foods. They also participate with the farmers' markets and Project Fresh."

Healthcare: A number of health care services were identified, including a free health care clinic and good access to primary and specialty care. A certified diabetes education program and certified cardiac rehabilitation program were mentioned. Other strengths included a variety of classes offered at the hospital.

"We have a variety of physicians and specialty positions which patients can access, which isn't always the case in some counties."

In addition, community members noted a visiting nurse program.

"[We have] a home visiting program so that moms are given help and we also encourage them all to stop smoking. We continue this message throughout their pregnancy and after delivery."

Physical Activity: Several resources were identified, including physical activity facilities (YMCA, Delta Center, and soccer complex) and walking trails.

"We have a large walking path in Bay County and it extends into the other counties which is free."

"We are building a large Y right now in eastside Bay City and that will contribute to more physical activity for our younger people."

Prevention Programs: The participants discussed several prevention programs, including employer wellness programs, Blue Cross Blue Shield website screening tools, free and low cost screenings, and a maternal smoking cessation program.

Other: Other strengths mentioned individually by participants included the smoke-free law, multidisciplinary collaboration efforts, a county transit system, and a strong ISD (intermediate school district) that offers classes.

“We can take a lot of disciplines and work well together to solve issues. There’s not a lot of territorial type things going on, people work well together and I think that’s a huge strength.”

Discussion Question: What can the community do to address these rates?

While programs that support health already exist within the community, meeting participants highlighted the lack of resident involvement in these efforts. Participants said this was likely due to a lack of motivation among community members. As such, a number of suggestions were made about the use of social media and education to leverage interest in local health initiatives. This could be especially important for engaging younger residents. One participant spoke of the importance of including motivational messages to help the community understand how to build on existing programs and resources.

Another participant said that evidence-based information should be more readily accessible to community members. Understanding how health programs were successful in the past, especially those focused on prevention, could help residents focus on strategies proven to support community health and to secure more funding.

Discussion Question: What kind of support could the local agencies provide to reduce the burden?

The participants made several comments regarding the utilization of community resources, such as the hospital and human services collaborative. One participant highlighted the opportunity to utilize interns from local colleges and universities. Another participant remarked on the need to engage local media.

“We will need to engage a strong media partner... it is still a way... that people in Bay County get their news.”

Meeting Evaluation Question: How will you use the information presented today?

Participants completed evaluation forms to assess their satisfaction with the pace and content of the community meeting (see Appendix 1). Participants were also asked “How will you use the information presented today?” The following responses were given:

Community Assessment:

- Incorporate into community assessment data.
- Information will be very helpful in conducting a county specific community assessment, also in seeing what programs are out there and not being used.

Discussion/Engagement:

- Discussion in local collaborative.
- Educate our management team about the incidence of CVD in Bay and Ogemaw counties.
- Discuss how we can collaborate with other agencies to reduce CVD rates.
- Share with key members.

Programming:

- Build on what we already do.
- Part of CHA, keeping partners engaged.
- Prevention program planning.
- Use to continue to evaluate success in prevention and outcomes.

Other:

- Strengthen my knowledge base. Do what I can to educate & promote healthy living in my community.

Clare and Gladwin Counties Community Meeting

The Clare and Gladwin Counties Community Meeting was held on August 25, 2011, in Harrison. Thirty-six people attended the meeting held at Mid-Michigan Community College. The following organizations were represented:

A&D Home Care	County of Isabella – Board of Health
Central Michigan University	Michigan Works
Central Michigan District Health Department	Mid-Michigan Health
Clare County Board of Commissioners	Mid-Michigan Medical Center -Gladwin
Clare-Gladwin RESD	Mid-Michigan Home Care
Clare-Gladwin RESD-GSC	Mid-Michigan Community College
Clare County Cleaver	MSU Extension – Gladwin County
Clare County Department of Human Services	Roscommon County Commissioner
Clare County Parks & Recreation	Ten Sixteen
Clare-Gladwin Literacy Council	Village Of Farwell
Community Mental Health for Central Michigan	

Clare and Gladwin Meeting Summary

Participants at the meeting discussed a number of potential contributing factors to the high rates of cardiovascular disease, some of which included poor diet and nutrition, poor health/health behaviors, and social issues. Participants also highlighted a number of strengths within the community to address this issue. These could include programs that address this issue including proper diet/nutrition and use of the physical environment. For each question asked by the moderator, summary and illustrative comments are presented below.

Discussion Question: What do you think about the high rates of CVD in this area?

While the group did not answer this question directly, they discussed various risk factors which provided insight into their perceptions of local CVD rates. Participants commented on body mass index, cholesterol rates, and poverty in addition to the difficulty of measuring and interpreting these risk factors. Because community members said they do not have a clear standard for measuring some of these risk factors and determining thresholds risk levels, they were not surprised at the high CVD rates in the area.

Discussion Question: What factors do you think contribute to these rates?

A number of factors related to diet and nutrition, health and healthy behaviors, and social issues were mentioned by meeting participants.

Diet/Nutrition: The participants discussed the issue of limited food choices, related to both lack of access and personal choice. Participants noted that fresh fruits and vegetables can be hard to find and very costly. Individuals also often lack the money and education on how to produce healthy foods.

“We’re very isolated in our food. It’s a culture up here what we eat. Very, narrow minded.”

“Community agencies do fundraisers (with) pancakes, pasta, spaghetti dinners, and fried fish.”

“... changes to the Bridge Card so that 50% of what they spend has to be on fresh fruits and vegetables? I don’t seek why it has to be Doritos and Mountain Dew.”

Health/Health Behaviors: A number of risk factors related to health and individual behaviors were discussed, including medical conditions such as diabetes and dental/oral hygiene. The participants were concerned about unhealthy behaviors such as smoking, inactivity, and the elderly not taking their medications. Another concern is a lack of health care access. Several participants noted that many individuals have multiple risk factors.

“We have a lot of people without insurance at all.”

Social Issues: The participants discussed a number of social issues in the counties, such as youth risk factors, culture, a lack of free physical activities, sedentary lifestyle (especially among retirees), and a lack of transportation to activities and services. The burden of the economy has impacted residents’ health and increased the amount of poverty in the area.

“Stress levels. Whether you are employed or not employed there [are] high stress levels in this part of Michigan because of the economy.”

“Clare has been one of the three poorest counties that I know of since the 1980’s.”

“Poverty is just overwhelming and they don’t know where to go.”

Discussion Question: Do you think these high rates are the result of the same families living in the area?

The participants also thought that families in the community have influenced cardiovascular disease rates- both in terms of genetics and health behaviors that are passed from one generation to the next. It was noted that portion size is traditionally larger in this areas and some families tolerate unhealthy lifestyles.

“I think some of it is generational.”

“Family history is your number one risk factor. If you have families that are staying here ... that is going to follow through generations.”

Discussion Question: What do you think are some of the strengths in this region?

Participants indicated several existing strengths that could be built upon to improve the community’s health. Particular emphasis was given to the level of collaboration among community members, current initiatives to address healthy eating and the physical environment.

Community: Many community strengths were mentioned, including the number of grass roots efforts, the level of community involvement, the presence of faith-based programs, and schools. A number of organizations work together in collaborative councils.

“Groups can discuss how ... to leverage the resources we have, how do we meet the needs of the community.”

Diet and Nutrition: Participants said that there have been some efforts to improve community members’ diet and nutrition. The community food service is attempting to introduce healthier foods, particularly through the “farm to schools” program.

Physical Environment: There was a discussion about the healthy physical environment. Participants emphasized the good air quality and many rivers and lakes for outdoor activity. Further, community members highlighted how the local population and low level of traffic contributed to the community being safer than more urban areas. One person remarked that the slower lifestyle pace can contribute to lower stress levels.

“We do have a decent amount of seasonable weather for most of the year [so] you can do things outside.”

The local environment lends itself to outdoor activities. In addition, there are some after school physical/sports programming for youth.

Discussion Question: What can the community do to address these rates?

Participants thought that organizations in the community could collaborate to address this issue, as they have done to address other health issues. One participant said that there needs to be communication with the board of commissioners and the community to garner additional funding to address the risk factors. Other participants discussed the need to reach community members through greater education efforts and the use of social marketing. Another participant brought up a role model program in the City of Marquette in the Upper Peninsula where residents are encouraged to get outside for physical activity. As an incentive to exercise, despite the cold and snowy weather, they city offers free snow shoe use. In the summer, residents are given free access to bikes. It was suggested that this type of program could be implemented in the five counties with higher CVD rates.

Discussion Question: What kind of support could the local agencies provide to reduce the burden?

Participants' responses focused on incorporating health promotion into existing programs in addition to increasing the availability of fresh, healthy foods. One person voiced the idea that when agencies distribute food, it is important to make sure the recipients know how to properly prepare it. Also, food pantries could encourage donors to contribute healthier foods. Another participant noted that the community has applied for grants to buy a truck for bringing healthy foods into the area.

"We are going to make recipes available on how to cook healthy food."

"Once a month my church makes donations to the local food bank. Why don't we encourage ... healthier foods? We might not be able to get fresh fruits and vegetables, but canned pineapple is better than macaroni and cheese."

Meeting Evaluation Question: How will you use the information presented today?

Participants completed evaluation forms to assess their satisfaction with the pace and content of the community meeting (see Appendix 2). The participants were also asked "How will you use the information presented today?" The following responses were given:

Discussion/Engagement

- Share with local government, groups, and community committees.
- For Isabella Health Improvement planning, to enhance health education/promotion work.
- Share back with agency staff and others will look at programming, include discussion of these issues, share with them.
- In planning for Clare-Gladwin's Health Improvement Plan.

Other

- Go back and make one change in my community.
- Improve initiatives.
- Procure funding.
- This has provided me with even more incentive to continue to change my lifestyle and get healthier.

Ogemaw County Community Meeting

The Ogemaw County Community Meeting was held on September 22, 2011, in West Branch. Fifteen people attended the meeting held at West Branch Airport. The following organizations were represented:

Council of Aging
District Health Department #2
Hospital of Helping Hands
Michigan State University Extension

Ogemaw County Economic Development
Corporation
Ogemaw Hills Free Methodist Church
Primary Care
St. Joseph Health System

Ogemaw County Meeting Summary

Community members who participated in the meeting were not surprised to learn about the high rates of cardiovascular disease. A number of contributing factors were discussed, especially those related to diet and nutrition, health/health behaviors, and social issues. Participants also highlighted community strengths that will be important for addressing high rates of CVD. Strengths included community members and leaders, opportunities for improved diet/nutrition, healthcare, physical activities, and access to the physical environment. For each question asked by the moderator, summary and illustrative comments are presented below.

Discussion Question: What do you think about the high rates of CVD in this area?

The participants were not surprised to learn about the high rates of CVD, given the dietary habits of the residents. However, one participant thought that the rates would be higher only in older demographics, and was alarmed that the rates presented were age-adjusted. Several participants talked about the number of fast food establishments in West Branch that may contribute to the rates.

“I am not surprised. I hear of how the kids would eat fast food if they can afford it. It is only going to get worse with our younger population.”

Discussion Question: What factors do you think contribute to these rates?

Diet/Nutrition: A number of comments were made about the availability and cost of food, specifically that healthier food is often more expensive (i.e. lower sodium versions of prepackaged food) and more available (i.e. “Hamburger Hill”).

“Lack of knowledge best food choices.”

Health/Health Behaviors: A number of risk factors related to health and individual behaviors were discussed. The participants were concerned about high rates of smoking and alcohol use/abuse. Poor compliance with medication was also cited.

Participants discussed the lack of local health care access in addition to the ways in which existing health care services are fragmented – there are limited health providers and facilities in the county. Further, there is a large under- and uninsured population. As a result, some individuals don't seek care until they are in crisis, at the end-stage of an illness or when they are dealing with multiple health issues. Not only does this lead to higher cost treatments for patients, but it places excess burden on the health care system as well. In addition, there is a lack of substance abuse resources in the county.

The county also has a large retiree population. A participant discussed the lack of resources for all chronic diseases that affect this population. In addition, patient instructions and education were cited as insufficient for creating sustained behavior change and positive health outcomes.

The need for improved patient education was echoed in participants' remarks regarding adults' limited knowledge of healthy choices. Further, participants expressed a need for further resources and best practices knowledge related to chronic diseases, especially heart disease.

“Are patients getting best-practices? ... are they getting instructions?”

“The uninsured population, their care is very fragmented. You may get a prescription, but cannot afford it. Then you have a re-hospitalization at a higher rate.”

“In a big city, you have resources. Here, we don't.”

“We are basically an older population.”

Social Issues: The participants discussed risk factors related to the local economy and others that have a particular influence on the county's youth. The depressed economy has had an impact on residents' health and level of poverty. One participant noted that 60% of kids are on free or reduced lunch in Ogemaw (the state average is 30%). As a result of the poor economic conditions, participants felt that residents in their community experience more stress.

Participants were very concerned about the youth in the community. Discussion focused on the large amount of alcohol use by teens and the low rate of educational attainment. Participants attributed these behaviors/expectations to a permissive social culture—one in which it is the norm to have open house parties with kegs of beer when teens graduate high school. Because youth perceive there to be a lack of planned social opportunities in the area, many resort to drinking for recreation. While participants said there are some residents who do go on to receive a college education, the county's poor economy and limited venues for culture and entertainment make it difficult to keep these people in the community.

“People in this area are under more stress ... given the fact that it is more rural and the socioeconomic factors.”

“I was appalled on how low our education rate is.”

“Individuals of low socioeconomic status tend to use alcohol, drugs, and tobacco more.”

“The social culture ... parents buy the keg of beer for the party.”

Discussion Question: Do you think these rates are the result of the same families living in the same area?

Participants discussed the role of generational poverty and resulting poor health outcomes. One participant noted the higher rates of MS and other chronic diseases in the area, indicating the likelihood of genetic factors contributing to the persistence of CVD as well.

Discussion Question: What do you think are some of the strength in this region?

A number of strengths were mentioned related to community members/leadership, diet/nutrition, healthcare, the physical environment, and physical activity,

Community Members/Leadership: There are many residents who are active in the community and as leaders. In particular, some local leaders have demonstrated that they value health and their commitment to improving community health outcomes. Further, the community has a vigorous chamber of commerce and involved faith-based ministries. The faith-based community represented at the meeting mentioned a number of community initiatives, including those that provide clothing for children, a food pantry, and a health ministry. The Chamber also offers events downtown to engage families and foster a sense of community.

Despite the low levels of educational attainment overall, the community has some very educated people. Meeting participants discussed the importance of partnering with these individuals to encourage the sharing of knowledge and to look to them as community role models.

"Especially in West Branch, we do have a very active chamber of commerce and downtown area. They host all kinds of different activities...my family goes all the time and it's really kind of cool."

"We really do have a lot of really educated people here. It's just a matter of pulling them out and getting them to share their knowledge."

Diet/Nutrition: Several strengths were mentioned in this area including a dietician from the local Michigan State University Extension. In addition to working with individuals who receive assistance, the dietician works to promote the availability of fresh foods at farmers' markets in two local cities. The senior center also provides nutrition education.

Healthcare: There is a concentration of health care facilities within a drivable distance.

"I think for a rural area, we really do have a high concentration of health care available.

Physical Activity and Physical Environment: The local Glen's Supermarket and Kmart open early to encourage walkers among seniors. The environment is also very beautiful with two parks for outdoor activities.

"We have two beautiful parks for exercising. If you want to be active, you can do it: spring, summer, winter, and fall."

Discussion Question: What can the community do to address these rates?

Participants identified several strategies and areas for growth that will aid in reducing the high rates of CVD.

Community Involvement: Participants highlighted the need for community leaders to lead by example. For example, one person commented on the need for more individuals to attend community meetings like the one being held. Further, leadership should be brought together across many sectors to engage a broader audience and reach community members through a variety of venues. Involving a large cross-section of the community would also maximize the possibility of drawing on a wide range of individuals' strengths.

"Each organization can promote a community-wide theme."

"Make your own organizations healthier."

Communication: Some thought that people did not attend the meeting simply because they did not know about it. As such, participants identified the need to improve the advertisement and packaging of health related information. Participants also discussed the opportunity to use social media to leverage partnerships and encourage community buy-in. Specifically, Facebook could be used to gain attention by distributing information electronically and the creation of online communities.

"We could get a larger voice through Facebook."

Education: Participants felt that increased opportunities for health promotion and education would be very beneficial to the community. Many people brought up the need for presentations on topics including basic food preparation, how to cook the same ingredients multiple ways, making cooking fun and fast, healthy food choices, and strategies for overcoming health related barriers. Some brought up the usefulness of grocery store tours and the need to reinvent what people want to eat.

“We have an opportunity to work with our grocery stores ... teaching (at the point of purchase).”

Healthy Food: Many strategies for improving the community's healthy food intake were also discussed. Participants suggested working with grocery stores to make healthy food more affordable or offering incentives to customers for buying healthy options. The importance of making simple dietary changes was also emphasized. For example, one participant suggested encouraging people to switch from drinking soda to water.

“We need to find a way to educate people (about nutrition).”

Discussion Question: What kind of support could the local agencies provide to reduce the burden?

Throughout the meeting, participants highlighted a variety of ways in which community agencies could provide support. Some reinforced the importance of strengthening leadership and suggested developing a human service collaborative. Others proposed engaging a media partner (e.g. TV station, newspaper) or encouraging local agencies to develop a social media campaign to gain community attention and buy-in. One participant suggested that the agencies present at the community meeting could act as community role models and start by making their own work places healthier. Finally, another participant proposed harnessing the resources of Michigan's colleges and universities and recruiting student interns to aid with health promotion efforts.

Meeting Evaluation Question: How will you use the information presented today?

Participants completed evaluation forms to assess their satisfaction with the pace and content of the community meeting (see Appendix 3). The participants were asked “How will you use the information presented today?” The following responses were given:

Discussion/Engagement

- To enact change in our community.
- Community/public speaking.
- Will bring info to management of our organization and continue involvement in group.

- Report it back to others who might participate in future meetings.

Programming

- Take back to hospice—looking to develop a transition program (already in place in Maine) for heart failure.

Other

- Not certain yet, will probably start by speaking with employees;
- Not sure yet—looking forward to “next steps”.

Summary and Resources for Community Progress

A number of common themes and strategies for addressing high CVD rates were observed across the three community meetings. The following discussion summarizes these over-arching themes in addition to presenting a few key points specific to certain areas.

Risk factors

Common Themes: At all three of the community meetings, participants discussed how the poor diet and nutrition of local residents is an issue in need of serious public health attention and a contributor to high CVD rates. Those attending the Clare/Gladwin and Ogemaw meetings also highlighted risk factors related to poor health and health behaviors. Participants at these meetings proposed a variety of social norms and existing social structures that reinforce these negative health behaviors, contribute to high rates of CVD, and limit the effectiveness of public health promotion efforts. Those attending community meetings for Bay, Clare, and Gladwin Counties also cited industry and the depressed economy as factors contributing to the burden of CVD.

Unique Themes: While more unifying themes were observed among risk factors identified, participants at the Bay community meeting discussed sedentary lifestyle and lack of physical activity to be CVD risk factors in their community as well. Further, participants highlighted the insufficient amount of disease prevention and general health promotion efforts.

Community Strengths

Common Themes: Participants from all three meetings noted the opportunity for growth in the areas of diet and nutrition. Meeting attendees highlighted the availability of healthy food options at local farmers' markets and the potential for improving residents' knowledge on how to make healthy choices.

Meetings with Bay and Ogemaw emphasized the relative availability of local health care clinics and resources, especially considering their rural setting. Participants from these communities also featured several opportunities for residents to participate in physical activities. Ogemaw and Clare/Gladwin communities also feature beautiful physical environments and local parks as venues for residents to get outside and be active. These existing community assets provide a foundation on which to develop further health promotion initiatives.

Unique Themes: Participants at the three community meetings each presented unique strengths. Those at the Clare/Gladwin meeting discussed the strong sense of community as a strength. Participants who attended the Ogemaw meeting also highlighted their community, but in terms of its strong leadership and the presence of an active chamber of commerce. Bay meeting attendees featured prevention and promotion programs already in place that support community health and well-being.

Future Directions

Gaining a more thorough understanding of risk factors and existing resources is important for informing future steps to reduce the rates of CVD in this five county area. Not only can efforts be better tailored to the specific needs of communities, but initiatives can benefit from programs in place so as not to duplicate efforts and to maximize positive outcomes.

Common Themes: The three areas would benefit from more structured and developed communication strategies. The use of social media to disseminate information and leverage community resources provides a unique opportunity to do so in an efficient and accessible way. Further, participants across communities expressed the need for greater health education efforts, particularly those that are engaging and fun. Offering more educational opportunities could empower community members with new knowledge and support the development of healthier social norms.

Unique Themes: In addition to suggesting several unifying themes, participants from the three meetings also offered some unique ideas for future initiatives. Those attending the Ogemaw meeting expressed desire to gain greater community involvement in this and other local health efforts. To reiterate, participants emphasized social media and community leadership as mechanisms for improving community visibility and gaining buy-in. Participants from this community also hope to promote healthy foods through increased education efforts, partnering with local grocery stores, and featuring existing farmers' markets. Participants of the Clare/Gladwin community meeting noted the need for more community collaboration to support overall health promotion and the reduction of CVD. In addition, attendees demonstrated their willingness to further outlets for physical activity and improve community knowledge of existing resources.

Resources

To support the progress of communities in their efforts to address CVD and related risk factors, MDCH suggests a few resources.

Michigan Department of Community Health – Cardiovascular Health, Nutrition & Physical Activity

www.michigan.gov/cvh

The Cardiovascular Health, Nutrition, and Physical Activity Section is a heart disease and stroke prevention program from the Michigan Department of Community Health. Communities will find resources available for communities as well as health care, schools, worksites, and faith-based venues. Two resources relevant to cardiovascular disease are High Blood Pressure University and High Blood Cholesterol University. The universities contain resources for the professional, patient, and community.

Michigan Department of Community Health – Health Statistics and Reports
www.michigan.gov/healthstatistics

The Michigan Department of Community Health, Health Statistics and Reports may also be of use to communities. State, county, health department, and city data can help communities develop health programs, target and evaluate program progress. Further, communities can use this information to identify local emerging health issues and trends and also to understand where progress has been made. The data are provided at the state, county, and community level and are available for a variety of categories.

MI Healthy Communities
www.mihealthtools.org/mihc

The MI Healthy Communities program is comprised of several initiatives that may be useful to those in the five county target area as the primary goal of the program is to reduce chronic diseases by increasing physical activity, healthy eating, and tobacco-free environments. By visiting the website, communities can learn about funding opportunities, community garden information, and current Healthy Communities projects. Further, MI Healthy Communities partners with local health departments and state level organizations to implement policy, environmental, and system changes. The program has resulted in trail expansions and enhancements, park upgrades, bike lanes, sidewalks, walking paths, farmers markets, community and school gardens, fruit and vegetable availability in corner stores and food emergency assistance locations, and tobacco free outdoor environments.

Appendix 1

Bay County Meeting Evaluation

Twelve participants completed a meeting satisfaction survey. All of the participants were satisfied/very satisfied with the pace of the meeting and fairly satisfied/satisfied/very satisfied with the amount of information presented (Table 1).

	Not at all satisfied	Fairly satisfied	Satisfied	Very Satisfied
Meeting pace	----	----	3	9
Amount of information	----	1	7	4

All of the participants, except one person who was unsure, thought the information presented was helpful and presented in a clear, understandable manner.

The participants gave several suggestions on how to improve the community meeting:

- Need more specific data, who do we target (age, race, education) heart disease if the end symptom, what do we do first?
- Might be helpful to have other community leaders here.
- Follow-up meeting in future would be helpful to see if any change.

Lastly, participants had the opportunity to make additional comments:

- Great job! Thanks.
- Other community groups to reach out to are: Great Start Collaborative (focus is children to age 5).
- Adult resource and needs taskforce (focus on adults 19 and older).
- Look forward to health survey.

Appendix 2

Clare and Gladwin Meeting Evaluation

Fifteen participants completed a meeting satisfaction survey. All of the participants were satisfied/very satisfied with the pace of the meeting and the amount of information presented (Table 2).

Table 2: Satisfaction with Meeting n=15				
	Not at all satisfied	Fairly satisfied	Satisfied	Very Satisfied
Meeting pace	----	----	6	9
Amount of information	----	----	6	9

Of the fourteen respondents who answered the question, 13 thought the information presented was helpful (one was unsure). Fourteen out of the 15 respondents indicated the information was presented in a clear and understandable manner (one was unsure).

Lastly, the participants had the opportunity to make additional comments:

- It was good to hear others' opinions on the causes and how they will solve them;
- The problems are huge and will take many hands and minds to find a workable solution;
- Collaborative work with our agencies are streamlining and keeping services available to our citizens.

Appendix 3

Ogemaw County Meeting Evaluation

Six participants completed a meeting satisfaction survey, however, not everyone completed every question. Of the six that answered the questions, all were satisfied/very satisfied with the pace of the meeting and amount of information presented (Table 3).

Table 3: Satisfaction with Meeting n=6				
	Not at all satisfied	Fairly satisfied	Satisfied	Very Satisfied
Meeting pace	----	----	1	5
Amount of information	----	----	1	5

All of the participants who answered the questions thought the information presented was helpful and presented in a clear and understandable manner.

The participants gave several suggestions on how to improve the community meeting:

- Set agenda;
- Receive agenda in advance for future meetings—come with ideas;
- Very well prepared! Better communication to get meeting info out to more leaders.

Lastly, the participants had the opportunity to make additional comments:

- Excellent—appreciated the stats;
- Agree that we need more community leadership involvement;
- Really enjoyed it!