MERCY HOSPITAL GRAYLING

Knowledge to Heal, Compassion to Care

Community Health Needs Assessment for Roscommon, Oscoda, and Crawford Counties

June 2012

Improving the health of our community

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Community Health Needs Assessment:

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Oscoda County Human Services Coordinating Council

Roscommon County Human Service Collaborative Body

Roscommon Health Improvement Planning Committee

The Kids Great Start Collaborative, covering Crawford, Oscoda, Ogemaw, Roscommon and Iosco County families

Mercy Hospital Grayling Physician Steering Committee

Community Health Needs Summit-Region 7 Northern Michigan

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I. Introduction and Mission Review Statement

Mercy Hospital Grayling Mission:

To serve together in partnership with Trinity Health, in the spirit of the Gospel, to heal mind, body and spirit, to improve the health of our communities, and to steward the resources entrusted to us.

From June 2011 through February 2012, a comprehensive community needs assessment was conducted by Mercy Hospital Grayling, in collaboration with the Roscommon Health Improvement Planning Collaborative, Crawford County Collaborative Body, the Oscoda County Human Service Coordinating Council, and many other stakeholders. A routine assessment of the health needs of the communities of these three counties was done, with special attention given to the poor and underserved, as it is essential in the fulfillment of the mission and heritage of Mercy Hospital Grayling. The Community Health Needs Assessment serves as a foundation and resource for the Strategic Planning and the Community Benefit Ministry Process.

Our Mission at Mercy Grayling Hospital is "to serve together in partnership with Trinity Health, in the spirit of the Gospel to heal mind, body and spirit, to improve the health of our communities, and to steward the resources entrusted to us". Within this scope, we need to look beyond our current health care system and to engage our community in the dialogue, asking about how to best address their health care needs. Our Mission encourages us to explore with our community the social needs: access to nutritious foods, transportation assistance, and adequate housing. These needs are as important to address as medical conditions. Valuable information also includes poverty rates, joblessness, environmental factors, access to health care, resources that promote good health care, and dental care. We also looked at indicators or gaps suggested by the community at large.

The goal of the Community Health Needs Assessment is to identify areas of action for both the strategy planning and the Community Benefit programming and planning for future collaborative endeavors and fund sourcing. At a time when resources are limited and community need is growing, we are challenged to ensure that we maintain our mission to "steward our resources" so that we provide the greatest benefit to all citizens in the most cost effective manner possible.

Our Vision

As the community's health leader, we will provide an exceptional care experience by being a committed and trusted health partner for life.

Mercy Hospital Grayling's vision is central to our commitment to our community. This document is dynamic and will provide metrics to use as a starting point that can be reviewed in the upcoming years. It will then be updated, prioritized, and incorporated into new strategic plans that will be communicated with our community partners who have taken part in this learning process. This is a life-long, life-span commitment. The data will continue to change and we will continue to learn more about our community. Most importantly, to ensure that the vitality of our counties continues, we commit to repeating this process again in three years. We wish to express our deepest gratitude and indebtedness to all who participated in this unique but (almost) prescriptive process.

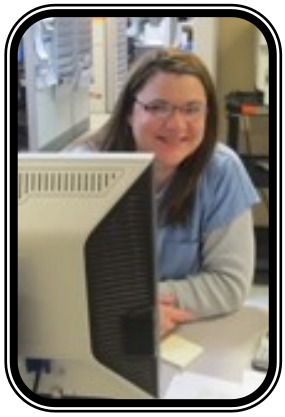
II. A Retrospective Review of the 2008 Community Needs Assessment

The Community Health Needs Assessment conducted in 2008 was reviewed by Munson Medical Center staff and an advisory group that included representatives from County Health Departments, Mercy Grayling Hospital, and Munson Medical Center. Key findings and interpretations were identified, as well as recommendations for presentation and formatting. The advisory group reviewed the common themes that emerged from the final reports. A summary of the recommendations, goals, and outcomes follows, with information on how each has been addressed.

The data for the 2008 assessment were a compilation of an 11 County region. This document will focus on the primary service area for Mercy Hospital Grayling which consists of three counties: Crawford, Oscoda and Roscommon.

Population Growth and Aging

In 2008, it was noted that population growth was already concentrated within the "baby boomer" generation and the senior population over the age of 65 years. This trend has continued, with both the "baby boomer" group and age 65 years and older. From 2000-2010, the population in Crawford, Oscoda and Roscommon counties has decreased, with the largest decrease occurring in Oscoda County. Compared to Michigan, the population of under age 5 and under age 18 is lower in all three counties with the population in the 65 and over age group higher than reported for all the state.



The growing health concerns for the aging population has set the tone for many of the initiatives that are currently in place for the region and also for Collaborative Bodies to continue planning for the future. In response to this concern, Mercy Hospital Grayling began their Senior Emergency Department program in May of 2010.

Significant Access Issues and Significant Disparities between Income Groups

With the continued focus on elder care and information from County Health Rankings research and program opportunities, the concern highlighted in 2008 continues to reflect a need to monitor this category of data on a continuous basis. Economic stressors on families in the three county region continue to intensify. As noted in 2008, the County Health Ranking social determinant information available to us today helps us to better understand health status as directly reflective of the ability of a household to provide insurance coverage, ability to pay for healthy meals and health care, and opportunity to gain access to a healthier lifestyle.

In 2008, concern for birth rate, percent of those with insurance coverage, and unemployment for the region all factored into the analysis of identifying potential disparities. The number of jobless residents has not seen much improvement since 2008, with Oscoda having the highest jobless rate of 16.5, as compared to Michigan at 10.4. In addition, unemployment rates for all three counties continue to be in a trend higher than all of Michigan, with Oscoda having the highest unemployment rate at 21.6%, compared to Michigan at 13.6%.

Current county Health Ranking data provides us with information on a number of health outcomes and health factors for the three county areas. A crucial determinant for families is their household income. The percentage of persons below poverty continues to be higher in all three counties than in all of Michigan with Roscommon having the highest rate at 22.0% compared to Michigan's rate of 14.8%

While not highlighted in the 2008 assessment, the concern for single parent status was a concern and that continues today. Children that are living in single parent households are higher than Michigan in both Crawford (38%) and Roscommon (45%), with Oscoda being slightly lower at 26%. Michigan's overall rate is 32%. A safety net need was identified in 2008 due to the overall worsening socio-economic situation that impacts the health status of the region. One such safety net, the AuSable Free Clinic, located on the campus of Mercy Hospital Grayling, continues to service adult residents and has seen a steady increase of clients since 2008.

Medication Access Program

Access to care was identified in the previous community health needs assessment in 2008. It continues to be a challenge for the rural Northern Michigan areas. Despite the existence of safety net services and assistance programs, the community members still experience a lack of access to medical care. One of the key components to managing disease is by prescription drugs. For a member/family unit to afford the prescription, it could mean the delay or avoidance of another much needed life sustaining component such as food, clothing, or (deemed) less significant medication. As a response to this dilemma, the Medication Access Program (MAP) was implemented. MAP services patients with incomes at or below 200% of the federal poverty level and do not have prescription coverage.

Medication Access for chronic disease and disease management is also an ongoing challenge for community members. Mercy Hospital Grayling (MHG) was a partner in the establishment of a Medication Access Program for uninsured or underserved individuals that meet the criteria (set by the pharmaceutical companies) for free or discounted prescription fills and refills. The program is facilitated by the AuSable Free Clinic with financial assistance by MHG. Since the beginning of the program in 2007, there have

been a total of 4749 successful applications, with a savings of $1,998,984 (through calendar year 2011). The MAP assists those in the MHG service area, covering both private and employed physician prescriptions. Since the last community health needs assessment (2008), there have been an average of 222 active patients in the program.

General Health Status of the Region compared to all of Michigan

In 2008, maternal and child health indicators were reviewed. It appeared, at that time, that the region was doing better than the state. There were 11 counties that had their data pooled into the summary. For this period of assessment, the focus is much narrower (three counties). Indicators included:

- The trend of single parent household has risen to the surface.
- The percentage of Medicaid paid births is higher for all three counties. In addition, infant mortality rates are noted to be highest in Crawford County than in all of Michigan. A regional task force has been charged with addressing this very issue.
- Teen pregnancy, ages 15-19, has continued to see an increase, as has the percentage of mothers that smoke, with all three counties having higher rates than Michigan.
- An area of growing concern is the rising number of births without adequate prenatal care. All three counties have seen a marked rise in percent over the past 3-4 years.

In 2008, the general health status of the region (11 County) was, on average, good or better than all of the residents statewide. As we look to the County Health Rankings for comparison (taking into consideration that we are now narrowed to a three county region analysis), health behaviors play a key role in assisting us in the assessment of how the health factors for the region have either improved or declined. By self-report, the residents rates of obesity, overweight, and excessive drinking are similar to or slightly higher than rates in Michigan. Rates of smoking are not available. While ideally it would be better to see the rates of negative behaviors decline, the data support the need for intervention and education for the entire region.

Chronic Disease and Related Risk Factors

The 2008 community health needs assessment utilized data from 2005. During that assessment, it was determined that indicators related to chronic disease and related risk factors were affecting a significant proportion of the population. Narrowing our focus now to a three county area has enabled us to look at our service area with a lens that is sensitive to the difference of 11 counties versus three county data, but also made the data more relevant to the county residents that participated in the feedback.

The data used to support a comparison of the region since 2008 have shown little to no improvement related to chronic disease and related risk factors. Obesity continues to be of significant concern, as does rate of smoking, percentage of leisure-time physical activity, percentage of overweight individuals, and numbers of people that have had a routine checkups in the past year. In the 2008 report, obesity had climbed to 28% (for an 11 County region). The new data reflects an even higher percentage rate that somewhat mirrors what is being seen in all of the state of Michigan, and the percent is at an all-time high of 31%. Roscommon reports to be 32% and the highest of the three counties.

Cancer incidence and mortality are higher in Crawford and Roscommon than the state of Michigan. Heart disease mortality is higher than the Michigan rate and rates in Oscoda and Roscommon. Incidence of stroke mortality in Crawford and Roscommon is lower than Michigan rate but higher than Michigan in Oscoda. This again, is similar to the information gleaned in the last community assessment.

III. Summary Observations from Current Needs Assessment

Community Collaborative Goals

The following represents the goals that were established from the community collaboratives in each county. Findings from the needs assessment were provided to the collaborative bodies. Each group used this information to determine goals and focus areas. They are listed below in random order.

Roscommon Community Collaborative

- Homelessness
- Domestic Violence
- Bullying Prevention
- Child and Family Safety
    - Great Start Collaborative
    - Big Brothers/Big Sisters
    - Early On
    - Child Protection Council
- Access to Care (including Dental and Mental Health)
- 2-1-1
- Senior Services
- Great Start Collaborative
- Suicide Prevention
- Substance Abuse Prevention
- Transportation

Crawford Community Collaborative

- Homelessness
- Bullying/Peer violence
- Poverty
- Prescription Drug Abuse Prevention
- 2-1-1

Oscoda Community Collaborative

- Homelessness
- Poverty
- Prisoner Reentry
- Prevention in general, including, prescription drug abuse, substance abuse, bullying, etc.
- 2-1-1

Great Start Collaborative: Five components with goals for each

In addition to the three community collaborative bodies, a request was made by the Great Start Collaborative (GCS) to share the chart book data base that was evolving. The GSC was engaged in a dialogue and sharing at their routine meeting held at Kirtland Community College. The following is an outline of their program components and their collaborative goals:

Early Care and Education

- All Families and children have access to high quality child care and early education
- Upon school entry, children are ready to succeed in school and life

Pediatric and Family Health

- Infants, young children, and their families are physically healthy
- The public recognizes a healthy beginning for life for all children as an essential part of a healthy community

Family support

- Families have access to community resources to assist them in meeting the needs of their family and children
- Families of infants and young children are provided access to supports to assist in gaining economic stability

Social & Emotional

- Infants, young children, and their families are socially and emotionally happy
- Public awareness of the importance of social and emotional health is prioritized

Parenting Leadership

- Parents have the opportunity to gain skills in advocacy for children 0-5 years old
- Families support and guide the early learning of their children

IV. Community Description

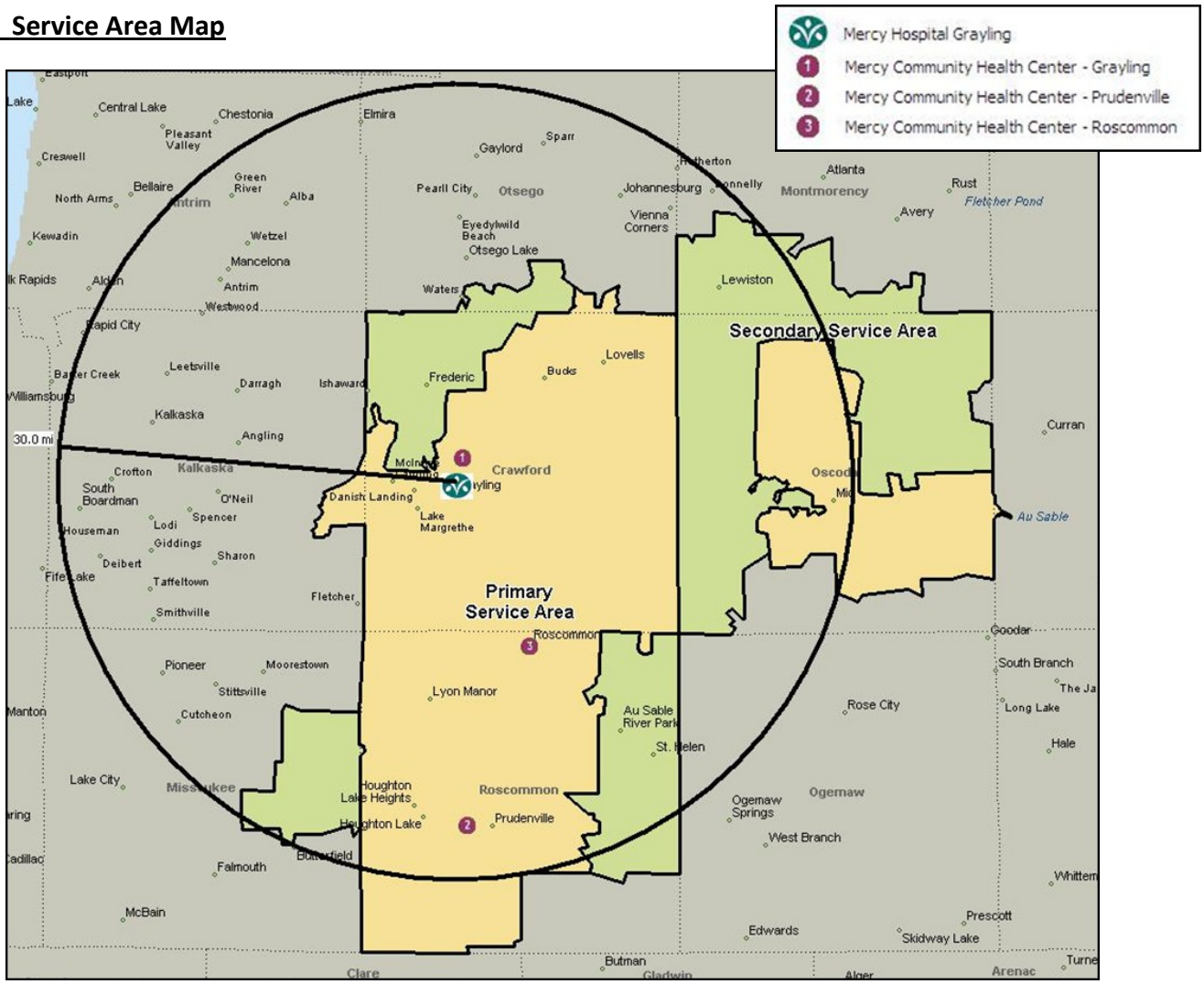
A. Profile of Service Area

Located in the heart of Michigan, Mercy Hospital Grayling serves Crawford, Oscoda, and Roscommon counties. As seen in the following map of the service area, the hospital is located in Grayling, with Community Health Centers in Grayling, Prudenville, and Roscommon.

Rivers, lakes and forests are found in this area, with farming, forestry, some agriculture, and tourism as the primary industries. Grayling is the county seat in Crawford County, which covers an area of 556 square miles, including part of the AuSable State Forest. Oscoda County covers an area of 566 square miles, including Huron National Forest, and Mio is the county seat. Roscommon County includes Higgins Lake, Houghton Lake, Lake St. Helen, the AuSable River and part of the AuSable State Forest. It covers 520 square miles and the county seat is Roscommon.

The number of persons per square miles in these counties is much less than in Michigan. In 2010, the number of persons per square mile in Michigan was 174.8, compared to 25.3 in Crawford County, 15.3 in Oscoda County, and 47.1 in Roscommon County.

B. Service Area Map



V. Data Collection Approaches

A. Methodology

Data were collected from a variety of current sources to provide a foundation for the Community Health Needs Assessment. Sources utilized include both primary and secondary sources:

- U.S. Census Bureau
- Michigan Department of Community Health
- Michigan League for Human Services
- MiPHY (Michigan Profile for Healthy Youth)
- District Health Department #10
- District Health Department #2
- Central Michigan District Health Department
- Michigan Labor Market
- Behavior Risk Factor Surveillance System
- County Health Rankings
- Roscommon County Resident Survey
- Mercy Hospital Physician Feedback

B. Community Participation Strategies

In addition to the quantitative analysis of the surveys and secondary data, primary data were obtained through a series of group discussions facilitated at all three Community Collaborative Bodies, the Roscommon Health Improvement Planning Committee, the (6 County) Great Start Collaborative Bodies and a physician steering group. The Community Collaborative groups have membership that includes business, health care, academics, social service departments, and area residents.

Data was collected and presented in a chart book format that provided county specific information that compared the three counties and the State of Michigan. The chart book format was utilized to align with the regional chart books available by the State of Michigan. Each chart book contains an indicator definition and overview, the findings in graph or chart form, the Healthy People 2020 target (when available), and the data source. In addition, the four questions that were used for the previous needs assessment were also used to gather any empirical data that the participants might have knowledge about that is not reflected in the quantitative data.

The 4 questions were as follows:

> Are there any trends or changes in the kinds of health issues or the nature of health issues you are seeing in the people you serve? (i.e., more of this, less than that, etc. than in the past years).
> Since 2008, has there been any new health or health-related issues that you are seeing among the people you serve that you have never or rarely seen before?
> How would you compare the demand or need for services in the past few years compared to five or ten years ago? Have you seen any trends of changes in the demographics of those in need of your services (age, gender, ethnicity, education level, residency, etc.?).
> Is there anything else you would like to share about the population that you serve that might not be captured in the data that is routinely collected in standard indicators?

Notes were taken from the group discussions as well as in the minutes of the meetings, which will be used for future planning. Results will be reported below in Section VI.

All preliminary findings from the quantitative were reviewed and analyzed by County Health Departments for all three counties (District #2, District #10 and Central Michigan Health Department). In addition, Kevin Hughes, Deputy Health Officer, and Linda Van Gills, Health Officer, from District Health Department #10, volunteered to assist in the interpretation and identification of key areas of concern and providing recommendations for presenting and formatting the findings.

C. Other Community Data Sources

A resident survey was conducted by the Health Improvement Planning (HIP) committee for Roscommon County. In November, 2010, 100 surveys were distributed, with 23 returned. Of the surveys returned, the majority of responses came from individuals that work in the public service arena or were working in the health care field. The HIP group decided to repeat the survey to a larger, more targeted population that did not include service groups of health care. It was unknown how many surveys were distributed county-wide since this part of the project was conducted by the HIP group; 249 surveys were returned.

VI. Findings from the Health and Community Data

A. Key Community Socio-Economic Factors

Education

The percentages of those with a high school degree and a bachelor's degree in Crawford, Oscoda, and Roscommon counties are lower that the percentages in Michigan for these two indicators, according to the U.S. Census Bureau.

	Crawford	Oscoda	Roscommon	Michigan
High school graduates, percent of persons age 25+ 2006-2010	84.3%	80.6%	83.7%	88.0%
Bachelor's degree of higher, percent of persons age 25+ 2006-2010	14.1%	8.9%	13.6%	25.0%

Population

The following table outlines population information from the U.S. Census Bureau for Crawford, Oscoda, and Roscommon counties, as well as Michigan. From 2000-2010, the population in all three counties and Michigan has decreased, with the largest decrease found in Oscoda County. All of the decreases are larger than the population decrease in Michigan during that time. When compared to Michigan, the population under age 5 and under age 18 is lower in all three counties, and the population in the 65 and over age group is higher than in Michigan. The percentage of females is lower than the percentage in Michigan in all three counties.

	Crawford	**Oscoda**	**Roscommon**	**Michigan**
Population, 2010	14,074	8,640	24,449	9,883,640
Population, 2000	14,273	9,418	25,469	9,938,444
Percent change, 2000-2010	-1.4%	-8.3%	-4.0%	-0.6%
Percent under 5 years old, 2010	4.7%	5.0%	3.9%	6.0%
Percent under 18 years old, 2010	19.9%	20.2%	16.1%	23.7%
Percent 65 and over, 2010	20.8%	23.5%	28.0%	13.8%
Female persons, 2010	49.8%	49.6%	50.1%	50.9%

Population Trends by Age

The following chart illustrates trends in population in the three counties, with percent of age groups during 1990, 1999, and 2009. In general, the under 18 age group and the 18-44 age group are declining while the 45-64 age group and the 65 and over group are increasing.

	1990	1999	2009	
Under age 18				
Crawford	26.0%	24.8%	19.4%	⇩
Oscoda	24.0%	23.2%	18.8%	⇩
Roscommon	21.0%	20.0%	16.7%	⇩
18-44 years				
Crawford	37.9%	33.2%	29.4%	⇩
Oscoda	31.4%	28.9%	24.3%	⇩
Roscommon	29.0%	27.5%	23.4%	⇩
45-64				
Crawford	21.2%	25.5%	32.4%	⇧
Oscoda	24.2%	27.6%	32.4%	⇧
Roscommon	25.1%	28.8%	33.3%	⇧
65 and over				
Crawford	15.0%	16.5%	18.8%	⇧
Oscoda	20.5%	20.4%	24.5%	⇧
Roscommon	24.9%	23.7%	26.6%	⇧

Race

The following table illustrates population information from the U.S. Census Bureau for Crawford, Oscoda, and Roscommon counties, as well as Michigan in 2010. All three counties are predominately white, with a low Hispanic population.

	Crawford	Oscoda	Roscommon	Michigan
White	97.5%	97.7%	97.3%	78.9%
Black	0.4%	0.2%	0.4%	14.2%
American Indian	0.5%	0.6%	0.6%	0.6%
Asian	0.4%	0.1%	0.3%	2.4%
Hispanic	1.3%	0.9%	1.1%	4.4%

Poverty

According to the U.S. Census Bureau, the per capita and the median household income is lower in Crawford, Oscoda, and Roscommon counties than in Michigan. The percentage of persons below poverty is higher than in Michigan for all three counties.

	Crawford	Oscoda	Roscommon	Michigan
Per capita money income in past 12 months, 2006-2010	$21,002	$18,524	$20,194	$25,135
Median Household Income, 2006-2010	$39,665	$32,346	$33,542	$48,432
Persons below poverty, 2006-2010	18.0%	20.4%	22.0%	14.8%

Poverty and Children

Data from the Michigan League for Human Services, 2009, indicate percentages of children living in poverty ages 0-17 , and ages 5-17 , as well as total percentage of individuals in poverty. The following chart compares the three counties and Michigan. All rates are higher than the Michigan rate, with Roscommon County having the highest rate of poverty among all three counties.

	Crawford	Oscoda	Roscommon	Michigan
Poverty - Ages 0-17	31.2%	32.9%	42.1%	22.2%
Poverty - Ages 5-17	27.4%	29.0%	36.9%	20.2%
Poverty - All ages	19.2%	20.9%	22.6%	16.1%

Jobless Rate

The annual jobless rate for 2011 is presented in the following table. The rate is highest in Oscoda County and all three counties have higher jobless rates for 2011 than the rate in Michigan. (Michigan Department of Technology, Management, and Budget)

	Crawford	Oscoda	Roscommon	Michigan
Jobless Rate	11.6	16.5	12.9	10.4

Additional demographic indicators

The Michigan League for Human Services reports data on additional economic indicators. The following table shows percentages of students eligible for free or reduced price lunch and the percentage of Medicaid paid births, with percentages in all three counties higher than the Michigan rate.

	Crawford	Oscoda	Roscommon	Michigan
Students eligible for free or reduced price lunch, 2010	63.0%	65.9%	62.9%	46.5%
Medicaid paid births, 2009	65.0%	46.3%	69.2%	42.8%

Findings from the Community Health Rankings

The 2011 County Health Rankings provide information on a number of health outcomes and health factors, and rank counties within the state. The following chart illustrates social and economic factors which affect the health of the community. The total ranking of the three counties is given, as well as seven indicators that are included in the socio-economic factor. Out of 82 counties in Michigan, the total ranking of social and economic factors for Crawford County was 65, Oscoda County was 80 and Roscommon County was 76.

When compared to Michigan, percentages of high school graduation is higher in Crawford and Oscoda and lower in Roscommon, while percentages of some college education are lower in all three counties. Unemployment rates are similar to (Crawford County) or higher (Oscoda and Roscommon Counties) than rates in Michigan. Percentages of children in poverty are higher in the three counties than in Michigan. When compared to Michigan, percentages of children in single parent households are higher in Crawford and Roscommon counties and lower in Oscoda County. Violent crime is lower than in Michigan for all three counties.

	Crawford	Oscoda	Roscommon	Michigan
Social and economic factors	**Ranked 65 of 82**	**Ranked 80 of 82**	**Ranked 76 of 82**	
High school graduation	80%	80%	75%	77%
Some college	45%	45%	52%	62%
Unemployment	13.4%	21.6%	15.1%	13.6%
Children in poverty	30%	31%	35%	19%
Inadequate social support	n/a	n/a	14%	20%
Children in single parent households	38%	26%	45%	32%
Violent crime rate	250	160	252	536

Access to Care

With regard to clinical care, Crawford, Oscoda, and Roscommon counties ranked 37, 53, and 21 out of Michigan's 82 counties, as reported in the 2011 County Health Rankings. When compared to Michigan, the percent of uninsured adults is the same in Crawford County, higher in Oscoda County, and lower in Roscommon County. The ratio of primary care physicians is much higher in Crawford and Roscommon counties when compared to Michigan; data is not available for Oscoda County. Preventable hospital stays are lower in the three counties and screenings are similar or higher than the percentages in Michigan.

	Crawford	Oscoda	Roscommon	Michigan
Clinical care	**Ranked 37 of 82**	**Ranked 53 of 82**	**Ranked 21 of 82**	
Uninsured adults	14%	17%	13%	14%
Primary care physicians	1,443:1	n/a	1,665:1	874:1
Preventable hospital stays	70	68	69	74
Diabetic screening	82%	81%	88%	83%
Mammography screening	79%	77%	77%	69%

Health factors

Included in the 2011 County Health Rankings is data on health behaviors. The three counties ranked low in this area. Some of the areas that are higher than the overall percentages in Michigan include smoking rate, excessive drinking, and motor vehicle crash death rate in Roscommon County. Similar rates of adult obesity are seen. Sexually transmitted disease rates are much lower in the three counties than in Michigan. The teen birth rate is similar to Michigan in Roscommon County, but higher in Crawford and Oscoda counties.

	Crawford	Oscoda	Roscommon	Michigan
Health behaviors	**Ranked 56 of 82**	**Ranked 72 of 82**	**Ranked 66 of 82**	
Adult smoking	n/a	n/a	28%	22%
Adult obesity	30%	31%	32%	31%
Excessive drinking	18%	n/a	23%	19%
Motor vehicle crash death rate	n/a	n/a	16	13
Sexually transmitted disease infections	131	45	64	446
Teen birth rate	47	44	35	35

Health Outcomes

2011 County Health Rankings on health outcomes are also low in the three counties: out of 82 counties in Michigan, Crawford ranked 61, Oscoda ranked 72 and Roscommon ranked 75. Mortality rankings are also low: Crawford ranked 64, Oscoda ranked 76 and Roscommon ranked 79. Premature death rates in all three counties are higher than in Michigan.

Counties are given a morbidity ranking and of the 82 counties in Michigan, Crawford ranked 41, Oscoda ranked 63, and Roscommon ranked 49. The percentage of poor or fair health is higher in Roscommon County; poor physical health days is higher in Oscoda and Roscommon counties, and poor mental health days is higher in Oscoda and Roscommon counties. Low birth weight is less than the percentage of low birth weight in Michigan.

	Crawford	Oscoda	Roscommon	Michigan
Health Outcomes	**Ranked 61 of 82**	**Ranked 72 of 82**	**Ranked 75 of 82**	
Mortality	**Ranked 64 of 82**	**Ranked 76 of 82**	**Ranked 79 of 82**	
Premature death	8,509	9,409	9,991	7,387
Morbidity	**Ranked 41 of 82**	**Ranked 63 of 82**	**Ranked 49 of 82**	
Poor or fair health	12%	n/a	20%	15%
Poor physical health days	3.6	7.0	4.1	3.5
Poor mental health days	3.3	8.1	4.6	3.7
Low birth weight	7.9%	n/a	5.8%	8.2%

Findings from the Behavior Risk Factor Surveillance System

Information on access to care is found in the Behavioral Risk Factor Surveillance System (BRFS) data. A limitation of the BRFS data in the three counties is the small sample size.

With regard to health care access and coverage, Roscommon County has percentages higher than Michigan for those without health insurance, no health care provider, no access due to cost and no routine check-up in the past year. For those same factors, Crawford County has lower percentages than Michigan, with less people reporting lack of health care or access. When compared to Michigan, Oscoda County has less people with no personal health care provider but more people reporting no access due to cost and no routine check-up.

	Crawford	Oscoda	Roscommon	Michigan
No health care coverage among those aged 18-64 years	--	--	18.8%	15.1%
No personal health care provider	12.6%	6.7%	19.0%	13.2%
No health care access during past 12 months due to cost	5.5%	13.4%	19.2%	12.9%
No routine checkup in past year	29.5%	33.1%	38.7%	31.8%

The following chart illustrates a number of health behaviors and outcomes for Michigan and the three counties, with information from the Behavior Risk Factor Survey. Comparisons are made between the counties and with Michigan. Findings with the highest percentages include:

- Obesity in Roscommon; overweight in Crawford and Oscoda
- Inadequate fruit and vegetable consumption in Roscommon; no data is available for the other two counties
- No leisure time physical activity in Roscommon
- Asthma, diabetes, and heart attack in Oscoda; angina or coronary heart disease in Roscommon
- Smoking in all three counties; binge drinking in Crawford

	Crawford	Oscoda	Roscommon	Michigan
Obese	27.4%	29.5%	40.4%	35.6%
Overweight	45.6%	41.8%	29.5%	30.1%
Inadequate fruit and vegetable consumption	--	--	87.2%	78.2%
No leisure-time physical activity	20.5%	29.6%	41.0%	23.4%
Ever told diabetes?	9.5%	15.5%	9.7%	9.3%
Ever told asthma?	22.2%	24.9%	17.1%	15.2%
Still have asthma	14.5%	17.7%	7.3%	9.9%
Ever told heart attack?	2.9%	17.3%	4.2%	4.7%
Ever told angina or coronary heart disease?	5.5%	5.5%	7.7%	4.9%
Ever told stroke?	4.0%	3.8%	3.8%	2.8%
Current smoker	35.2%	24.9%	28.4%	20.3%
Binge drinking	23.5%	--	17.8%	17.1%
Drove motor vehicle after drinking	--	--	1.5%	2.5%

Key Health Indicator Findings: Priority I

Diabetes

Mortality rates for diabetes are lower than the rate in Michigan for all three counties. Among the three counties, Oscoda has the highest rate with 37.1 per 100,000. According to the Behavior Risk Factor Survey, Oscoda also has the largest percent of adults reporting they have diabetes, with 15.9% of the adult population.

	Diabetes Related Mortality, age adjusted rate per 100,000	Percentage of adults reporting they have diabetes
Crawford	29.0	9.5%
Oscoda	37.1	15.9%
Roscommon	22.2	9.7%
Michigan	80.6	9.3%

Cardiovascular Disease

The mortality rate for major cardiovascular disease is highest in Oscoda County with 339.2 per 100,000. Hospital discharges for acute myocardial infarction are highest in Crawford County and rates for congestive heart failure and stroke are highest in Oscoda County (Michigan Department of Community Health). In Oscoda County 17.3% of the population reported being told they had a heart attack and in Crawford County 4% reported being told they had a stroke (Behavior Risk Factor Survey).

	Crawford	**Oscoda**	**Roscommon**	**Michigan**
Cardiovascular Disease Mortality, 2007-2009, age adjusted per 100,000				
Major cardiovascular disease	253.1	339.2	288.0	276.2
Cardiovascular Disease Hospital Discharges, 2007-2009, per 100,000				
Acute myocardial infarction	421.6	366.7	409.9	231.4
Congestive heart failure	185.3	273.5	210.5	240.8
Stroke	281.5	283.6	258.4	256.9
Cardiovascular Disease - Self Report				
Ever told heart attack?	2.9%	17.3%	4.2%	4.7%
Ever told stroke?	4.0%	3.8%	3.8%	2.8%

Teen Pregnancy

Rates of teen pregnancy are shown over a five year period, from 2005-2009, using information from the Michigan League for Human Services. During 2009, all three counties have rates higher than Michigan, with the highest rate of 67.1 in Crawford County.

Teen Pregnancy Rates, per 1,000 girls age 15-19					
	2005	2006	2007	2008	2009
Crawford	64.4	58.1	57.8	66.2	67.1
Oscoda	61.7	48.9	41.5	47.4	54.5
Roscommon	55.6	45.4	43.4	45.3	54.2
Michigan	54.4	53.6	53.4	54.0	53.2

Teen Birth

The following chart illustrates trends in teen births over a five year period, from 2005 to 2009 (Michigan League Human Services). Rates of teen births are calculated by the number of births per 1,000 teen girls. In general, the teen birth rate for Michigan is lower than the rates in all three counties, with Crawford County having the highest rate.

Teen Birth Rate, per 1000 girls age 15-19					
	2005	2006	2007	2008	2009
Crawford	44.4	42.3	43.7	50.1	48.4
Oscoda	46.3	35.8	31.1	32.4	34.4
Roscommon	33.9	30.2	29.4	33.3	40.3
Michigan	33.6	33.4	33.5	33.7	33.3

Tobacco Use

Smoking rates among adults in the three counties are all higher than the percent of smokers in Michigan (Behavior Risk Factor Survey). Percent of women who smoke while pregnant is even higher in all three counties than the general population of adults who smoke, and is higher than in Michigan (Michigan League for Human Services). Crawford County has the highest percent of smokers and Roscommon County has the highest percent of women who smoke while pregnant.

	Crawford	Oscoda	Roscommon	Michigan
Adult smokers	35.2%	24.9%	28.4%	20.3%
Women who smoke while pregnant	45.5%	33.3%	49.1%	18.2%

Tobacco Use - Students

The following chart is from the MiPHY data and illustrates student attitudes and behaviors regarding smoking. Students included attended schools in Crawford, Ogemaw, Oscoda, and Roscommon counties and were in 7th, 9th, and 11th grades. Within the MiPHY survey, schools from these four counties were grouped together, including Ogemaw with our three counties. Additional MiPHY data is included in the appendix.

When asked about the ease of getting cigarettes, percentages were highest among the 11th graders at 82.9%. Students were asked about smoking behavior and almost half of the students in grade 11 had smoked a whole cigarette and 26% of those 11th graders had smoked in the past 30 days. Of those students who currently smoke, 57.6% of the 9th graders and 64.3% of the 11th graders had tried to quit. Local data is also compared to data from the 2009 Youth Risk Behavior Survey.

			2009 YRBS
Percentage of students who reported sort of easy or very easy to get cigarettes	7th	37.6%	n/a
	9th	60.4%	n/a
	11th	82.9%	
Percentage of students who ever smoked a whole cigarette	7th	13.6%	n/a
	9th	31.1%	46.0%
	11th	48.8%	
Percentage of students who smoked cigarettes on one or more of the past 30 days	7th	5.3%	n/a
	9th	18.0%	18.8%
	11th	26.0%	
Among students who are current smokers, the percentage who tried to quit smoking during the past 12 months	9th	57.6%	53.6%
	11th	64.3%	

Immunizations

The number of immunizations given in 2010 is presented in the following chart, with information provided by the health departments in the three jurisdictions. Crawford County provided the most vaccines and flu shots. Information from MCIR (Michigan Care Improvement Registry) indicates that the percentage of children age 19-35 months who have received all indicated immunizations is 80.0% in Crawford County, 53.0% in Oscoda County, and 69.0% in Roscommon County.

Immunizations			
	Crawford	**Oscoda**	**Roscommon**
Number of immunizations given, Health Department data, 2010			
# vaccines given	1,486	--	1,684
# influenza shots given	778	120	359 total flu shots given
# H1N1 shots given	2,032	--	
Children age 19-35 months with all immunizations, 2010, MCIR (Michigan Care Improvement Registry)			
	80.0%	53.0%	69.0%

C. Key Health Indicator Findings: Priority II

Cancer

The rates of cancer mortality and incidence is highest in Roscommon County followed by Crawford County. Both have higher rates than Michigan (Michigan Department of Community Health, 2007-9). The highest cancer rate by type in Crawford County is lung cancer. Prostate cancer has the highest rate in Oscoda and Roscommon Counties (Michigan Department of Community Health, 2003-7).

	Crawford	Oscoda	Roscommon	Michigan
Cancer Mortality 2007-2009 per 100,000	199.1	167.1	208.5	184.8
Cancer Incidence, 2005-2007 per 100,000	499.2	444.0	573.2	494.3

Cancer Incidence, 2003-7, rate per 100,000					
	Prostate	Lung	Breast	Colon	All other
Crawford	70.2	89.8	53.2	45.8	240.2
Oscoda	63.9	53.6	50.2	55.8	189.5
Roscommon	97.2	89.3	86.7	60.6	256.8
Michigan	77.6	75.0	66.3	50.8	230.7

Low Birth Weight

Percent of low birth weight in Crawford County is 9.2%, higher than the other two counties and Michigan. Less than adequate prenatal care and late or no prenatal care is highest in Oscoda County. In all three counties, percent of preterm births is lower than the percent in Michigan, with the highest in Roscommon County. In all three counties, births to mothers who smoked while pregnant is higher than the percent in Michigan, with the highest rate of 49.1% in Crawford County (Michigan League for Human Services).

	Crawford	Oscoda	Roscommon	Michigan
Low birth weight	9.2%	5.7%	7.3%	8.5%
Less than adequate prenatal care	22.8%	50.0%	26.1%	22.5%
Late or no prenatal care	3.7%	7.8%	2.3%	3.2%
Preterm births	8.7%	7.0%	9.5%	10.2%
Births to mothers who smoked while pregnant	49.1%	31.3%	45.3%	19.3%

Infant Mortality

The following table illustrates the annual number of infant deaths, births, and the death rate by County and Michigan. Because the number of deaths is small, a five-year moving average, from 2005-2009, was used. Data was provided by the Michigan Department of Community Health. Included are deaths occurring to infants less than one year of age. The average infant death rate for Roscommon is 7.6, the same as for Michigan. The infant death rate for Oscoda during that time period is too small to calculate. The average infant death rate for Crawford County is 13.6, with an average of 1.8 deaths per year.

	Crawford	Oscoda	Roscommon	Michigan
Average number of infant deaths	1.8	0.6	1.4	945.0
Average number of live births	132.8	82.8	184.2	123,753
Average infant death rate	13.6	--	7.6	7.6

Obesity

Percent of obesity is highest in Roscommon County, with 40.4%, and percent of overweight is highest in Crawford County with 45.6%. Both of these rates are higher than in Michigan (Behavior Risk Factor Survey). MiPHY data also look at obesity and overweight. The greatest number of students who are obese are in 9th grade, with 19.5%. The greatest number of students who are overweight are in 11th grade, with 19%. Approximately half of the students in all three grades reported trying to lose weight.

	Crawford	Oscoda	Roscommon	Michigan
Obese	27.4%	29.5%	40.4%	30.6%
Overweight	45.6%	41.8%	29.5%	30.1%

2009 YRBS

Percentage of students who are obese (at or above the 95th percentile for BMI by age and sex)	7th	12.2%	n/a
	9th	19.5%	11.9%
	11th	14.5%	
Percentage of students who are overweight (at or above the 85th percentile and below the 95th percentile for BMI by age and sex)	7th	16.5%	n/a
	9th	10.8%	14.2%
	11th	19.0%	
Percentage of students who were trying to lose weight	7th	48.6%	n/a
	9th	53.8%	44.8%
	11th	51.9%	

D. Key Environmental Health Factors

Environmental health data were provided by three health departments: Central Michigan District Health Department, District Health Department #10, and District Health Department #2. Results show the findings regarding onsite sewage, water program, and food service. Of the three counties, Roscommon provides the most environmental health permits and inspections.

Key Environmental Health Factors			
	Crawford	**Oscoda**	**Roscommon**
Onsite Sewage			
# Septic Permits	77	67	130
# Septic Failures	68	6	113
Water Program			
# Well Permits	86	81	201
# Well Inspections	30	15	201
Food Service			
# Food Operation Inspections	104	57	403, including temporaries
# Temp Food Booth Inspections	16	29	
# Reported Food Borne Illness	3	2	0
Animal bites/exposure	61	--	--

VII. Findings from the Community Input Process

Consumer Health Surveys

Roscommon Health Issues Survey, 2010

The Roscommon Health Improvement Collaborative developed a survey supported by the Central Michigan Health Department. The initial survey was distributed to 100 individuals and had 23 returned. The respondents were mostly from service fields or working in professional health care roles. The decision was to re-distribute surveys, using the membership to assist in the distribution to include clinic offices, group community functions, or case management cases to solicit participants. The goal was to hear from the general public. It is unknown how many surveys were distributed; 249 were returned.

The results of the surveys that were distributed in Roscommon County reflected a somewhat similar response related to health needs and health concerns. Residents and professional community members identified chronic issues of poverty, child and family safety, substance abuse prevention, violence prevention, housing, access to care, and transportation as on-going concerns. The following table includes the health concerns of Roscommon County Residents collected from both surveys.

Health Concerns of Roscommon County Residents	
Unemployment/ Economy	142
Health Services	82
Housing	48
Transportation	46
Nutrition/ Activity	39
Organizations Accessed in Last 6 Months	
Michigan Works	80
Department of Human Services	37
St. Vincent De Paul	19
Health Department	12
Community Mental Health	11

Public Forums and Focus Groups

When members of the collaborative bodies were engaged in a dialogue about the data and asked the four questions (see preceding section), several themes emerged that were not reflected in the secondary quantitative data. The process led to the identification of common themes among all three counties:

- There is a perception that there were more drug addicted babies being born in the past 2-3 years.
- There is a need for illiteracy evaluations when there is "perceived" non-compliance. General consensus at two of the three Collaborative Bodies and the Great Start Collaborative was that more muster needs to be extended to evaluate this phenomenon.
- While food banks and food distribution has been more readily available, with multiple agencies working together to target families at risk, there is not a consistent process in place to evaluate the family's ability to cook. One service agency representative shared a story about a recent food distribution that included fresh chicken. Two days after the food was distributed, the case worker followed-up with the household, only to find that the mother did not know how to cook the chicken.

All three Collaborative Bodies (Roscommon, Oscoda, and Crawford) have existing goals that are actively reported upon each month. The data that was shared was not necessarily news to many of the membership. They were, however, very interested to hear the similarities that surfaced with both the data and the communicated findings from the feedback sessions.

From the initial County Collaborative Body presentation came an invitation from the Great Start Collaborative to meet. The Great Start Collaborative is a comprehensive early childhood system serving children from birth to age 5. The Collaborative shared data from the MiPHY data bank that was congruent with the information MHG provided. Roundtable discussion included additional counties of Ogemaw and Iosco. All parties were in agreement that a broader partnership was warranted to ensure that future endeavors would reach a larger portion of the community.

Mercy Hospital Grayling's goal was to share the data and request feedback from the community collaboratives. This was to encourage collaboration and reduce the "silo" activity for future planning and implementing programs and projects. All collaborative bodies agreed that economic status and the dwindling funding resources is, and will continue to be, a challenge to the partnership development and progression of goal attainment.

Equally important for the success of programs and initiatives is the ability for all leaders within a community to collaborate and communicate a target or goal. There was good dialogue among the engaged participants about historical trends in teamwork and identifying strategies for future partnering. Collaboratives were also in agreement that policy change would be required in some instances for any real movement to occur in areas of obesity, maternal child and teen smoking.

An additional challenge for the rural counties is the need for better transportation for participants to be able to attend programs and services. Use of technology to communicate has assisted groups to share strategies and be able to plan for site location, dates, resource allocation among each other, but the burden of finding a good locale for a program continues to be a crucial component for successful participation.

When the engaged Collaborative members were asked 4 questions (see section V. B), there was a concern about drug addicted babies that surfaced. Currently there is no data bank available to us for this information. In addition, the topic of illiteracy was identified as being a "silent" concern that had been witnessed by some, but the impact was amplified as the discussion ensued.

Physician Input

Physician Feedback (focus group)

The physician group identified the need to focus on chronic pain and also chronic disease management. Lack of specialty services for mental health (including substance abuse), ear, nose and throat for children, and geriatric specialty services was highlighted by the group.

The physician group felt that opiate drug abuse has increased substantially over the past three years, and shared that they have seen many more overdoses. The group specifically identified the abuse of prescription drug as surpassing the use of illicit drugs.

Newly surfacing issues related to elder care (due to the aging population) has also evolved into the need for more cancer care options that are not necessarily in our local geographic area. The demand for primary care providers (and the lack thereof) was a key issue that surfaced during their dialogue. The physician group felt that the types of care that could be managed on an outpatient basis would be improved with more primary care providers to address cardiac care, chronic illnesses and a growing aged population.

The physician staff is open to telemedicine for mental health and has had experience in the ED with telemedicine for neurology specialty services.

VIII. Reflections on the Health Needs Assessment

The Process: Lessons Learned and Recommendations

Tapping into the existing community forum structures was a successful way to hold group discussions about the data related to their community. Utilizing an existing group assured key community stakeholders and service providers that the discussion would occur. In all three County Community Collaborative Bodies, there existed agreed upon goals and initiatives. While the collaborative bodies were each unique in their process to set goals and identify ways to partner with neighboring collaborative bodies, they were equally eager to hear and share what the data had to offer. Common themes emerged from both the identified goals of each county collaborative and from the dialogue that ensued during the data sharing. Similarities in community health needs surfaced in each dialogue. Mercy Hospital Grayling representatives were able to share this information at each session and proposed that there be less silo work and more partnership development for programming in the future.

Utilizing the existing collaborative bodies was a successful communication tool. It would be beneficial to continue membership on the community groups to assist in dynamic conversations that are not limited to a three year assessment. Metric sharing should be an on-going process across the counties that were engaged in this assessment.

The physician group was also engaged by utilizing an existing meeting. Knowing that physicians have busy schedules and are pulled into many meetings, this process worked well for our data gathering.

Utilizing the skills of a private individual that was familiar to data extraction and also capitalizing on the partnership of Community Health experts to evaluate the data was beneficial, since it provided an objective view of our county information.

The following provides a summary of the lessons learned, in the areas of the community health needs assessment process, poverty and unemployment, access to care, and maternal and child health.

The Community Health Needs Assessment Process

The commitment to the community health needs assessment process by Mercy Hospital Grayling and it's partners includes the following: continue to utilize the groups that are active in the service area; consider the data sources and maintain similarity in metrics that are utilized and communicated.; communicate the process for strategic planning and on-going evaluation of goals and outcomes with board membership.

Poverty and Unemployment

Median household income has been shown to be lower in the three counties of Roscommon, Oscoda and Crawford than in Michigan. Mercy Hospital Grayling currently partners with the only Free Clinic in the area and will continue to support the work, knowing the there is uncharted territory with the advent of healthcare reform initiatives. Financial screeners are currently available in all access points (physician office, ED, inpatient/outpatient) for on-going evaluation of client need for assistance (e.g. financial, housing). Connections can then be made to available resources.

Access to health care

The rural nature of our counties will challenge us to "think outside the box" when it comes to development of programs. Mercy Hospital Graying has the added concern related to availability of needed specialty services, especially mental health services. Mercy Hospital Grayling is currently working in partnership with the local Community Mental Health Department for a pilot program within Maternal Child Health. Ongoing sharing of information and grant proposal writing will continue to be a hallmark of improvement in this arena.

Lack of primary care providers both within the hospital and in the outlying areas are of major concern. By looking to other provider models (Nurse Practitioner, Physician Assistant, Case Management), the population will have more opportunity for earlier intervention at a care management level most appropriate.

Maternal child health

While each of the three County Collaborative Bodies and the Great Start Collaborative Body all agree that the well-being of mothers, children and infants is crucial to future healthy families, the partnering across county lines has not been a strength. A Northern Michigan 21-County Collaborative has been charged to address the gaps in care access, develop partnerships across the 21-counties, and establish a formal body to move health care goals and objectives (including legislative policy change) forward. Mercy Hospital Grayling is a current partner in this work and will continue to assist in this initiative development. In addition, the continued active participation in the County Collaborative and the Great Start Collaborative will be crucial to the ongoing open dialogue related to maternal child issues.

Governor Snyder's 2012 charge to the State of Michigan to address infant mortality is priority one, followed by the chronic issue of obesity. While the data does not reflect percent of expectant mothers that are obese, national, state, and local levels of overweight and obesity suggest that this would also be of concern with this population.

Consideration for next steps

The Community Health Needs Assessment Process

We will continue to utilize the groups that are active in the service area while considering the data sources and maintaining similarity in metrics that are utilized and communicated. It was noted that each group tended to utilize a variety of data sources. By coming to agreement about the data metrics that would be utilized for "like" measures, the region could be set-up for a more consistent message when soliciting support for initiatives. In addition, continuing to communicate the process for strategic planning and on-going evaluation of goals and outcomes with board membership provides for leadership support at the hospital level. The engagement of local opportunities allows participants to detail suggestions and recommendations on ways to meet any need, given the available resources and potential opportunities for partnerships across the region.

While the plan was to develop a comprehensive assessment of the three county region, data were collected from sources, which at times, were limited in response rates. One such data source was the Behavior Risk Factor Survey. Self-reported results while important in reflecting the news of the community may have limitations due to self-selection and the inability to reach an ample representation of the community membership.

Creating a Healthy Community

While the priority of the issues differed among the various groups engaged, the themes of poverty, access to health care, maternal child health, obesity and chronic disease management surfaced to the top of all lists. In addition, it was identified by the community groups that transportation has been, and continues to be, an area that requires much collaboration in order to work within the limited available sources.

Drug abuse, while not new to the region, has reared its ugly face in a new way. Prescription drugs are the drugs of choice in this new assessment, the region is lacking in resources for mental health service providers but has been creative in developing partnerships and opportunities to coordinate among agencies. Coordination includes communication to the general public via media messages, health fair campaigns, and soliciting for data metrics for ongoing monitoring of healthy lifestyles within a given target population.

Agency Coordination

Throughout the engagement of the community for their feedback, the message of working outside the normal boundaries was endorsed. Dwindling financial resources and reduced personnel pools have highlighted the need for regional agencies to refrain from working in "silos" and to begin exploring how the management of targeted issues can be jointly ventured. More comprehensive programs that address the key common issues now need a more eclectic approach, utilizing the experience and expertise of the many various active teams/groups within the community that will be able to develop policy and make the necessary changes in order to "move the needle" on the tough issues such as obesity, access to care, maternal and child health and chronic disease.

Health Education and Literacy

Comprehensive and inclusive strategies to educate and inform the general public, region-wide, is essential. Areas of self-care and self-management are crucial for sustainability of a healthier community. It is not enough to hold a forum or educational offering and not tie it into how the information relates to the person receiving the information. Written documents are only as good as the reader. We've learned from our working with the survey and impromptu dialogue that illiteracy, language barriers and basics for cooking, infant care, and reading of food labels can be deterrents to what might be considered to be a quality educational program. By incorporating and soliciting feedback from the participants and working with local agencies, the targeted population will be provided a program that is user friendly and provided with sensitivity to the extra needs of the audience (e.g., reading, writing, transportation concerns, childcare concerns, elder care concerns).

IX. Appendices

Community Data Worksheet

Health Indicator Grid

Environmental Health Grid

MiPHY Data

Roscommon County Resident Survey

County Chartbook Summary for Crawford, Oscoda, and Roscommon Counties

Community Data Worksheet						
Data Set	Crawford Co	Oscoda Co	Roscommon Co	Michigan	US	Data source
Population and Trends: population and % change	14,074/-1.4%	8,640/-8.3%	24,449/-4.0%	9,883,640/-0.6%	308,745,538/9.7%	US Census
Age/Sex: Female %	48.3%	51.3%	51.0%	50.8%	50.7%	US Census
Race/Ethnicity: % white	97.5%	97.7%	97.3%	78.9%	72.4%	US Census
Marital Status						
Households	5,833	3,963	11,433	3,860,160	112,611,029	US Census
Persons per household	2.32	2.25	2.2	2.53	2.6	US Census
Household income	$35,866	$32,928	$33,273	$45,254	$50,221	US Census
Households< poverty						
Households< USDHUD moderate income						
Vehicles per household						
Social security						
Medicare						
Medicaid						
Poverty<FPL (150%&200%)						
Homeless						
Occupation/employment sectors						
Disability sectors						
Housing by type						
Housing by venue						
Education (25+ years): HS grad/ college grad	83.5%/14.1%	80.2%/10.3%	84.9%/14.2%	83.4%/21.8%	84.6%/27.5%	US Census
Household church attendance						
Language spoken at home						
Grandparents as caregivers						

Health Indicators						
Indicator	HP 2010 Ob-	Crawford Co	Oscoda Co	Roscommon Co	Michigan	Source
Priority 1 Health Indicators:						
Diabetes	25/1000	10%	11%	11%	9%	County Rankings
Cardiovascular Disease, mortality,2007-9, age adjusted rate	166/100,000	253.1	339.2	288.0	276.2	MDCH
COPD						
Asthma						
Teen Pregnancy Rate, per 1000	43	60.5	58.1	61.9	51.5	MDCH
Teen Birth Rate		50.1	32.4	33.3	33.7	MDCH
Teen Abortion -number of abortions, 2009		3	4	4	4,105	MDCH
Immunizations (ages 19-35 months) 2009	90%	72.7%	54.5%	70.7%	60.9%	Mi League for Human Services
Tobacco Use	12%	35.2%	n/a	n/a	19.8%	BRFS
Priority II Health Indicators:						
STD						
HIV (rate per 100,000)		n/a	n/a	49		County Rankings
Cancer mortality 2007-9		199.1	167.1	208.5	184.8	MDCH
Low Birth Weight, 2009	5%	8.2%	4.9%	6.9%	8.4%	MDCH
Osteoporosis						
Injury, fatal, 2009		12	9	12	5,917	MDCH
Alcohol Use: binge drinking		14.0%	22.0%	n/a	18.0%	County Rankings
Substance Abuse						
Obesity	15%	30.0%	31.0%	32.0%	31.0%	BRFS
Schizophrenia						
Depression						
Bipolar Disorder						
Mental Retardation						
Co-occur Mental III/Sub abuse						
ADHD						

Environmental Health Data						
Data Set	Crawford Co	Oscoda Co	Roscommon Co	Michigan	US	Source
Food/water/vector-borne diseases diagnosed	3 food borne	0	0 food diagnosed	1,070 food	16.4 million water/48 million	DHD#10/DHD#2/CMDHD/Dept of Agriculture/FDA
Animal bites	61		94	3300	4.7 million	DHD#10/DHD#2/CDC/MDCH
Animals positive-rabies	0		0	73		
Infectious disease outbreaks						
Flu-like disease						DHD#10
Influenza (Novel 2009)						DHD#10
type						
Toxic chemical releases - # of pounds				71,371,613		EPA
Air quality standards: radon		0		3.5	2.1	CMDHD/DNR/EPA
Lead poison cases				411		MDCH
Fatal injuries:						
type						
type						
type						
Contaminated drinking wells	13	0		1900 bacterial; 67 nitrate		DHD#10/DHD#2/CMDHD/DEQ
Monitored drinking wells	115	10	11	9965		DHD#10/DHD#2/CMDHD/MI DNR/EPA
Failed septic systems	68	6	113	3.5	5	DHD#10/DHD#2/CMDHD/MI DNR/EPA

MiPHY: Crawford, Ogemaw, Oscoda, Roscommon, 2009-10

Alcohol Use

2009 YRBS

Percentage of students who ever drank alcohol	7th	19.1%	n/a
	9th	52.2%	68.8%
	11th	70.3%	
Percentage of students who drank alcohol during the past 30 days	7th	7.5%	n/a
	9th	22.4%	37.0%
	11th	41.0%	
Percentage of students who have ever been drunk	7th	7.2%	n/a
	9th	33.2%	n/a
	11th	59.0%	

Drinking and Driving/Riding

2009 YRBS

Percentage of students who ever rode in a car driven by someone who had been drinking alcohol	7th	35.4%	n/a
Percentage of students who rode in a car or other vehicle driven by someone who had been drinking alcohol one or more times during the past 30 days	9th	19.8%	27.5%
	11th	24.5%	
Percentage of students who drove a car or other vehicle when they had been drinking alcohol one or more times during the past 30 days	9th	5.2%	8.4%
	11th	12.1%	

Smoking

2009 YRBS

Percentage of students who reported sort of easy or very easy to get cigarettes	7th	37.6%	n/a
	9th	60.4%	n/a
	11th	82.9%	
Percentage of students who ever smoked a whole cigarette	7th	13.6%	n/a
	9th	31.1%	46.0%
	11th	48.8%	
Percentage of students who smoked cigarettes on one or more of the past 30 days	7th	5.3%	n/a
	9th	18.0%	18.8%
	11th	26.0%	
Among students who are current smokers, the percentage who tried to quit smoking during the past 12 months	9th	57.6%	53.6%
	11th	64.3%	

Other Drugs

Percentage of students who ever tried marijuana	7th	4.4%	n/a
	9th	26.8%	36.5%
	11th	44.3%	
Percentage of students who used marijuana during the past 30 days	7th	1.9%	n/a
	9th	13.6%	20.7%
	11th	22.3%	
Percentage of students who were offered, sold, or given an illegal drug on school property by someone during the past 12 months	7th	3.0%	n/a
	9th	16.4%	29.5%
	11th	25.8%	

Suicide

2009 YRBS

Percentage of students who ever seriously considered attempting suicide	7th	23.2%	n/a
Percentage of students who ever made a plan about how they would attempt suicide	7th	13.8%	n/a
Percentage of students who ever tried to kill themselves	7th	8.7%	n/a
Percentage of students who felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities during the past 12 months	9th	34.3%	27.4%
	11th	38.9%	
Percentage of students who seriously considered attempting suicide during the past 12 months	9th	19.1%	16.0%
	11th	19.1%	
Percentage of students who made a plan about how they would attempt suicide during the past 12 months	9th	15.8%	14.6%
	11th	13.4%	
Percentage of students who actually attempted suicide during the past 12 months	9th	12.2%	9.3%
	11th	7.7%	

Sexual Behavior

2009 YRBS

Percentage of students who ever had sexual intercourse	7th	8.9%	n/a
	9th	28.9%	45.6%
	11th	61.9%	
Percentage of students who had sexual intercourse with four or more people during their life	9th	7.4%	13.6%
	11th	15.1%	
Percentage of students who had sexual intercourse during the past 3 months	9th	17.4%	34.1%
	11th	46.9%	
Among students who had sexual intercourse during the past three months, the percentage who drank alcohol or used drugs before last sexual intercourse	9th	29.0%	24.7%
	11th	18.4%	
Among students who had sexual intercourse during the past three months, the percentage who used a condom before last sexual intercourse	9th	72.7%	61.4%
	11th	54.1%	
Among students who had sexual intercourse during the past three months, the percentage who used birth control pills to prevent pregnancy before last sexual intercourse	9th	9.4%	21.4%
	11th	23.2%	
Percentage of students who had ever been pregnant or gotten someone else pregnant	9th	2.7%	6.2%
	11th	6.5%	
Percentage of students who have ever been physically forced to have sexual intercourse when they did not want to	9th	6.6%	10.4%
	11th	10.8%	
Of students who ever had sexual intercourse, the percentage whose first partner was 3 or more years older	9th	29.6%	18.7%
	11th	22.1%	

Physical Health

2009 YRBS

Percentage of students who saw a doctor or healthcare provider for a check-up or physical exam when they were not sick or injured during the past 12 months	9th	59.7%	61.8%
	11th	57.8%	
Percentage of students who had ever been told by a doctor or nurse that they had asthma	9th	25.2%	23.2%
	11th	26.3%	
Percentage of students who had been told by a doctor or nurse that they had asthma and still have asthma	9th	15.2%	11.6%
	11th	14.3%	

Nutrition

Percentage of students who ate five or more servings per day of fruits and vegetables during the past seven days	7th	39.4%	n/a
	9th	37.1%	19.6%
	11th	30.2%	
Percentage of students who drank three or more glasses per day of milk during the past seven days	7th	31.8%	n/a
	9th	26.5%	13.3%
	11th	22.1%	
Percentage of students who had breakfast every day in the past week	7th	52.9%	n/a
	9th	39.3%	n/a
	11th	39.7%	

Weight

2009 YRBS

Percentage of students who are obese (at or above the 95th percentile for BMI by age and sex)	7th	12.2%	n/a
	9th	19.5%	11.9%
	11th	14.5%	
Percentage of students who are overweight (at or above the 85th percentile and below the 95th percentile for BMI by age and sex)	7th	16.5%	n/a
	9th	10.8%	14.2%
	11th	19.0%	
Percentage of students who were trying to lose weight	7th	48.6%	n/a
	9th	53.8%	44.8%
	11th	51.9%	

Physical Activity

Percentage of students who were physically active for a total of at least 60 minutes per day on five or more of the past seven days	7th	57.3%	n/a
	9th	68.6%	46.8%
	11th	54.5%	
Percentage of students who watched three or more hours per day of TV on an average school day	7th	35.4%	n/a
	9th	25.1%	29.6%
	11th	28.9%	
Percentage of students who played video or computer games or use a computer for something that is not school work three or more hours per day on an average school day	7th	26.1%	n/a
	9th	19.4%	n/a
	11th	23.6%	

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2012 East Preston Avenue
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Roscommon County Resident Survey
October/November 2011

This is an anonymous survey. We appreciate you taking the time to share your opinion with us.

What county do you live in? _____

What concerns and stresses effect your everyday life?

Do you consider yourself a healthy person? Yes No
If yes, how do you stay healthy? If no, what prevents you from being a healthy person?

What concerns do you have about your future or your family's future?

What agencies/organization's services have you used in the last 6 months?

Uniting the communities and working together, we will improve health and promote wellness in central Michigan.

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From the list below, please circle the 3 issues that most concern you.

Health Services	**Substance Abuse**	**Transportation**
Nutrition & Physical Activity	**Family Life/Parenting**	**Environmental Issues**
Abusive & Violent Behavior	**Housing**	**Unemployment or Economy**

Uniting the communities and working together, we will improve health and promote wellness in central Michigan.

Crawford County Health Profile Summary 2011

Demographics

	Michigan	Crawford	Compare
HS Education	87.4%	83.5%	
College degree	24.5%	14.1%	
Jobless rate	12.5	13.1	
Persons below poverty	16.1%	19.2%	
Free and reduced price lunch	45.8%	58.9%	
Medicaid paid births	42.8%	65.0%	

Access to Health Care

	Michigan	Crawford	Compare
People per primary care physician	874	1,443	
No health care provider	13.2%	12.6%	
No access to care in past year due to cost	12.9%	5.5%	
No health insurance	15.1%	n/a	
No dental visit in past year	26.0%	n/a	

Health Indicators

	Michigan	Crawford	Compare
Cancer mortality rate per 100,000 (HP2020: 160.0)	184.8	199.1	
Cancer incidence rate per 100,000	494.3	499.2	
Cardiovascular disease mortality per 100,000	276.2	253.1	
Diabetes related mortality rate per 100,000 (HP2020: 65.8)	80.6	29.0	
Infant mortality rate per 1,000 births (HP2020: 6.0)	7.6	17.9	
Low birth weight (HP2020: 7.8%)	8.5%	9.2%	

Health Behaviors and Indicators

	Michigan	Crawford	Compare
Overweight	30.1%	45.6%	
Obese (HP2020: 30.6%)	35.6%	27.4%	
Inadequate fruit and vegetable consumption	78.2%	n/a	
No leisure time physical activity	23.4%	20.5%	
Binge drinking in past month (HP2020: 24.3%)	17.1%	23.5%	
Smoking (HP2020: 12.0%)	20.3%	35.2%	
Smoking during pregnancy (HP2020: 1.4%)	18.2%	45.5%	
Teen pregnancy rate per 1,000	53.6	64.8	
Childhood immunizations	66.0%	80.0%	
Chlamydia rate per 100,000	504.4	235.0	
Diabetes	9.3%	9.5%	

HP2020=Healthy People 2020 targets

Sources: Michigan Department of Community Health; US Census Bureau; County Health Rankings; MI Department of Technology, Management and Budget; Michigan League for Human Services; Michigan Care Improvement Registry.

Oscoda County Health Profile Summary 2011

Demographics

	Michigan	Oscoda	Compare
HS Education	87.4%	80.2%	
College degree	24.5%	10.3%	
Jobless rate	12.5	19.3	
Persons below poverty	16.1%	20.9%	
Free and reduced price lunch	45.8%	65.1%	
Medicaid paid births	42.8%	46.3%	

Access to Health Care

	Michigan	Oscoda	Compare
People per primary care physician	874	n/a	
No health care provider	13.2%	6.7%	
No access to care in past year due to cost	12.9%	13.4%	
No health insurance	15.1%	n/a	
No dental visit in past year	26.0%	n/a	

Health Indicators

	Michigan	Oscoda	Compare
Cancer mortality rate per 100,000 (HP2020: 160.0)	184.8	167.1	
Cancer incidence rate per 100,000	494.3	444.0	
Cardiovascular disease mortality per 100,000	276.2	339.2	
Diabetes related mortality rate per 100,000 (HP2020: 65.8)	80.6	37.1	
Infant mortality rate per 1,000 births (HP2020: 6.0)	7.6	12.3	
Low birth weight (HP2020: 7.8%)	8.5%	5.7%	

Health Behaviors and Indicators

	Michigan	Oscoda	Compare
Overweight	30.1%	41.8%	
Obese (HP2020: 30.6%)	35.6%	29.5%	
Inadequate fruit and vegetable consumption	78.2%	n/a	
No leisure time physical activity	23.4%	29.6%	
Binge drinking in past month (HP2020: 24.3%)	17.1%	n/a	
Smoking (HP2020: 12.0%)	20.3%	24.9%	
Smoking during pregnancy (HP2020: 1.4%)	18.2%	33.3%	
Teen pregnancy rate per 1,000	53.6	55.8	
Childhood immunizations	66.0%	53.0%	
Chlamydia rate per 100,000	504.4	Rate too low to calculate	
Diabetes	9.3%	15.5%	

HP2020=Healthy People 2020 targets

Sources: Michigan Department of Community Health; US Census Bureau; County Health Rankings; MI Department of Technology, Management and Budget; Michigan League for Human Services; Michigan Care Improvement Registry.

Roscommon County Health Profile Summary 2011

Demographics

	Michigan	Roscommon	Compare
HS Education	87.4%	84.9%	
College degree	24.5%	14.2%	
Jobless rate	12.5	14.9	
Persons below poverty	16.1%	22.6%	
Free and reduced price lunch	45.8%	64.8%	
Medicaid paid births	42.8%	69.2%	

Access to Health Care

	Michigan	Roscommon	Compare
People per primary care physician	874	1,665	
No health care provider	13.2%	19.0%	
No access to care in past year due to cost	12.9%	19.2%	
No health insurance	15.1%	18.8%	
No dental visit in past year	26.0%	32.8%	

Health Indicators

	Michigan	Roscommon	Compare
Cancer mortality rate per 100,000 (HP2020: 160.0)	184.8	208.5	
Cancer incidence rate per 100,000	494.3	573.2	
Cardiovascular disease mortality per 100,000	276.2	288.0	
Diabetes related mortality rate per 100,000 (HP2020: 65.8)	80.6	22.2	
Infant mortality rate per 1,000 births (HP2020: 6.0)	7.6	10.7	
Low birth weight (HP2020: 7.8%)	8.5%	7.3%	

Health Behaviors and Indicators

	Michigan	Roscommon	Compare
Overweight	30.1%	29.5%	
Obese (HP2020: 30.6%)	35.6%	40.4%	
Inadequate fruit and vegetable consumption	78.2%	87.2%	
No leisure time physical activity	23.4%	41.0%	
Binge drinking in past month (HP2020: 24.3%)	17.1%	17.8%	
Smoking (HP2020: 12.0%)	20.3%	28.4%	
Smoking during pregnancy (HP2020: 1.4%)	18.2%	49.1%	
Teen pregnancy rate per 1,000	53.6	55.1	
Childhood immunizations	66.0%	69.0%	
Chlamydia rate per 100,000	504.4	104.0	
Diabetes	9.3%	9.7%	

HP2020=Healthy People 2020 targets

Sources: Michigan Department of Community Health; US Census Bureau; County Health Rankings; MI Department of Technology, Management and Budget; Michigan League for Human Services; Michigan Care Improvement Registry.