

COMMUNITY HEALTH NEEDS ASSESSMENT OF LANGLADE COUNTY, WI

Aspirus Langlade Hospital: REPORT TO THE COMMUNITY

June 2016

Langlade County Community Health Needs Assessment

June 2016

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Langlade County Community Health Needs Assessment

June 2016

Executive Summary Report

**I. Langlade County Community Health Needs Assessment
Executive Summary
June 2016**

Purpose and Method

The Langlade County Community Health Needs Assessment was a collaborative effort led by Aspirus Langlade Hospital involving community partners including health organizations, social service agencies, schools and other educational organizations, law enforcement as well as county and local government and other local partners. Collaboration among providers and community health partners expands the community's capacity to address health needs through shared vision, shared resources and skills that creates a foundation for coordinated efforts to improve community health.

A community health assessment is a systematic examination of the health status indicators for a given population that is used to identify key health related problems as well as the resources and assets available in a community. The ultimate goal of a Community Health Needs Assessment (CHNA) is to develop strategies to address the community's health needs and identify issues to improve the overall health of the people living in the hospital's patient service area. In an effort to support achievement of the overarching goal of improving the health of the population, the hospital completes a CHNA every three years to reassess the impact of prior years' planning and to explore opportunities to further positively impact those previously unmet community health needs.

This is the second Community Health Needs Assessment undertaken by the hospital. The first CHNA was completed in June 2013. The current CHNA will further the efforts initiated through the last CHNA as outlined above.

Research and Findings

The 2016 CHNA utilized published state and federal quantitative health, quality-of-life research and demographic data. The research included a review of identified health indicators and health risk factors as reported by these sources. In addition, primary qualitative research data was gathered locally from several sources including interviews with 67 key informants (individuals and groups whose professional occupations offer key insights into local health

needs) and an online/mail-in public survey completed by over 800 people residing in the identified patient service area. Comparisons were made with data collected from the last CHNA, data from other Wisconsin counties as well as benchmarks with state and national measures to ascertain the relative gravity of the health issues. Similar to the process used with the prior CHNA, an action planning task force was formed to prioritize the identified health problems and to discuss and develop action plans to address those issues determined to be the most serious and amenable to corrective influence.

Top Priorities

The prioritization and action planning process was undertaken by the Action Planning Task Force (APTF) a group comprised of local health professionals. The task force utilized specific scientific methods to rate and determine the most serious health problems identified from the research. The process commenced with an in-depth review of the health priorities identified in the prior CHNA and the impact of previous action planning related to those priorities. Following the prior CHNA analysis, the latest research findings and demographics were reviewed. The prioritization process included considerable discussion and a related data review by the APTF which transpired over a series of four meetings during which each health priority was selected and carefully defined. The following health issues were identified as top priorities for the 2016-2019 assessment:

- 1. Wellness & Prevention and Nutritional & Physical Activity**
- 2. Substance Abuse**
- 3. Affordability of Healthcare and Prescription Medication Costs**

Mental Health/ Behavioral Health issues were identified as an inherent factor in each of the above three health priorities and are incorporated within each priority.

Action Planning

Community health problems are complex. They have many dimensions and their solutions are not clear-cut. The causes of community health problems are multi-dimensional, meaning that one agency cannot deal with them independently. Because of these complexities, these issues require a system perspective and multi-faceted approaches. After selecting and defining each

of the health priority areas, the APTF conducted an Affinity Diagram through Root Cause Analysis to evaluate possible actions that if undertaken, could positively influence the three priority health issues. Root Cause Analysis is an effective method aimed at identifying key factors that contribute to problems or events. An Affinity Diagram is one method of completing a Root Cause Analysis that encourages broad thinking, allows all perspectives to be shared equally, and assures that everyone has a voice in the process, making it a good fit for the collaborative nature of the work.

Mental Health / Behavioral Health

According to the National Institute of Mental Health, one in four Americans, approximately 43.8 million people, experience a mental illness in a given year. Good mental health is fundamental to the health and well-being of every person. Mental illness is a medical condition that disrupts a person's thinking, feeling, mood, ability to relate to others and daily functioning. It can affect persons of any age, race, religion or income. As the healthcare industry turns towards value-based care and population health management, healthcare systems are recognizing that physical care alone is not sufficient. Many people in need of mental health and behavioral health services never receive the necessary services due to lack of affordable and available resources. Societal stigmas regarding mental health erode confidence that mental disorders are real and treatable health conditions. This stigma has allowed an unwarranted sense of hopelessness to generate attitudinal, structural and financial barriers to effective treatment and recovery. Langlade County is dedicated to improving the mental health of all individuals and our community as a whole through advocacy, education and service. Mental health and behavioral health issues are interwoven tightly within all three health priorities; wellness and prevention/nutrition and physical activity, substance abuse and affordability of healthcare. Strategies for improvement will be addressed in all health priority action plans below.

Wellness and Prevention / Nutrition and Physical Activity

Wellness and prevention services paired with nutrition and physical activity can have a significant impact on many of the health issues identified in the research. The issues of substance abuse and access to healthcare can all be favorably affected by targeted wellness and prevention efforts. Increasing one's knowledge regarding successfully maintaining a healthy lifestyle can, over the long term, dramatically improve one's health and reduce both the personal and societal economic impact related to increased healthcare utilization.

In the last CHNA study, nutrition and physical activity, previously labeled as “obesity”, was a priority area of its own; however, after discussion and completing the root cause analysis, it was decided that the wellness and prevention services and nutrition and physical activity have similar strategies and actions for improvement and, thereby, also impact obesity as a health issue.

The action plan below reflects the integration of the two priorities which both have a direct influence on improving and maintaining a healthy lifestyle for all demographics at any age.

Action Plan:

1. Actively promote a year-long mental health community campaign in collaboration with business, churches, and school systems, in Langlade County and the surrounding service area. Planning and implementation will include researching best practices on how other communities successfully executed mental health awareness campaigns.
2. Offer training and support for working professionals in public and social service environments. These efforts would create opportunities to build relationships, connect resources and open doors for inclusive community collaboration and support.
3. Continue to provide opportunities for group physical activities, such as 100 Mile Club program.
4. Restorative Programming for students in Langlade County schools to promote education related to student bullying issues.
5. Provide parent and child education opportunities on various subjects including wellness, prevention, nutrition and physical activity.
6. Support expansion efforts of local Head Start services to five days and offer yearlong care.
7. Promote and develop Farm-to-Hospital initiatives starting March 2016 and running through March 2017.

8. Develop and maintain a comprehensive community help guide regarding available resources, contacts and related community assets. The guide would be modeled after the 2-1-1 Assistance Guide which was developed for Marathon County.
9. Continue the expansion and support for the WeekEnd Backpack Program (WEB). The WEB program provides students with easy open, child friendly food for needy families to eat over the weekend. The WEB program will be expanded for the next school year to include all Antigo Unified District Schools including two local parochial schools.

Substance Abuse

Substance abuse and chemical dependency from the use of alcohol and other drugs can impact mortality, morbidity and criminal behaviors. Abuse of these substances is one of the most serious health problems facing the United States, Wisconsin and Langlade County. Prescription drug abuse and opioid usage has reached epidemic proportions nationwide and Langlade County is no exception. During the five year period from 2007 to 2011, the United States has seen a 117% increase in the number of emergency room visits made by patients seeking narcotics or related drugs. Prescription drug misuse and diversion is another leading cause of drug addiction, morbidity and mortality and ranks as the number one drug problem in the State of Wisconsin.

Action Plan:

1. Formation of the Prescription Drug Abuse Community Action Initiative, a public awareness campaign. The campaign would offer a venue for informative and important round table discussion regarding prescription drug abuse in Antigo and Langlade County. In addition, research will be conducted to determine the best practices regarding opioid prescribing policy implementation for use at Aspirus Langlade Hospital and its clinics. The research will include the best practice for execution of local awareness, information and education campaign regarding patient drug misuse.
2. Support the implementation of mental health services for incarcerated population at the Langlade County Jail- partnering with Langlade County Sheriff's Department.
3. Develop an education series throughout Langlade County related to the following topics:

- a. Adverse Childhood Experiences (ACES) and Question Persuade Refer (QPR), Trauma Informed Care provided for parents, teachers, clinicians.
 - b. Teen peer issues provided for youth, elementary, middle school, high school kids.
4. Support the work of Action Alliance of Langlade County as it continues to research evidence based programs regarding substance abuse. This will include evaluating the feasibility and effectiveness of implementing a local Drug Court to promote treatment and rehabilitation rather than focusing only on the criminal element of illicit drug usage.

Affordability of Healthcare and Prescription Medication Costs

The cost of healthcare services including prescription medications in Langlade County is an important economic issue. Per capita income in Langlade County is substantially lower than state and national averages. Most recent income data indicates that 15.9% of the people living in Langlade County are living in poverty. In fact, oftentimes personal healthcare needs are forgone because disposable income is not available to cover the cost or other more pressing personal needs. This increases the likelihood that left untreated, a personal illness may become more severe and require more costly healthcare intervention at a later date.

Action Plan:

1. Continue financial and community support for the two major projects created as a result of the 2013 CHNA. These projects are 1) the Prevention Fund for people in need of emergency financial assistance for medical needs such as medication, and 2) the Community Patient Transportation Project to provide free transportation to patients who do not have reliable transportation.
 - a. Support of the Prevention Fund: To assist patients with an immediate need. The goal is to reduce unnecessary visits to the Emergency Room or Walk-in Clinic, reduce admissions or readmissions to the hospital by providing assistance with medications, medical supplies or any other immediate need identified.
 - b. Support of Community Patient Transportation Project: Assist with the expansion of transportation resources throughout Langlade County by collaborating with

Red Robin Transit (operated by Menominee Public Transit) to provide an additional On-Demand Service van to provide transportation throughout all of Langlade County, Monday-Friday 6am-10pm and to provide two additional routes on the current in-town bus route.

Langlade County Community Health Needs Assessment

June 2016

Complete Report

II. Langlade County Community Health Needs Assessment Complete Report June 2016

Purpose

In September, 2015, Aspirus Langlade Hospital began efforts to undertake its' second Community Health Needs Assessment (CHNA). The purpose of a CHNA is four fold: First and foremost, the purpose of the CHNA is to improve the health of the people living in Langlade County. As a not- for- profit and tax exempt Catholic Hospital, responding to the health needs of the people living in Langlade County and the surrounding services area, especially those most at risk, is central to the mission of Aspirus Langlade Hospital. Indeed, for more than two decades, the hospital has focused its resources on addressing significant health needs in the hospital's patient service area and has responded with, in addition to a comprehensive array of acute care services, senior housing facilities, an adult daycare program, a child day care service, a hospice service, home health care, a mobile rural dental clinic, and a medically directed exercise and wellness facility. Secondly, as a not- for- profit organization, the hospital is required under IRS regulations legislated as part of the Patient Protection and Affordable Care Act enacted March of 2010 to conduct a CHNA every three years. Thirdly, the CHNA will provide a foundation of current, reliable and well documented information that will be available to other groups and organizations who are also concerned about community health improvement. Finally, the collaborative efforts to the multiple organization partnership will have symbolic effect that will enhance discussion, strengthen, resolve, and build upon existing relationships to have an even greater collective impact upon the health of the population of people living in this area of Northern Wisconsin.

Process

Throughout the last three years, the CHNA efforts and actions have had representatives of various groups and organizations throughout Langlade County as key players in actions taken as a result of the 2013 CHNA. This group included representation from every health, public health and social service organization in Langlade County as well as representatives from the various school districts, law enforcement, City and County government as well as Emergency Medical Services. A small work group was comprised of these representatives to go through a process of evaluating research, setting priorities and developing action plans to address priorities. Three main questions were frequently revisited during the completion of the second CHNA for

Langlade County area with regards to action planning and implementation strategies for the 2016 assessment in relation to the first assessment completed in June 2013: 1) What needs to be continued? 2) What needs to change? 3) What, if anything, needs to be eliminated?

The CHNA process included an extensive review of population characteristics of Langlade county and surrounding service area including quantitative demographic data. The data was obtained from various state, federal, hospital and county sources and included general demographics such as age, income, and race; health indicators including leading causes of death and hospitalization, mortality, morbidity and premature death; high risk factors including tobacco use, excessive drinking, substance abuse, obesity, motor vehicle crash death rate, sexually transmitted infections and teen birth rate; access to healthcare including rates of uninsured population, availability of primary care providers, federal health personnel shortage designations, preventable hospital stays, and health screenings; social determinants of health including unemployment, education, housing, environmental quality and crime statistics.

In addition to the above mentioned research, additional qualitative research methods were used over a six month period to collect community input to ascertain the perceived health issues and needs from people living in the hospital service area. These methods included key informant interviews and community public surveys. (See appendix D through E). A total of 67 key informant interviews were conducted with community leaders and people whose occupations or professional positions enable them to speak authoritatively about the health issues facing people living in Langlade County and the surrounding area. Along with the key informant interviews, an online and mail in survey was distributed through the area. Comparisons with community standards and benchmarks as well as historical trends were utilized when reliable and valid data was available.

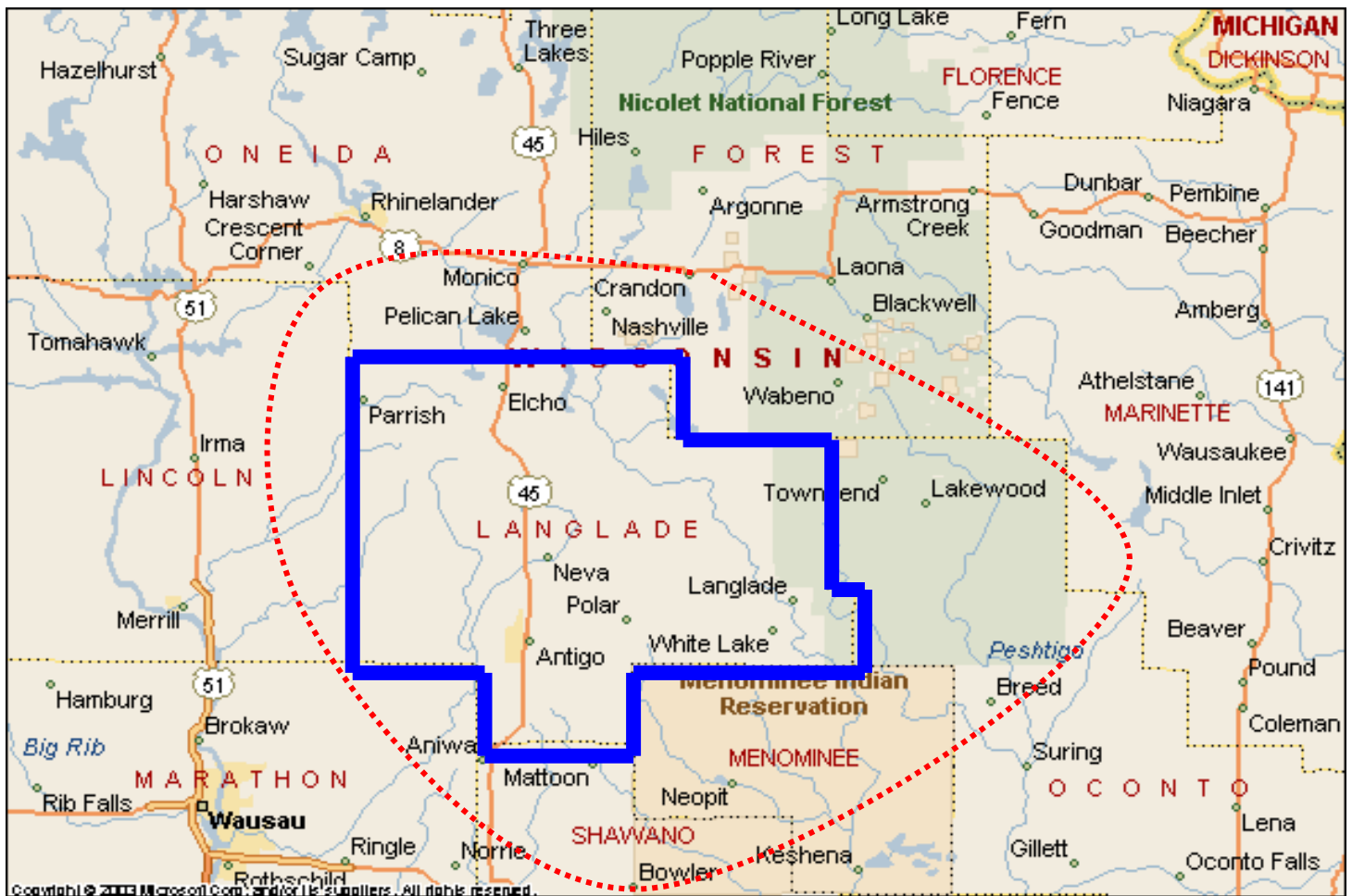
Recent prior assessments completed in Langlade County were reviewed. Among those included the Community Health Needs Assessment 2013-2016 led by Aspirus Langlade Hospital and the Langlade County Community Health Improvement Plan 2010-2015 led by Langlade County Health Department in partnership with many county organizations. The Unified School District of Antigo's 2015 Youth risk Behavior Survey was also reviewed.

Collaborating across the community allows the hospital to 1) Leverage existing assets in the community creating the opportunity for broader impact; 2) Avoid unnecessary duplication of programs or services thereby maximizing the use of scarce resources; and 3) Help build the capacity of community members to engage in civil dialogue and collaborative problem solving and position the community to build upon and sustain health improvement activities.

Scope

The scope of the CHNA includes all of the Aspirus Langlade Hospitals primary service areas including Langlade County as well as its secondary service area (see Map 1 below). A range of health issues were examined for the identified area as well as social determinants or factors which are known to impact the health of a population such as socioeconomic, environmental, and cultural conditions.

Map 1- Langlade Hospital Primary & Secondary Service Area



III. The Demographics of Langlade County

Community Overview – Population Demographics

Based upon the United States Census Bureau reports, the population of Langlade County has declined from 20,740 in 2000 to 19,977 in 2010. This is a decrease in population of 763 people or 3.7 percent. The population is essentially equally split between females and males. The current median age of the population is 45.7 years which has risen by more than five percent following predicted trends of an aging population as outlined below (see Table 1).

Table 1
Population of Langlade County – US Census Bureau
-Population-

	<u>Census 2000</u>	<u>Census 2010</u>	<u>Change</u>
Total	20,740	19,977	-763 /-3.7%

Female	10,449	9,945	-504/-4.8%
Male	10,291	10,032	-259/-2.5%

-Median Age-			
Overall	40.5	45.7	+5.2/+12.8%

Female	41.6	46.8	+5.2/+12.5%
Male	39.4	44.4	+5.0/+12.7%

While the county population between the ages of 0 and 44 has declined by 2944 people or 23% since 2000, the population aged 45 and older has significantly increased by 2181 people or 27%. The age cohort 55 to 64 showed the greatest percent increase since the 2000 census as the number of people in this age group increased by 653 or 29% in the 10 year period. The population of Langlade County age 55 and older represented 29.6% of the total population in 2000 and now represents 34.4% of the population. This represents a total increase of nearly 12% in the age 55 and older cohort during this same time period. This shift in age demographics with declining population under age 45 and increasing population over that age is expected to continue for at least the next 20 years (see Table 2 and Chart 1).

Table 2
Breakdown of Langlade County Population by Age Cohort
(US Census Bureau)

<u>Age</u>	<u>Census 2000</u>	<u>Census 2010</u>	<u>Change</u>
0 - 14	4,094	3,386	-708/-17%
15 - 29	3,322	3,143	-179/-5.4%
30 - 44	4,381	3,252	-1,129/-25.8%

45 - 54	2,808	3,330	+522/+18.6%
55 - 64	2,227	2,880	+653/+29.3%
65 - 74	1,956	2,112	+156/+8%
75+	1,952	1,874	-548/-35%

Total	20,740	19,977	-763/-3.7%

Chart 1
Comparison of Age Groups in Langlade County by Census
(US Census Bureau)

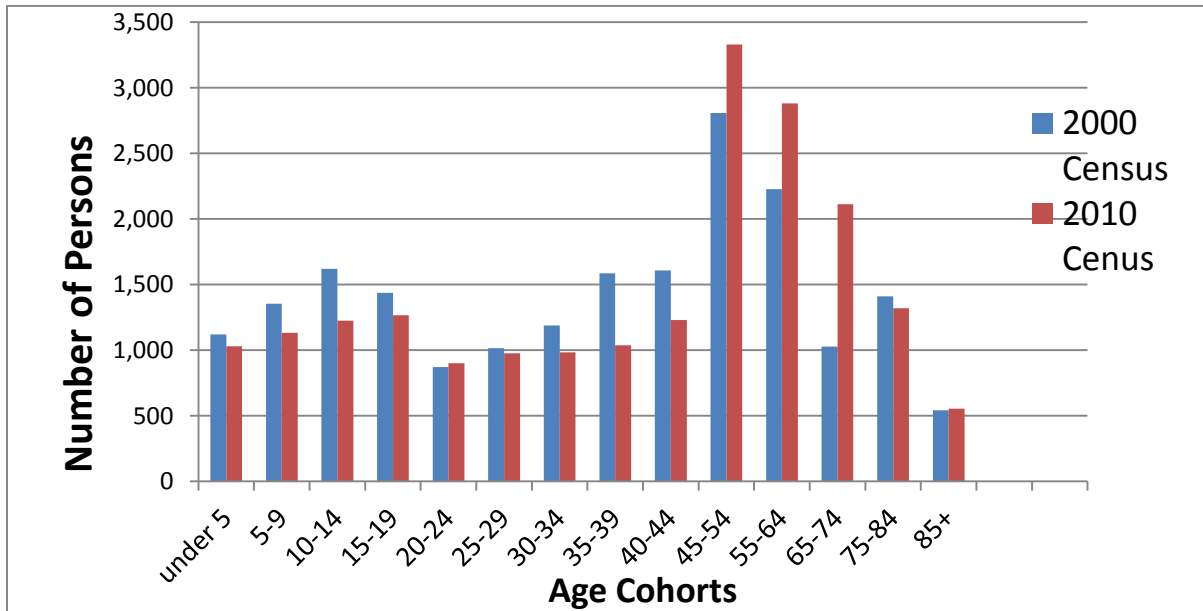


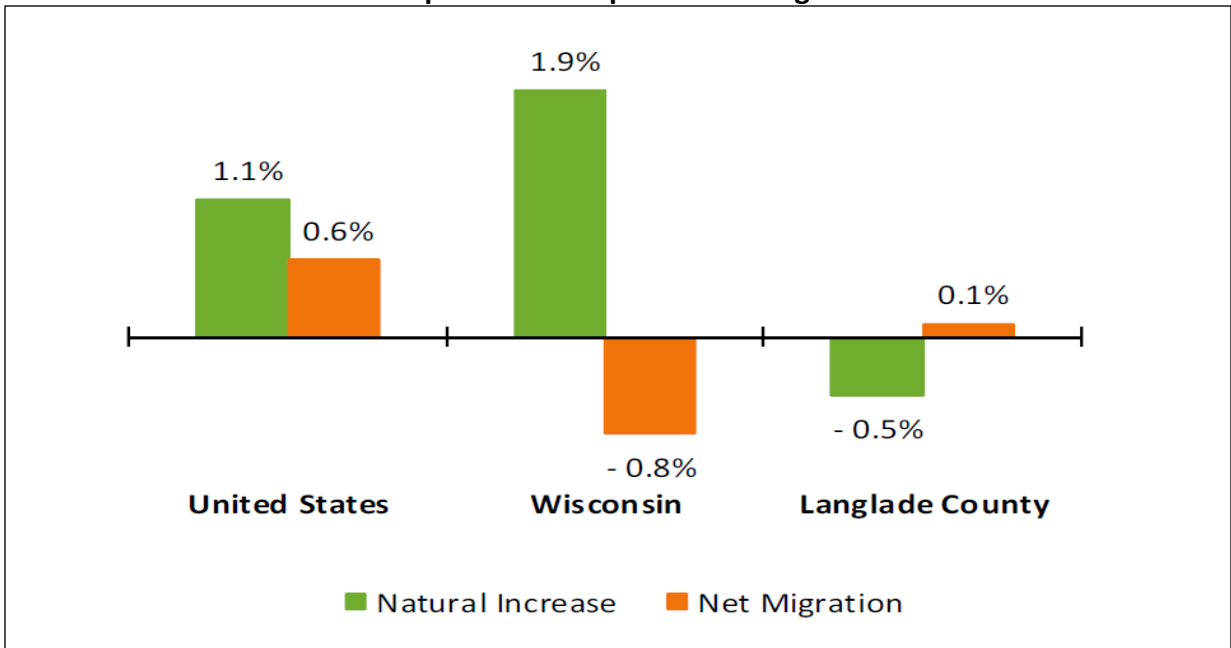
Table 3 below shows the breakdown of the Langlade County population by race. The majority of the population in Langlade County is white (96.5%). The American Indian population is the largest minority population in the county and represents 1% of the total population. The remaining minority groups, each representing less than one percent of the total population, include Asian, African American and Hispanic/Latino.

Table 3
Breakdown of Langlade County Population by Race
(US Census Bureau)

<u>Race</u>	<u>2000 Census</u>	<u>2010 Census</u>	<u>Change</u>
White	20,311(98%)	19,267(96.5%)	-1,044/-5.1%
American Indian	113(<1%)	191(1%)	+78/+69%
Asian	57(<1%)	62(<1%)	+5/+8%
Black/African American	31(<1%)	72(<1%)	+41/+132%
Other	42(<1%)	100(<1%)	+58/+138%
Hispanic/Latino Origin	171(1%)	324(1.6%)	+153/+89.5%

According to the 2015 Wisconsin Department of Workforce report, Langlade County's estimated population decreased by seventy residents. This population decrease contrasts with the growth in Wisconsin. Natural population change measures the difference between births and deaths in the area. Whereas Wisconsin experienced a 1.9 % increase from natural population change, Langlade County experiences a 0.5 % decrease. Natural population change is sensitive to age. The decrease in Langlade County reflects its older population. While the median age in Wisconsin is 39.2 years, the median age in Langlade County is 48.0 years. Net migration measures the difference between residents moving into and residents moving out of an area. While Wisconsin has a net migration decrease, Langlade County had a 1.0 % increase in its population as a result of new migration (see Chart 2).

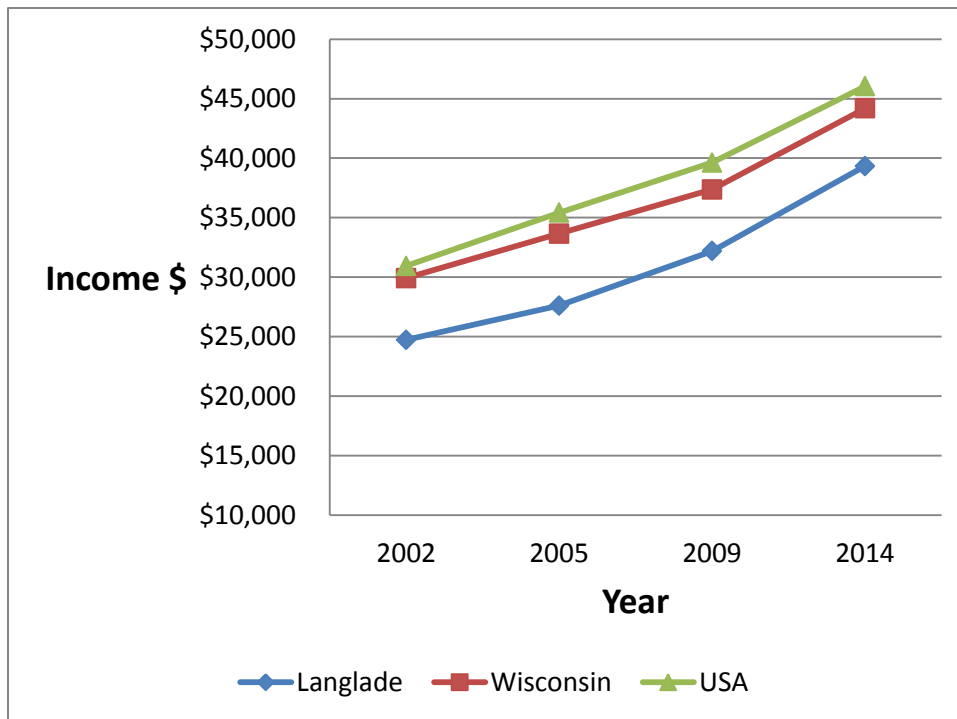
Chart 2
2015 Wisconsin Department of Economic and Workforce Profile
Components of Population Change



Income-Poverty

Again, using the most recent information provided by the 2015 Langlade County Economic and Workforce Profile report, per capita personal income in Langlade County as of 2014 was \$39,355 which was below Wisconsin (\$44,186) and US (\$46,049) figures. This continues a historical trend which has consistently shown per capita personal income in Langlade County to be significantly below both state and national levels (see Chart 3).

Chart 3
Per Capita Income Comparison in Langlade County – 2015 Langlade County Economic & Workforce Profile; State of Wisconsin Department of Workforce Development



As of 2011, approximately 2,759 people or 14.2% of the county population was living below the federal poverty guideline according to the USDHSS and US Census. The number of people living in poverty in Langlade County has risen every year since 2007. In the years from 2007 to 2014 the number of people living in poverty nearly doubled (95% increase) from 1,414 people in 2007 (see Chart 4). Table 4 shows the number of children in Langlade County on the school-based Free and Reduced Lunch program by year in comparison to Wisconsin state averages. For the year 2008, 46% of the children in school in Langlade County were on the school based Free and Reduced Lunch program according to the Wisconsin Council on Children and Families. As of 2013, that percentage rose to 55%, which experts are now estimating as many as 59% of students is utilizing the resource for 2015. This compares to an overall Wisconsin percentage of 34% in 2008 and 43% in 2013.

Chart 4
Percent of Langlade County Persons Living Below Federal Poverty Guidelines
(US Dept. of Health & Human Services)

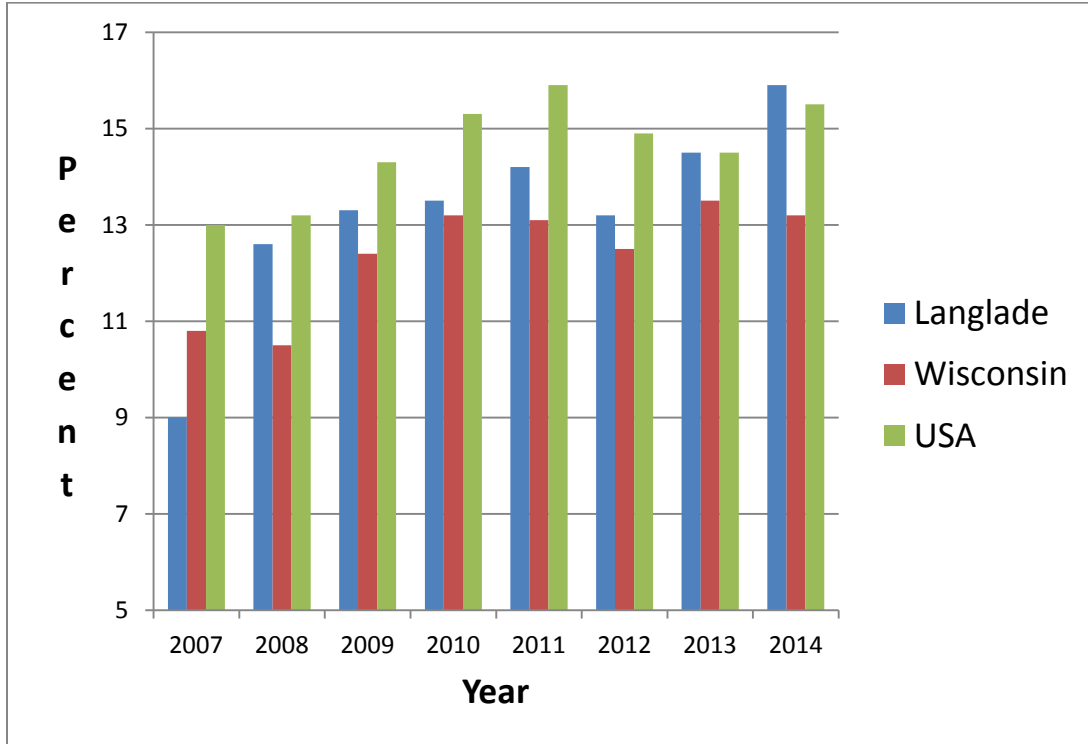


Table 4
Percent of School Children in Langlade County Free & Reduced Lunch by Year
(Wisconsin Council on Children and Families)

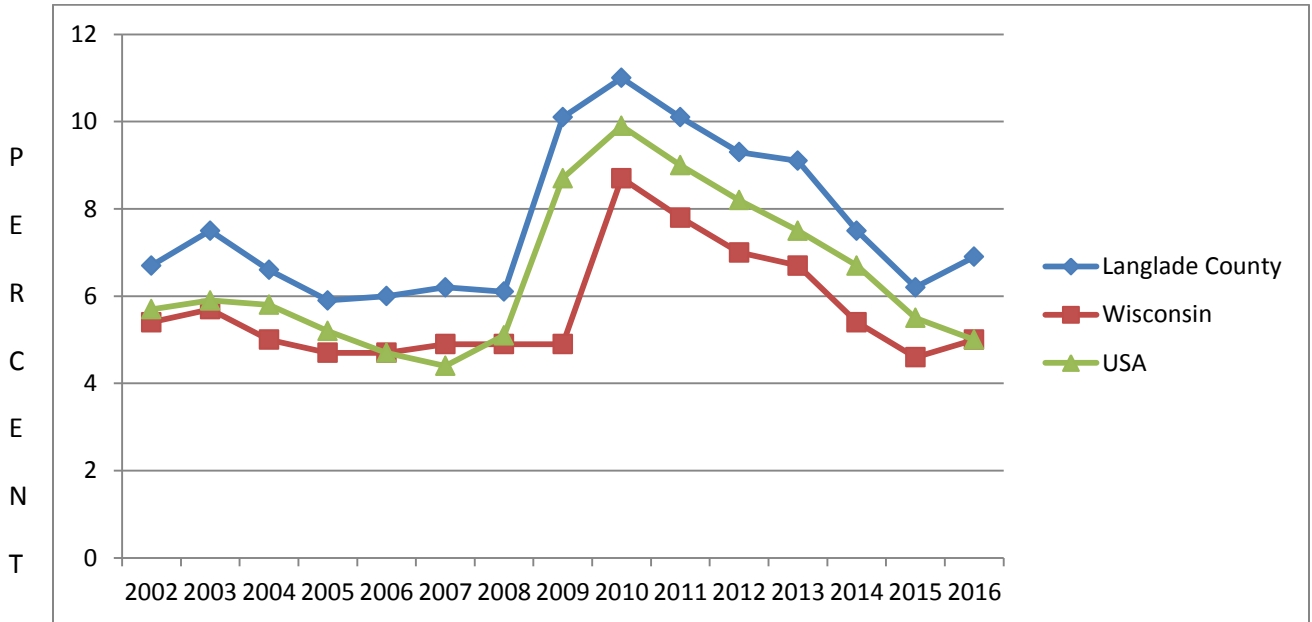
Year	Langlade County	Wisconsin
2008	46%	34%
2009	49%	34%
2010	47%	37%
2011	47%	39%
2012	55%	40%
2013	55%	43%

Wage rates for most industries in Langlade County are consistently less than the State of Wisconsin averages according to information released by the Wisconsin Department of Workforce Development (DWD) (see Table 5 below). Median household income in Langlade County based on the US Census Bureau was \$40,994 in 2014 compared to \$52,738 in Wisconsin and \$53,482 in the United States. Langlade County has consistently ranked well below state and national median household income levels. Chart 5 displays the average annual unemployment rate in Langlade County from 2002 to March 2016 based on the US Bureau of Labor Statistics and Wisconsin Department of Workforce Development. The unemployment rate has been consistently higher than both the state and national figures.

Table 5
Average Wage Rate by Industry in Langlade County vs. State in 2014
(Wisconsin Department of Workforce Development)

	Wisconsin Average Annual Wage	Langlade County Average Annual Wage	Percent of Wisconsin
All industries	\$ 43,856	\$ 32,241	73.5%
Natural Resources	\$ 36,156	\$ 27,995	77.4%
Construction	\$ 55,317	\$ 38,248	69.1%
Manufacturing	\$ 54,365	\$ 42,229	77.7%
Trade, Transportation & Utilities	\$ 37,362	\$ 29,405	78.7%
Information	\$ 62,482	\$ 24,625	39.4%
Financial Activities	\$ 61,884	\$ 39,881	64.4%
Professional & Business Services	\$ 52,386	\$ 32,751	62.5%
Education & Health	\$ 44,829	\$ 35,048	78.2%
Leisure & Hospitality	\$ 16,055	\$ 11,771	73.3%
Other Services	\$ 25,847	\$ 25,831	99.9%
Public Administration	\$ 44,462	\$ 33,238	74.8%

Chart 5
Langlade County Average Unemployment by Year vs. State and National
(Wisconsin Department of Workforce Development)



Health Status

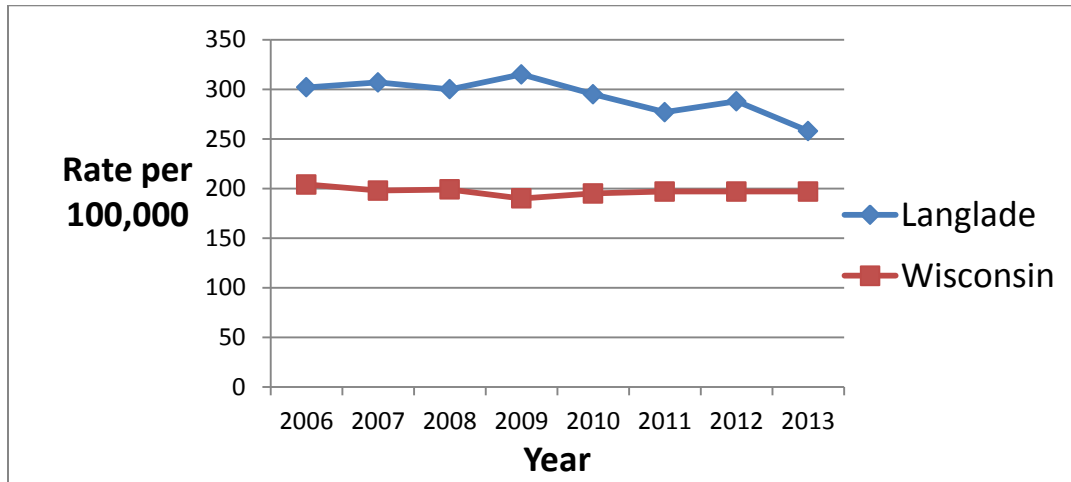
According to the Wisconsin Department of Health Services, for the years 2006 – 2012 heart disease has been the leading cause of death in Langlade County followed by cancer, cerebrovascular disease, lower respiratory disease and accidents (see Table 6). Chart 6 shows that, for the same time period 2006 - 2013, the rate of death from heart disease per 100,000 population has been consistently higher in Langlade County than for the state.

Table 6
Leading Causes of Death per 100,000 Population in Langlade County 2006 – 2010
(Wisconsin Department of Health Services)

Cause of Death Langlade County	2013	2012	2011	2010	2009	2008	2007	2006
Heart Disease	51/258	57/288	55/277	59/295	67/315	64/300	65/307	64/302
Cancer	51/258	34/323	49/247	42/210	58/273	54/253	63/298	58/273
Cerebrovascular Disease	15/**	13/**	16/**	8/**	12/88	16/**	21/99	10/**
Lower Respiratory Disease	19/**	7/**	15/**	14/**	17/**	20/94	11/**	10/**
Accidents	21/**	13/**	5/**	9/**	11/**	16/**	13/**	13/**

**low rate per 100,000 population

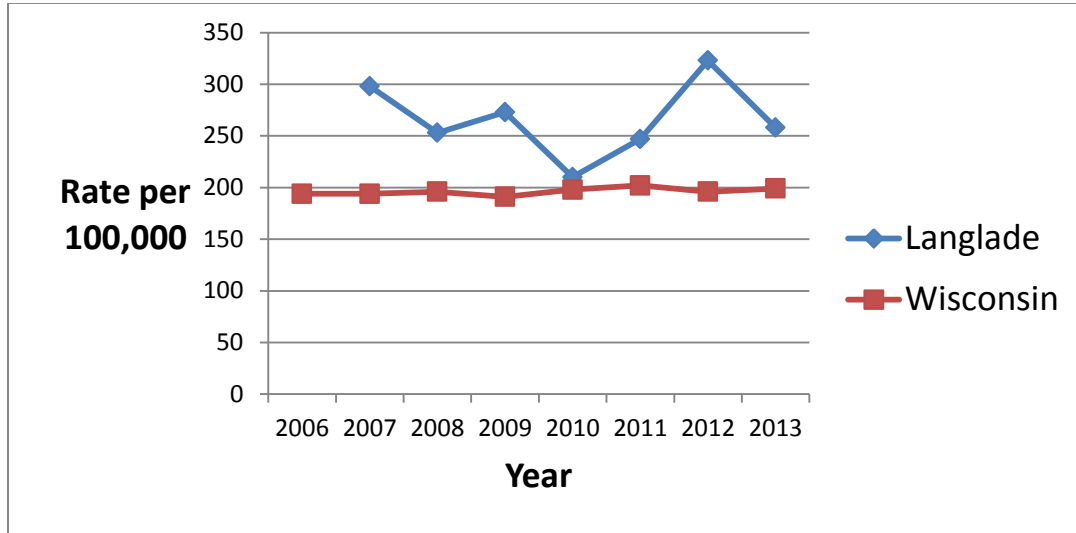
Chart 6
Heart Disease Death Rate (per 100,000 population) by Year in Langlade County vs. Wisconsin
(Wisconsin Department of Health Services)



Based on a 2015 American Cancer Society report entitled *Wisconsin Cancer Facts & Figures 2015* published by the State of Wisconsin Department of Health Services, between the years 2005 – 2012 in Wisconsin, the leading causes of death from cancer for females in order of frequency were: lung cancer (25%), breast cancer (14%) and cancers of the colon and rectum (8%). For Wisconsin males during the same period, the most frequent causes of death from cancer were: lung cancer (27%), prostate (12%) and cancers of the colon and rectum (8%). The report also shows cancer mortality rate by county for the State of Wisconsin. According to the report, the cancer mortality rate in Langlade County for the same period was higher than the state average.

More recent data reported by the Wisconsin Department of Health Services for the years 2007 to 2013 show the death rate from cancer in Langlade County above the state average however nearing the state average in 2010, increasing in 2012 but then decreasing for 2013 (see Chart 7).

Chart 7
Cancer Death Rate (per 100,000 population) in Langlade County vs. Wisconsin
(Wisconsin Department of Health Services)



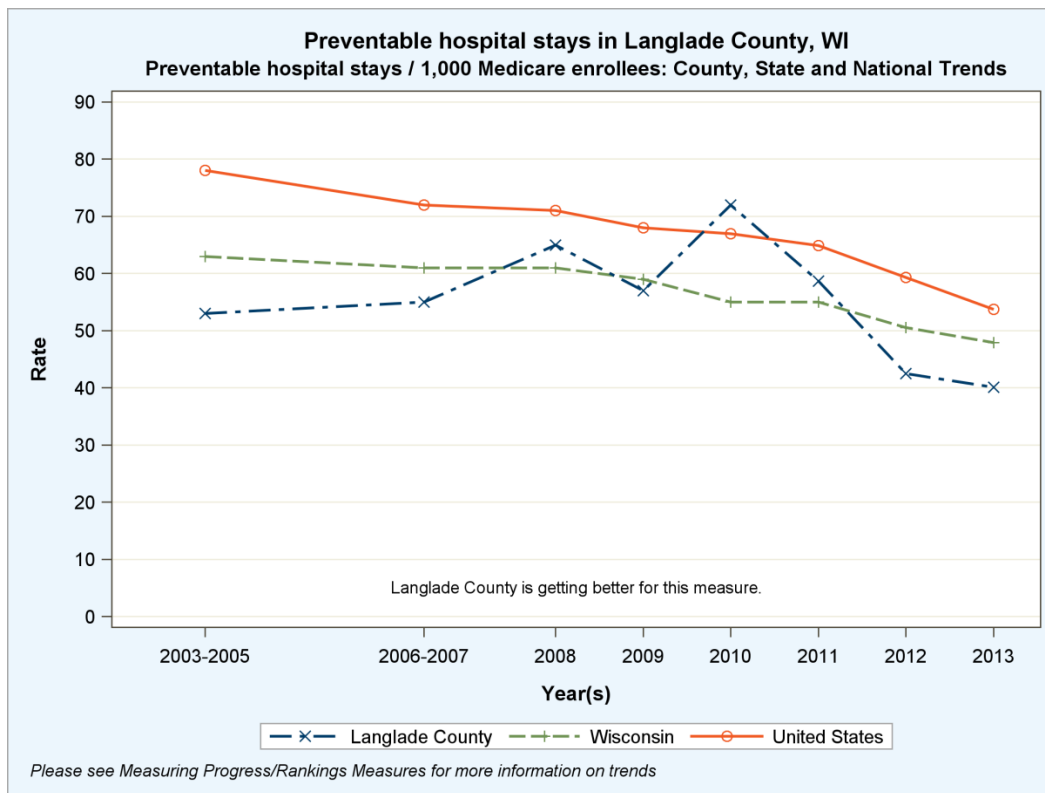
The American Cancer Society report *Wisconsin Cancer Facts & Figures 2015* indicates that for the same period 2005 – 2009 the incidence rate of cancer in Langlade County was less than the state average. More recent state-wide statistics from the Wisconsin Department of Health Services show that the incidence rate (per 100,000 population) of new cancers in Langlade County for the years 2006 – 2010 was highest for prostate cancer followed by breast cancer, lung cancer and colorectal cancer except for the year 2009 when lung cancer ranked second followed by breast cancer and colorectal cancer. The numbers then shift in 2011-2012 showing breast cancer as the highest followed by prostate cancer (see Table 7).

Table 7
Rate of New Cases of Cancer (per 100,000 population) by Year
(Wisconsin Department of Health Services)

Primary Site	Year													
	2006		2007		2008		2009		2010		2011		2012	
	L	WI	L	WI	L	WI	L	WI	L	WI	L	WI	L	WI
Breast	104	128	104	131	133	133	75	136	100.6	135.9	182	149.5	162.5	149.7
Cervical	0	7	19	6	28	6	9	6	30.2	6.6	0	6.0	0.0	6.6
Colorectal	52	50	57	47	24	44	47	47	60.1	42.0	50.4	44.3	91.0	42.9
Lung/ Bronchus	99	65	52	66	85	63	136	67	70.1	67.7	125.9	69.9	116.2	69.4
Prostate	123	142	104	140	141	144	215	139	209.3	139.9	150.4	141.5	140.8	120.7
Other Sites	359	218	236	230	208	225	300	249	400.5	251.2	362.6	264.9	298.2	271.4
Total	623	471	457	481	468	473	633	503	700.8	501.9	705	528.1	657.0	532.3

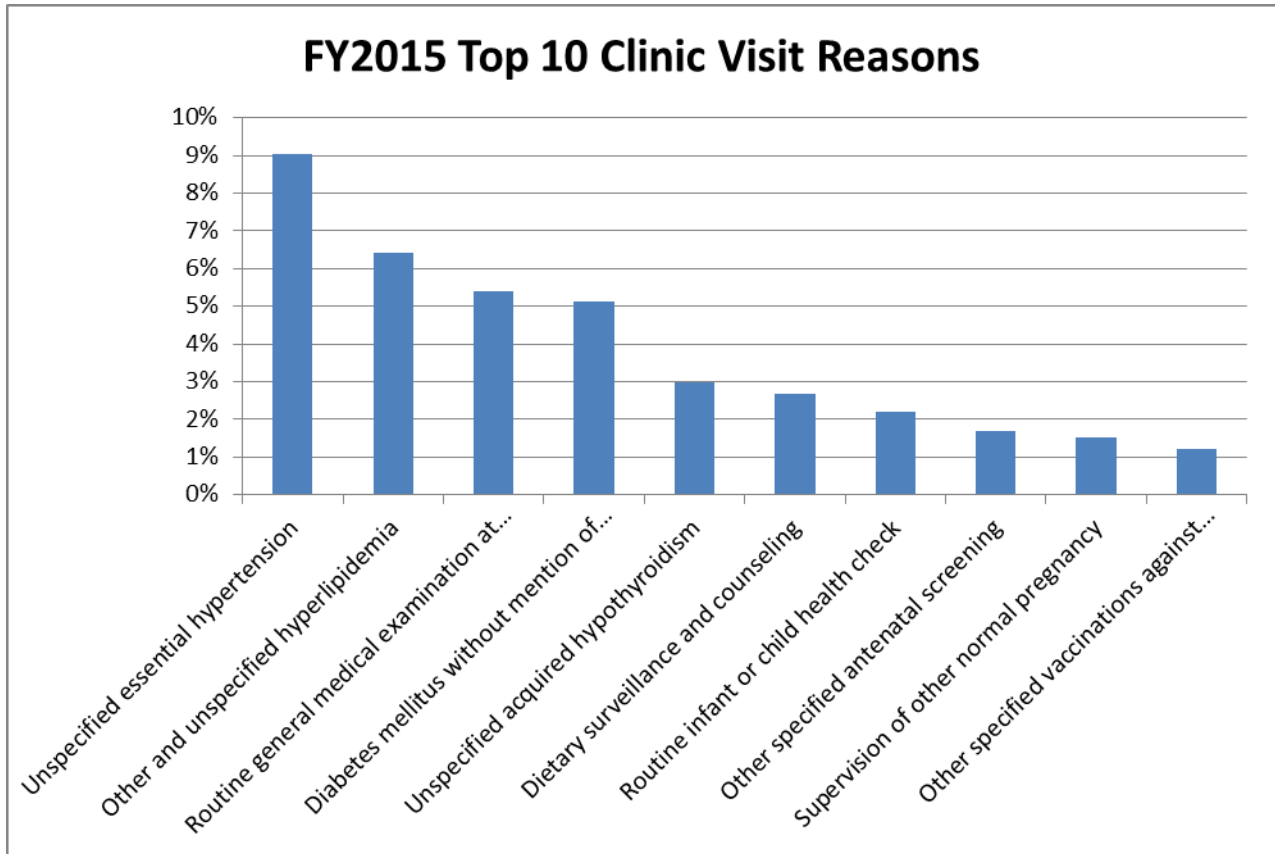
The University of Wisconsin Population Health Institute began publishing an annual report which ranks health outcomes and health factors for each of the Wisconsin counties. Included in the report is the rate of preventable hospitalizations for diagnoses such as congestive heart failure, asthma, diabetes, chronic obstructive pulmonary disease and pneumonia. Chart 8 shows the rate of preventable hospitalizations in Langlade County for the years 2003 – 2013. For the year 2013, the Institute reported that the number of preventable hospitalizations for Langlade County for the year was 40 which was below the state and national average.

Chart 8



The top 10 reasons for patient visits to the Aspirus General Clinic, the largest primary care clinic in Langlade County, is presented in Chart 9. Hypertension was the number 1 reason for patients to visit the clinic representing 9% of the visits followed by hyperlipidemia (6.2%) and infant health/well child check (2.1%).

Chart 9
10 Most Frequent Reasons for Patient Clinic Visits FY 2015
Aspirus General Clinic Antigo, Elcho & Birnamwood



Sexually transmitted diseases reported in Langlade County have been consistently below state averages. Table 8 shows the frequency of sexually transmitted diseases for Langlade County as reported by The Wisconsin Department of Health Services for the most recent years available 2006 - 2013. Chlamydia was the most frequently reported sexually transmitted disease in Langlade County as the number of cases has ranged from 15 to 37 per year during that time period.

The incidence of HIV in Langlade County is low in comparison to state-wide averages. According to the State of Wisconsin Department of Health Services AIDS/HIV Surveillance Summary, there have been a total of seven cases of HIV infection (less than 1% of state total) reported in Langlade County between 1983 and 2013 compared to a state-wide total of 10,246 cases. According to the Department of Health Services, the overall rate of HIV infection in

Wisconsin is 4.8 per 100,000 population which is less than one third of the national rate (15.8 per 100,000).

Table 8
Sexually Transmitted Diseases in Langlade County by Year
(Wisconsin Department of Health Services)

Disease	2006	2007	2008	2009	2010	2011	2012	2013
Chlamydia	20	15	16	18	19	16	37	30
Gonorrhea	<5	<5	<5	<5	<5	0	0	<5
Syphilis	0	0	0	0	0	0	0	0
Genital Herpes	10	6	-	-	-	-	-	-

Health Risk Factors

Each year, the University of Wisconsin Population Health Institute within the University of Wisconsin-Madison School of Medicine and Public Health releases its *Wisconsin County Health Rankings*. The rankings are compiled through the assistance of the Centers for Disease Control and Prevention as well as Dartmouth College. The rankings are based upon a model of population health improvement that describes the current health status of a county using specific measures of health outcomes such as morbidity. These health outcomes are influenced by a number of health factors or determinants of health such as specific health behaviors and socioeconomic factors. The rankings are presented in using these two broad categories of measures: Health Outcomes and Health Factors. The two categories are broken down by specific measures below:

A. Health Outcomes:

1. Mortality:

a. Premature death

2. Morbidity:

b. Poor or fair health

c. Poor physical health days

d. Poor mental health days

e. Low birth weight

B. Health Factors:

1. Health Behaviors:

- a. Adult smoking
- b. Adult obesity
- c. Physical inactivity
- d. Excessive drinking
- e. Motor vehicle crash death rate
- f. Sexually transmitted infections
- g. Teen birth rate

2. Clinical Care:

- a. Uninsured adults
- b. Primary care provider rate
- c. Preventable hospital stays
- d. Diabetic screening
- e. Mammography screening

3. Social & Economic Factors:

- a. High school graduation
- b. Some college
- c. Unemployment
- d. Children in poverty
- e. Inadequate social support
- f. Children in single parent households
- g. Violent crime rate

4. Physical Environment:

- a. Air pollution – particulate matter days
- b. Daily fine particulate matter
- c. Drinking water safety
- d. Air pollution – ozone days
- e. Access to healthy foods
- f. Limited access to healthy foods
- g. Access to recreational facilities
- h. Fast food restaurants

The purpose of the annual *County Health Rankings* is to give each county a “snapshot” of the overall health of their respective population as a “call to action” to improve the health of communities through development and implementation of programs and policies that address health factors. A large portion of the research included a careful review and consideration of

these rankings published by the Population Health Institute for the years 2010 – 2015 (see Table 9).

Table 9
Wisconsin County Health Rankings 2010 – 2015 (Langlade County)
University of Wisconsin Population Health Institute

Measure	2010	2010 State Rank	2011	2011 State Rank	2012	2012 State Rank	2013	2013 State Rank	2014	2014 State Rank	2015	2015 state rank
Health Outcomes:		64		67		66		58		52		59
1. Mortality:		38		51		57		34		34		49
Premature Death	6,149		*6,971		*7,121		5,795		5,795		*6,472	
2. Morbidity:		70		70		68		67		62		62
Poor or Fair Health	*18%		*19%		*19%		*17%		*16%		*16%	
Poor Physical Health Days	*4.8		*4.8		*4.0		*3.8		3.5		3.5	
Poor Mental Health Days	*4.1		*3.9		*3.9		*3.6		3.0		3.0	
Low Birthweight	*7.3%		*7.4%		6.9%		6.7%		*6.9%		*6.8%	
Health Factors:		54		54		59		59		60		48
1. Health Behaviors:		58		58		63		62		59		51
Adult Smoking	22%		21%		*26%		*25%		*23%		*23%	
Adult Obesity	*29%		*30%		*30%		*30%		29%		*27%	
Physical Inactivity	NA		NA		*24%		*24%		*26%		*22%	
Excess Drinking	23%		21%		22%		22%		24%		61%	

Motor Vehicle Crash Death Rate	*27		*27		*29		*22		*22		*21	
Sexually Transmitted Infections	73		65		84		90		81		193	
Teen Birth Rate	*41		*41		*38		*35		*36		*35	
2. Clinical Care:		17		47		50		53		38		29
Uninsured Adults	10%		11%		*12%		*12%		*12%		*13%	
Primary Care Provider Rate	**59		**2,017:1		**2,017:1		1,174:1		1,164:1		1,156:1	
Preventable Hospital Stays	56		55		57		*72		59		43	
Diabetic Screening	90%		**85%		**88%		**89%		91%		**89%	
Mammography Screening	NA		**64%		**69%		**69%		**68.4%		**69.6%	
High School Graduation	98%		95%		91%		92%		92%		89%	
Some College	NA		52%		53%		51%		52%		56.40%	
Unemployment	*6%		*10.1%		*10.0%		*9.4%		*8.7%		*8.6%	
Children In Poverty	*18%		*19%		*23%		*23%		*26%		*23%	
Inadequate Social Support	18%		17%		*19%		*19%		*19%		N/A	
Children In Single Parent Households	NA		27%		28%		29%		31%		34%	
Violent Crime Rate	149		100		105		144		151		174	
4. Physical Environment:		33		7		7		7		28		30
Air Pollution-Particulate Matter Days	0		2		2				10.9		10.9	

*Above State Average for the Year

**Below State Average for the Year But of Concern

The most recent 2015 rankings give Langlade County a ranking of 59 out of 72 for Health Outcomes and a ranking of 48 for Health Factors. These two key rankings for Langlade County have consistently fallen in the bottom quartile for the years 2010 – 2015 (see Charts 10 & 11). With respect to the Health Outcomes data, self reported “poor or fair health days,” “poor physical health days,” and “poor mental health days” have been above the state average for the past four years.

Health Behaviors including “adult smoking,” “obesity,” “physical inactivity,” “motor vehicle crash death rate” and “teen birth rate” are above the state average for the same period 2010 - 2015. Clinical Care measures including “uninsured adults” and “preventable hospital stays” have risen above state levels during the past years, while “diabetic screening” rates and “mammography screening” rates have consistently been below state averages.

Social and economic factors of “unemployment” and “children in poverty” have consistently ranked above the state average as previously cited. Measures of “inadequate social support” have also risen above the state average for the past two reporting years 2012 and 2014.

Chart 10
State Health Rankings – Langlade County Health Outcomes 2010 – 2015
(UW Population Health Institute)

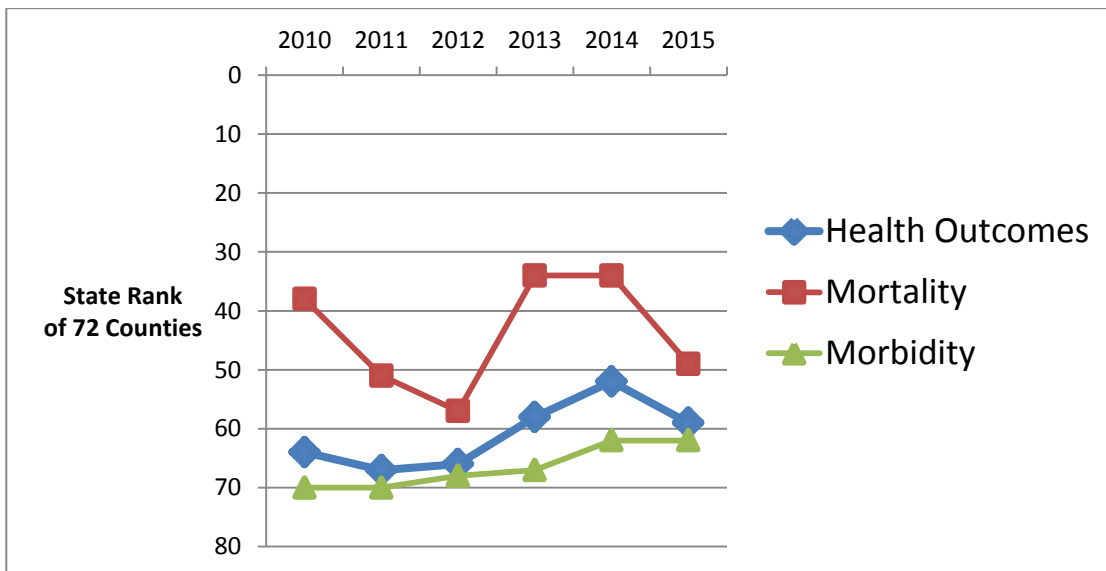
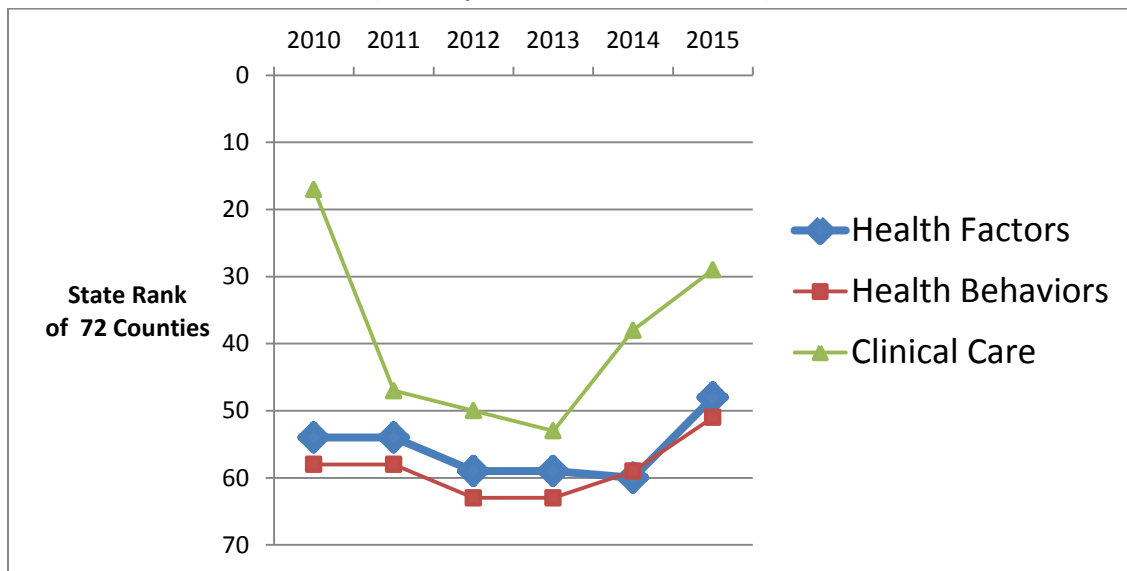


Chart 11
State Health Rankings – Langlade County Health Factors 2010 – 2015
(UW Population Health Institute)



Access to Healthcare

Most primary care medical providers practice in the Aspirus Antigo Clinic (AAC) on the Aspirus Langlade Hospital campus in Antigo, the county’s population center. The most recent listing of primary care providers per 100,000 population in Langlade County by the US Department of Health & Human Services (2013) shows a total of 76.6 providers. The current provider level is higher than was reported in 2009 with 59.9 but lower than recorded in 2011 with 80.9 providers. The AAC has additional clinics in the communities of Elcho and Birnamwood. Current provider staffing in the AAC includes several medical providers that practice in more than one AAC site:

<u>Specialty:</u>	<u>Number</u>
Aspirus Antigo Clinic	
Family Practice	7
Internal Medicine	2
General Surgery	2
Pediatrics	1
Obstetrics/Gynecology	1
Allied Health	11
Psychology	1

Aspirus Elcho Clinic

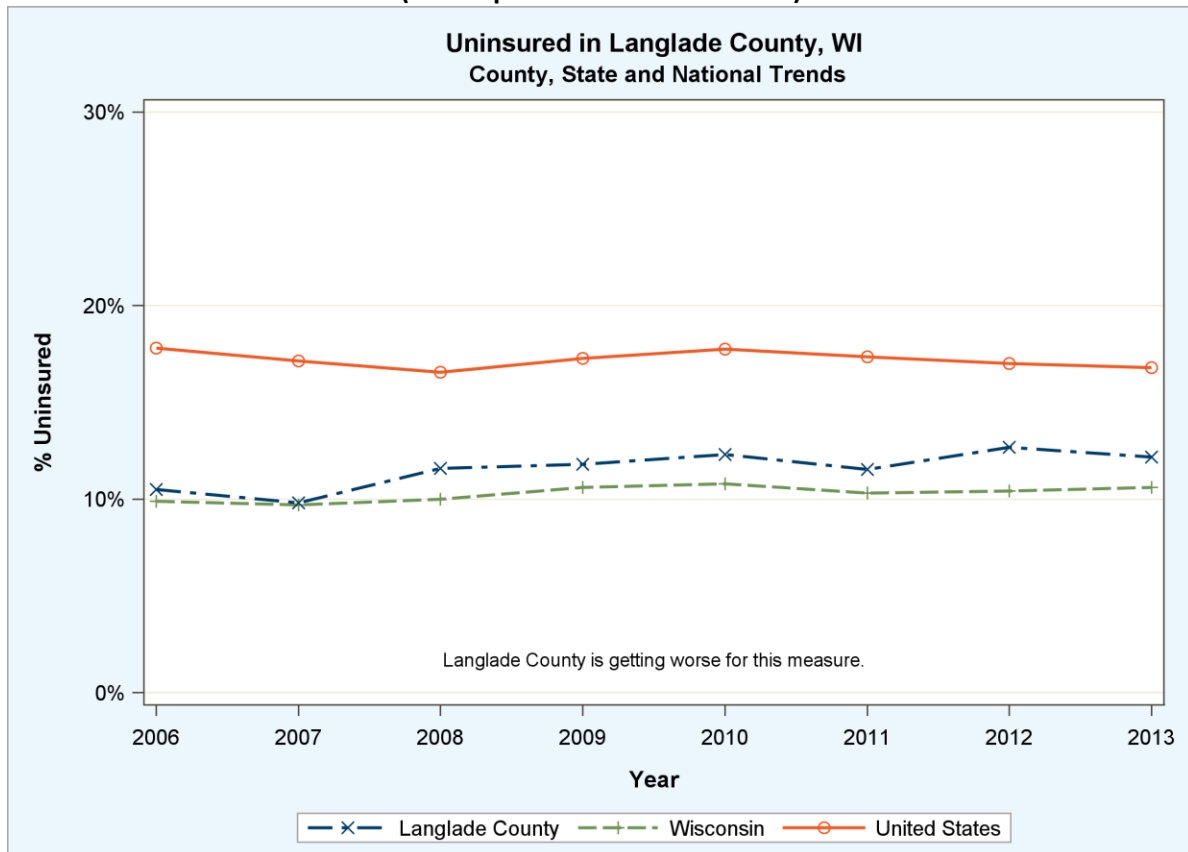
Internal Medicine	2
Allied Health	1

Aspirus Birnamwood Clinic

Family Practice	3
Allied Health	2

According to the University of Wisconsin Population Health Institute, approximately 13% of the population of Langlade County is uninsured. This percentage has increased from 10% in 2010 and has risen to 13% in 2013. Langlade County's rate of uninsured persons has risen above the state average during the past six years. The rate of uninsured persons correlates with the increased unemployment in Langlade County which has also consistently remained above both state and national averages as previously mentioned. That is because many people have access to health care coverage through their employer, and when employment is lost, access to health coverage can become difficult and costly (see Chart 12).

Chart 12
Uninsured Population in Langlade County 2006-2013
(UW Population Health Institute)



The breakdown of patient volume by payer source for persons receiving services in the hospital's service area is shown in Table 10. The table shows that, while self-pay volumes have generally declined over the period 2012 to 2015, both the Medicare and Medicaid volumes have risen. This corresponds to the changing age and socioeconomic demographics of the county as outlined above.

As of May, 2016, according to the Wisconsin Department of Health Services, there were a total of 4,300 persons (one in five persons) in Langlade County who were Medicaid/Badger Care beneficiaries. This figure is down from May 2014 and May 2015 when 4,694 and 4,354 persons respectively were enrolled in the programs (see Table 11).

No accurate Medicare figures were available for Langlade County, however, based on the 2010 census, approximately 4,000 persons in Langlade County are Medicare recipients as compared to 3,908 person in the previous 2000 census.

Table 10
Patient Volumes in Langlade Hospital Service Area by Payer Source
(Intellimed)

Patient Volumes in Primary Service Area (Langlade County, Aniwa, Birnamwood, Bowler)

Inpatient

Payer Class	FY 2012	FY 2013	FY 2014	FY 2015	FY 2012	FY 2013	FY 2014	FY 2015
	Discharges	Discharges	Discharges	Discharges	Discharges	Discharges	Discharges	Discharges
Medicaid	460	526	556	514	19.4%	18.7%	20.5%	19.1%
Medicare	1,119	1,417	1,324	1,332	47.2%	50.3%	48.7%	49.5%
Self Pay	86	122	99	57	3.6%	4.3%	3.6%	2.1%
Commercial/Other	708	754	739	789	29.8%	26.7%	27.2%	29.3%
Total	2,373	2,819	2,718	2,692	100.0%	100.0%	100.0%	100.0%

Outpatient Surgery

Payer Class	FY 2012	FY 2013	FY 2014	FY 2015	FY 2012	FY 2013	FY 2014	FY 2015
	Visits	Visits	Visits	Visits	Visits	Visits	Visits	Visits
Medicaid	445	582	730	690	12.3%	11.8%	13.9%	12.9%
Medicare	1,531	2,257	2,280	2,227	42.3%	45.8%	43.3%	41.7%
Self Pay	48	106	101	45	1.3%	2.2%	1.9%	0.8%
Commercial/Other	1,599	1,979	2,157	2,376	44.1%	40.2%	40.9%	44.5%
Total	3,623	4,924	5,268	5,338	100.0%	100.0%	100.0%	100.0%

Emergency

Payer Class	FY 2012	FY 2013	FY 2014	FY 2015	FY 2012	FY 2013	FY 2014	FY 2015
	Visits	Visits	Visits	Visits	Visits	Visits	Visits	Visits
Medicaid	2,843	3,634	3,438	3,965	31.6%	31.5%	30.4%	33.8%
Medicare	2,686	3,596	3,615	3,652	29.8%	31.2%	32.0%	31.2%
Self Pay	873	1,119	1,091	625	9.7%	9.7%	9.6%	5.3%
Commercial/Other	2,601	3,193	3,166	3,472	28.9%	27.7%	28.0%	29.6%
Total	9,003	11,542	11,310	11,714	100.0%	100.0%	100.0%	100.0%

Table 11
Medicaid/Badger Care Recipients in Langlade County 2009 – 2016 (May)
(Langlade County Department of Social Services)

	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
Medicaid	1,272	1,286	1,458	1,606	1,580	1,091	1,088	1,124
Badger Care	3,213	3,857	3,778	3,745	3,586	3,603	3,266	3,176
Total	4,485	5,143	5,236	5,348	5,166	4,694	4,354	4,300

Based on the findings of the qualitative research methods including the population survey, and key informant interviews, there was significant concern expressed by participants regarding the cost of healthcare and prescription medication services. Our research has shown that people will often choose to forego needed healthcare services because of the cost of the service or because of a lack of health coverage. This is also true for many persons who are insured by a health coverage plan but, because of large deductibles or co-pays, find their out-of-pocket cost for healthcare financially challenging. A 2009 American Journal of Medicine study in the United States reported that medical debt due to accumulated medical bills was a contributing cause in 62% of personal bankruptcy filings. Of significance, nearly three quarters of those filing personal bankruptcies for medical debt had health insurance or other form of health coverage.

Social Determinants of Health

Most of the qualitative research indicated that issues related to substance abuse were of serious concern to people living in Langlade County. Recent information released by county law enforcement agencies related to the criminal use of illicit substances as well as the misuse of prescription medications in Langlade County has increased awareness of these issues. News reports of high profile arrests of community leaders and others for the criminal sale and use of illegal substances over the past few years has both raised awareness of the issue and demonstrated the ongoing challenge law enforcement agencies face in addressing these issues. However, specific accurate information related to the prevalence of substance abuse in Langlade County has been difficult to obtain, with the exception of information related to the abuse of alcohol.

Table 12 below shows a year-by-year comparison of available data regarding the incidence of self-reported drinking behavior in northern Wisconsin and the State of Wisconsin for the years 2007 to 2010. The table also displays a comparison of self-reported excessive drinking in Langlade County and Wisconsin for the years 2010 to 2013 as reported by the University of Wisconsin Population Health Institute. The definitions of the various drinking behaviors are:

Heavy Drinking – More than one drink per day on average for a woman and more than two drinks per day on average for a man.

Binge Drinking – More than five drinks on one occasion for a man or more than four drinks on one occasion for a woman.

Excessive Drinking - Includes heavy or binge drinking and any alcohol consumption by youth under the age of 21 or any alcohol consumption by a woman during pregnancy.

The incidence of self-reported heavy drinking in northern Wisconsin has typically been below the average rate for the state during the years reported. Binge drinking rates in northern Wisconsin have also been slightly below state levels for the same years. The excessive drinking rate comparison for the years 2010 – 2013 shows Langlade County’s rate as equal to or less than the state average rate. Current youth alcohol use in Langlade County was not available.

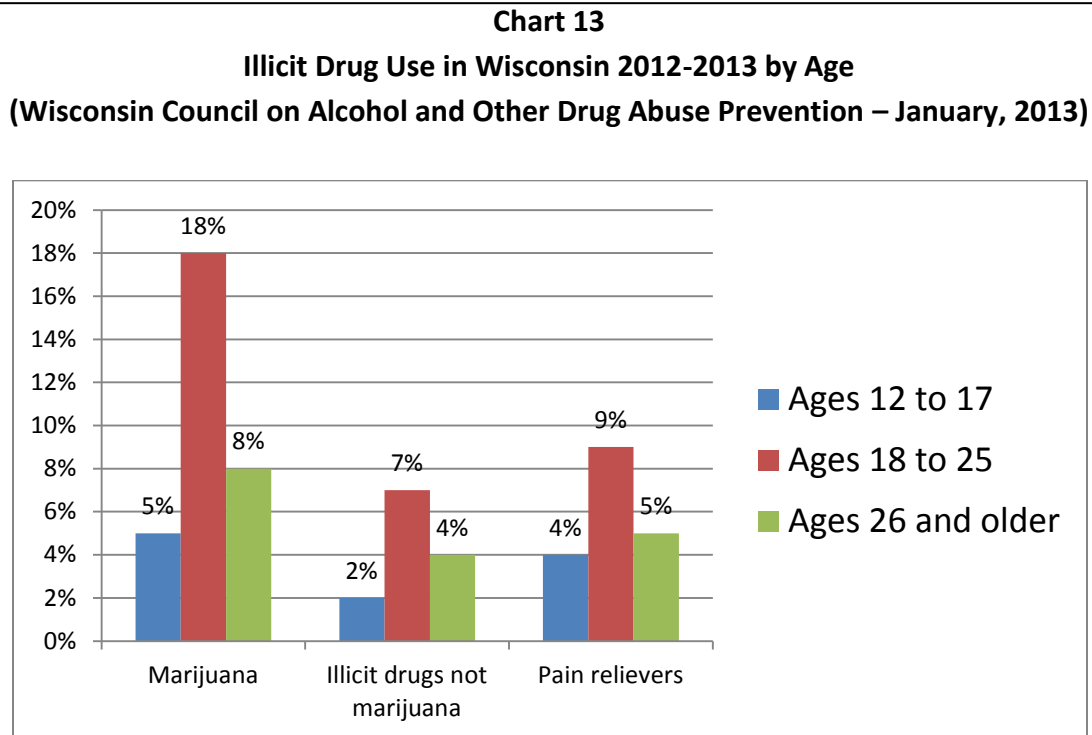
Table 12
Self Reported Heavy, Binge and Excessive Drinking in Langlade County/Wisconsin by Year
(Wisconsin Interactive Statistics on Health (WISH), UW Population Health Institute)

Drinking Behavior	2006	2007	2008	2009	2010	2011	2012	2013
Heavy Drinking – Northern, WI	5.8%	7.3%	7.5%	7.5%	4.3%			
Heavy Drinking – Wisconsin	7.9%	6.7%	7.9%	8.0%	6.3%			
Binge Drinking – Northern, WI	20.5%	22.8%	19.6%	22.7%	20.5%			
Binge Drinking – Wisconsin	24.2%	23.3%	23.0%	23.9%	21.4%			
Excessive Drinking – Langlade Co.					23%	21%	22%	22%
Excessive Drinking - Wisconsin					23%	25%	24%	24%

In March 2013, the UW Population Health Institute, the University of Wisconsin School of Medicine and Public Health, and Health First Wisconsin updated the previously published joint report entitled: *The Burden of Excessive Alcohol Use in Wisconsin*. The report estimates the economic cost of excessive alcohol consumption for each Wisconsin county. The report estimates that, for Langlade County in 2011, the most recent year data is available, excessive alcohol consumption contributed to at least 7 alcohol related deaths, 200 alcohol related

hospitalizations and 162 alcohol-related arrests. The report estimated binge drinking, which is responsible for 76% of the economic cost of excessive alcohol consumption, in Langlade County at 29% of the population compared to 23% for Wisconsin and 16% for the United States. They estimate the annual economic cost of excessive alcohol use in Langlade County to be \$31.4 million. These estimated costs are broken out as follows: \$3.5 million in healthcare costs, \$22.7 million in lost productivity and \$5.0 million in other economic costs such as motor vehicle crashes and criminal justice system costs. Wisconsin ranks number 1 in the U.S. in rates of binge drinking and number 1 in intensity of drinking- Wisconsin adults report drinking an average of 9 drinks per occasion.

Chart 13 below shows the illicit use of drugs in Wisconsin by age for the year 2013 (most recent data available). No specific data was available for Langlade County. The chart shows that the highest percentage of illicit drug use for that year was by adults age 18 to 25.



According to the 2014 Wisconsin Department of Health Services publication in *Wisconsin Epidemiological Profile on Alcohol and Other Drug Use*, prescription drug abuse is America's fastest growing drug problem. The misuse of prescription drugs in Wisconsin was comparable to levels in the United States until 2006 when the percentage in Wisconsin exceeded the United States (see Wisconsin/US comparison in Chart 15). The report further states that unauthorized

prescription drug use has now overtaken marijuana use as the most common illegal drug used by youth even though its use is illegal. They also report that recent data in Wisconsin shows that prescription drugs are the most common drug used for recreational purposes after marijuana. The United States makes up 4.6% of the world's population but consumes 80% of its opioids and 99% of the world's hydrocodone (the opioid that is Vicodin). The report further states that, nationally, the average number of prescriptions per resident is 14.9 per year and in Wisconsin the rate is 12.7 per year. The Wisconsin Department of Health Services issued an information graphic detailing non-medical use of pain relievers and the report states that between the years 2012 and 2013, 15% of Wisconsin adults reported using pain relievers for non-medical purposes. Even though Chart 15 shows a small decrease in 2012, the state and national trend are continually moving upwards.

More recent data published by the Wisconsin Department of Health Services in association with the *Dose of Reality* prescription medication awareness campaign guided by the Wisconsin Attorney General, reports that overdose deaths involving opioid painkillers and other drugs have skyrocketed from 2000 to 2014 (see Chart 14 below). It also reports that prescription opioids contributed to 392 (47%) of the 843 drug overdose deaths in 2014, while heroin contributed to 238 (28%) of the deaths.

Chart 14
Overdose Deaths Involving Opioid Painkillers and Other Drugs
 (Wisconsin Division of Public Health, Wisconsin Department of Health Services)

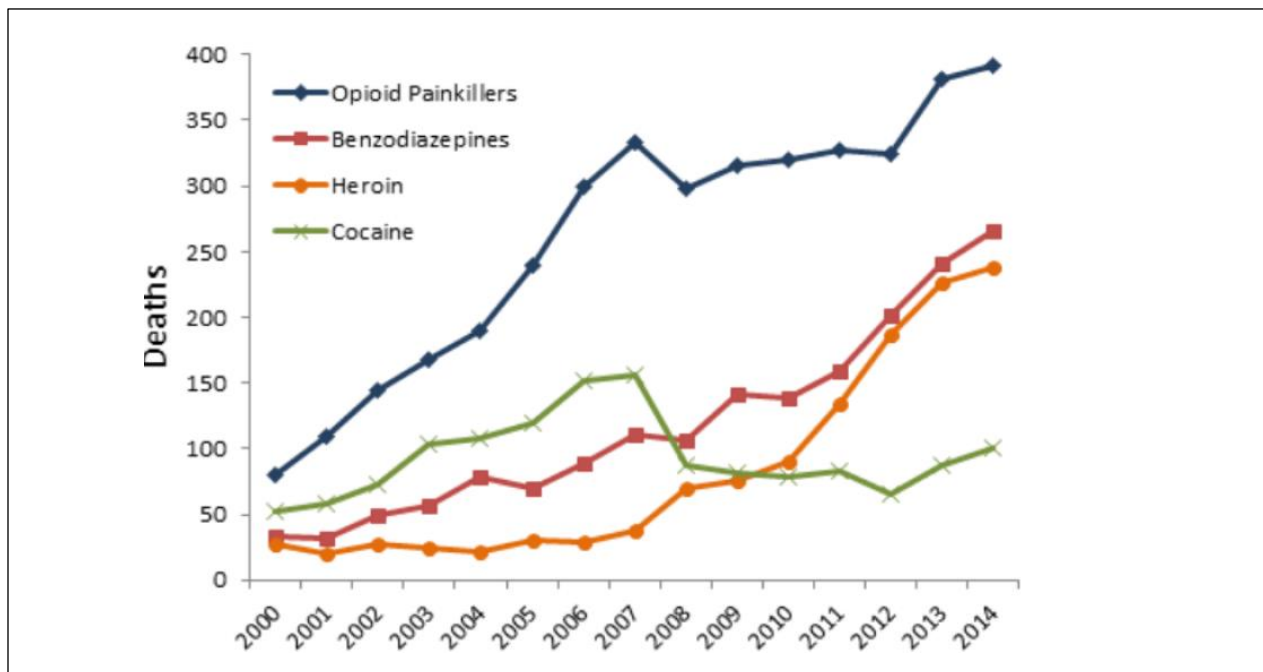
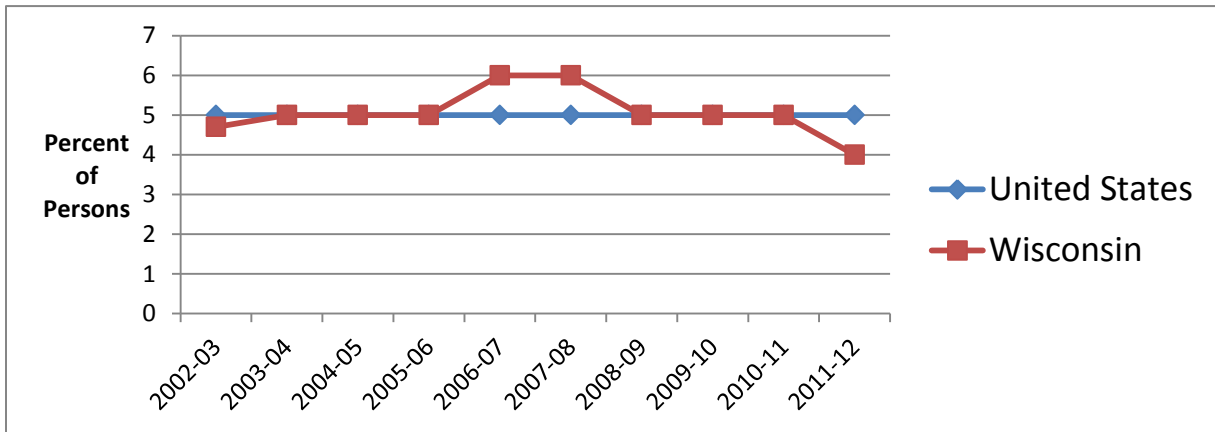
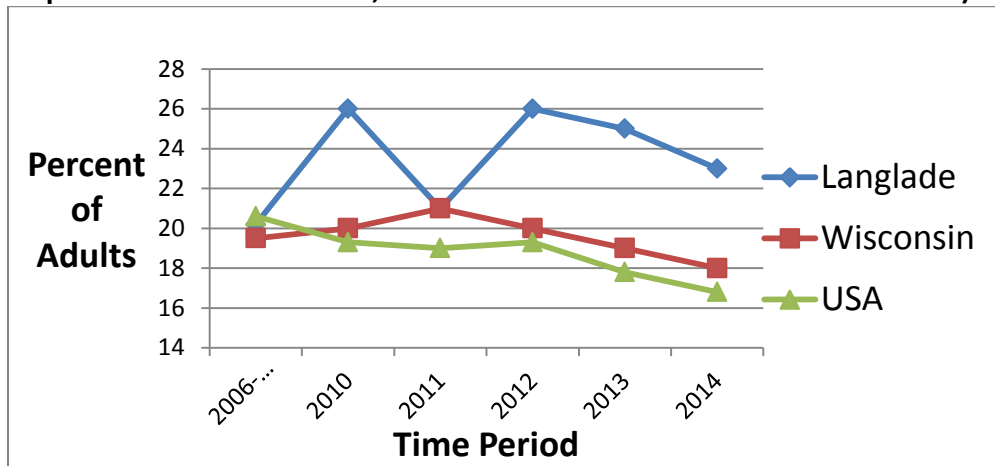


Chart 15
Prescription Drug Misuse Age 12 & Older by Year – US/WI Comparison
(Wisconsin Council on Alcohol and Other Drug Abuse Prevention – January, 2012)



Tobacco use in Langlade County among adults (no current youth data available) is above state and national levels (see Chart 16 below).

Chart 16
Prevalence of Adult Smoking US, WI and Langlade County by Year
(UW Population Health Institute, Centers for Disease Control and Prevention)



*Lapse in data 2006-2010

The prevalence of women smoking during pregnancy in Wisconsin and the United States has been declining. According to the University of Wisconsin - Milwaukee Center for Urban Initiatives and Research (CUIR) 2016 report *Smoking During Pregnancy in Wisconsin and the*

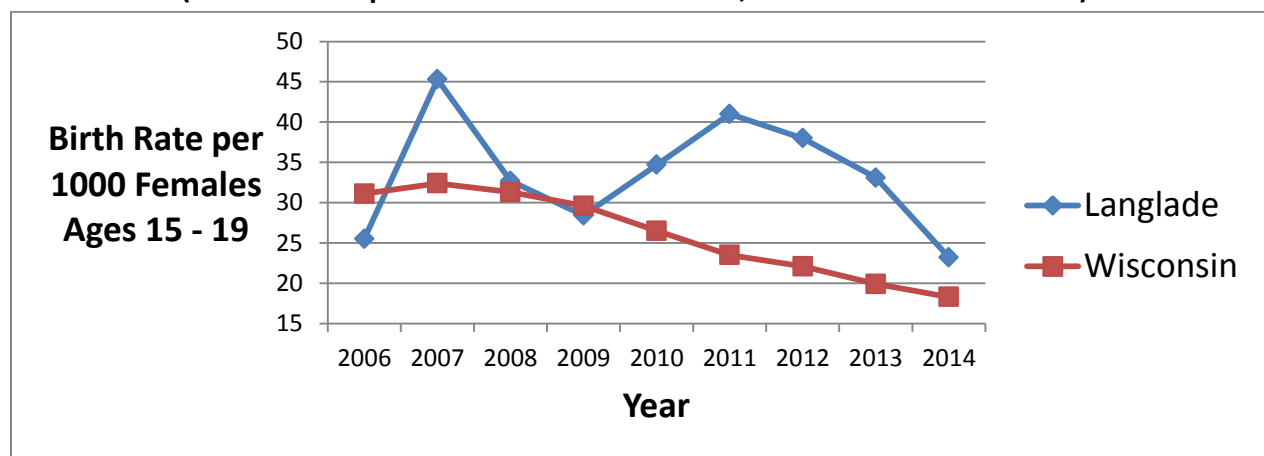
United States Updated Trends and Patterns, 1990 - 2013, the prevalence of smoking during pregnancy in the United States decreased from 18% in 1990 to 9% in 2007. In Wisconsin, the prevalence of smoking during pregnancy decreased from 23% in 1990 to 15% in 2007. Between 1990 and 2013, according to the CUIR, smoking during pregnancy decreased by 42% in Wisconsin. In Langlade County, however, based on the CUIR study, the prevalence of smoking during pregnancy has increased during those same periods (see Table 13 below) and the estimated trend is that this percentage will continue to rise. This raises many concerns regarding fetal and maternal health for women and infants in Langlade County. More recent information provided by UW Population Health Institute indicates that the percentage of women who smoke while pregnant still hasn't decreased and it is still recorded at 28%.

Table 13
Prevalence of Smoking During Pregnancy in WI & Langlade County by Year
(UW-Milwaukee Center for Urban Initiatives & Research)

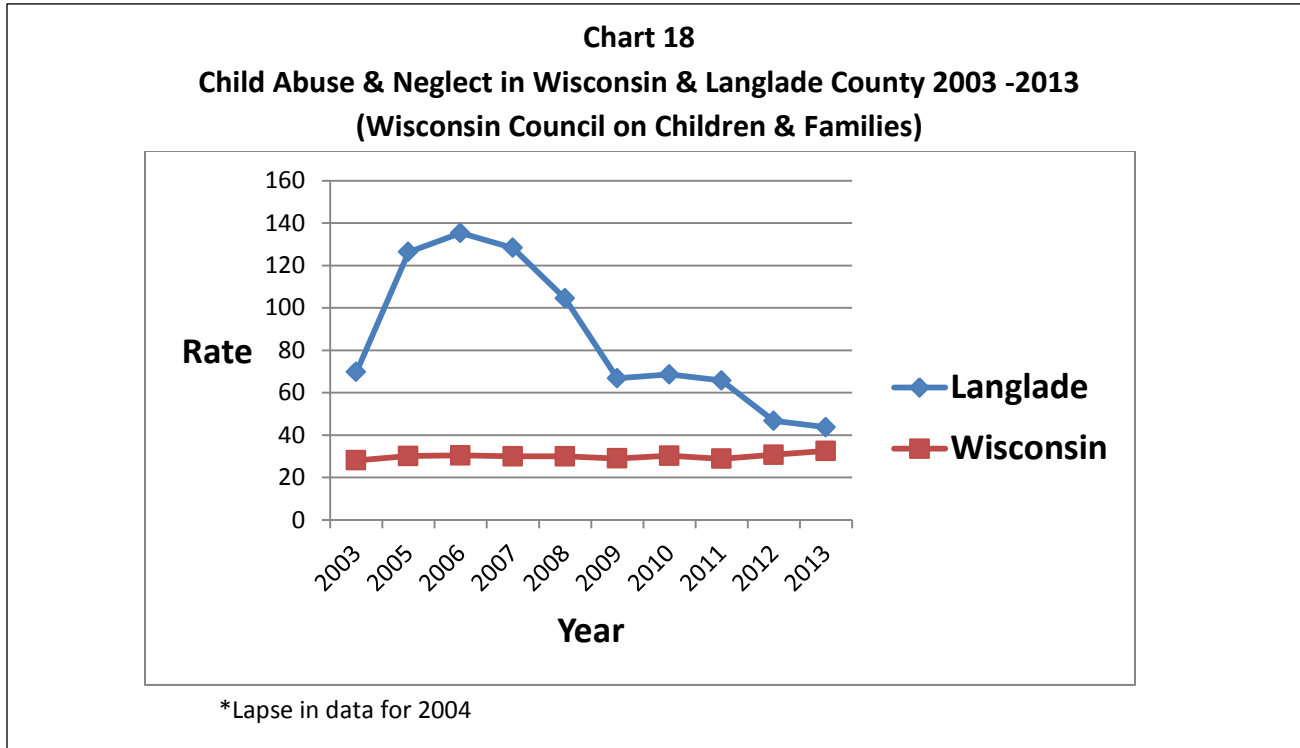
	<u>2005 – 2007</u> <u>Smoking Prevalence</u>	<u>2008 – 2010</u> <u>Smoking Prevalence</u>	<u>2011-2013</u> <u>Smoking Prevalence</u>
Langlade County	26.0%	28.9%	28.1%
Wisconsin	14.4%	13.9%	14.1%

The teen birth rate per 1000 females in Langlade County has consistently been above state averages according to the Wisconsin Department of Health Services. Chart 17 below shows a comparison of the county teen birth rate to Wisconsin for the years 2006 to 2014 the most recent years for which data was available.

Chart 17
Teen Birth Rate for Wisconsin and Langlade County by Year
(Wisconsin Department of Health Services, Division of Public Health)



The frequency of child abuse and neglect in Langlade County has consistently and significantly risen above state averages according to the Wisconsin Council on Children & Families. Chart 18 below displays the recorded incidence of the most recent child abuse and neglect statistics per 1000 population in Langlade County for the years 2003 to 2013. While rates have declined since 2007, they remain above state averages for the two most recent years on record.



Langlade County crime statistics indicate that the incidence of violent crime is well below state averages for the years 2010 – 2015 according to the UW Population Health Institute (see Table 14). Langlade County Sheriff’s Department (most recent available) report the top 10 arrests and top 10 citations issued for Langlade County (see Table 15 and 16).

Table 14
Violent Crime Rate in Wisconsin & Langlade County 2010 – 2015
(UW Population Health Institute)

Region	2010	2011	2012	2013	2014	2015
Langlade	149	100	105	144	151	174
Wisconsin	272	283	275	261	248	255

Table 15
Top 10 Arrests for Langlade County
Langlade County Sherriff's Department

Total	Offence
205	Warrant Arrest
185	Dangerous Drugs
71	Bail Jumping
46	Disorderly Conduct & Traffic Stop (same total)
41	Obstructing
38	Intoxicated Driver
26	Probation Hold
16	Domestic Trouble
13	Criminal Damage of Property & Sexual Assault (same total)
12	Theft

Table 16
Top 10 Citations Issued for Langlade County
Langlade County Sherriff's Department

Total	Citations Issues
88	Operate while Intoxicated
68	Operate after Suspension
67	Speeding
39	Operate without Valid License
34	Operate after Revocation
25	Non-Registration
24	Disorderly Conduct
26	Underage Drinking
20	No proof of Insurance
15	Inattentive Driving and Unreasonable and Imprudent Speed (same totals)

Academic achievement for adults age 25 and older as reported by the Wisconsin Department of Workforce Development and the US Census Bureau based on the 2000 and 2010 census are shown in Table 17 and graphically represented in Chart 19. Langlade County statistics indicate that there are fewer people with a college degree or higher living in Langlade County than state and national averages. However, a higher percentage of the county's population has high school diplomas or equivalent than state and national averages.

Table 17
Academic Achievement USA, Wisconsin & Langlade County 2000 & 2010
(Wisconsin Department of Workforce Development & US Census Bureau)

2000 Census

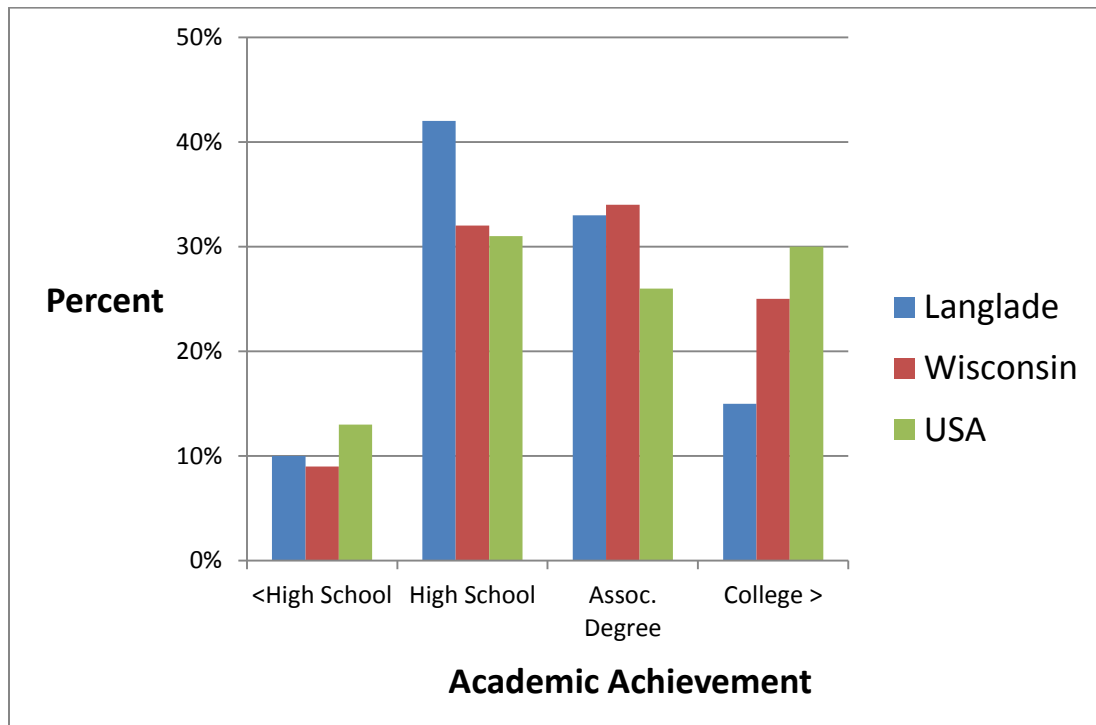
	Less Than <u>High School</u>	High School <u>Diploma</u>	Assoc. Degree <u>Some College</u>	Bachelor Degree <u>Or Above</u>
Langlade County	19.1%	45.3%	23.9%	11.7%
Wisconsin	14.8%	34.6%	28.1%	22.5%
United States	19.6%	28.6%	27.4%	24.4%

Table 17 Continued
Academic Achievement USA, Wisconsin & Langlade County 2000 & 2010
(Wisconsin Department of Workforce Development & US Census Bureau)

2010 Census

	Less than <u>High School</u>	High School <u>Diploma</u>	Assoc. Degree <u>Some College</u>	Bachelor Degree <u>Or Above</u>
Langlade County	10%	42%	33%	15%
Wisconsin	9%	32%	34%	25%
United States	13%	31%	26%	30%

Chart 19
Percent Academic Achievement USA, WI and Langlade County 2010
(Wisconsin Department of Workforce Development and US Census Bureau)



Langlade County, as mentioned above (Chart 5), experiences a rate of unemployment that is consistently above both state and national averages. This significant economic factor is compounded by relatively low wage rates for persons employed in Langlade County as presented in Table 5 above. For every major industry, wage rates for jobs in Langlade County are significantly lower than state averages. According to the WDWD, while the average wage of Langlade County increased from 2013-2014 by 3.7 percent, it is lower than the state wage in every sector (see Table 18).

Approximately 66 percent of the overall workforce in Langlade County was employed in the manufacturing, trade, transportation, utilities, education and health employment sectors in 2014. It is projected that the education and health services sector will gain more jobs in the upcoming years. Overall, estimated over 14,000 more jobs are projected by 2022 indicating a 7 percent increase from 2012.

Table 18
Average Annual Wage by Industry Division in 2014
(2015 Langlade County Economic and Workforce Profile)

	Wisconsin Average Annual Wage	Langlade County Average Annual Wage	Percent of Wisconsin	1-year % change
All industries	\$ 43,856	\$ 32,241	73.5%	3.7%
Natural Resources	\$ 36,156	\$ 27,995	77.4%	-2.2%
Construction	\$ 55,317	\$ 38,248	69.1%	8.6%
Manufacturing	\$ 54,365	\$ 42,229	77.7%	6.4%
Trade, Transportation & Utilities	\$ 37,362	\$ 29,405	78.7%	2.3%
Information	\$ 62,482	\$ 24,625	39.4%	-4.2%
Financial Activities	\$ 61,884	\$ 39,881	64.4%	2.1%
Professional & Business Services	\$ 52,386	\$ 32,751	62.5%	-3.0%
Education & Health	\$ 44,829	\$ 35,048	78.2%	4.0%
Leisure & Hospitality	\$ 16,055	\$ 11,771	73.3%	0.4%
Other Services	\$ 25,847	\$ 25,831	99.9%	2.0%
Public Administration	\$ 44,462	\$ 33,238	74.8%	-1.9%

Housing statistics in Langlade County based upon the results of the 2010 census are displayed in Table 19. More than three quarters of people living in Langlade County live in their own homes. Most people live in households with an average of 2.79 people, while nearly 30% of Langlade County residents live alone.

Langlade County is a comparatively desirable location to reside from an environmental health perspective. Based on the above reported *County Health Rankings* published by the University of Wisconsin Population Health Institute, Langlade County has maintained an overall rank of 7th of the 72 Wisconsin counties for the years 2011, 2012 and 2013 with respect to the physical environment health factor. Clean air and drinking water as well as access to recreational facilities are key drivers of the high ranking for Langlade County. As neighboring counties increase and improved their rank in physical environment, Langlade County has dropped in ranking for 2014 and 2015, but then again rising to 11th in 2016. In spite of the fluctuation in the environmental ranking, Langlade County continues to climb the ladder in areas such as clinical care, currently ranking at 23 out of the 72 counties in the state of Wisconsin.

Table 19
Langlade County Families & Housing Statistics 2010
(US Census Bureau)

Langlade County Families/Housing 2010

Family/Housing	Number	Percent
Total Households	8,587	100%
Owner Occupied House	6,561	76.4%
Renter Occupied House	2,026	23.6%
Families	5,629	65.6%
Husband/Wife Family	4,471	52.1%
Household Children under 18	2,281	26.6%
Average Family Size	2.79	-
Household Living Alone	2,487	29.0%

IV. Community Assets & Resources

During the course of the CHNA, a catalogue was developed of community assets and resources available in Langlade County and the surrounding area. This listing was used to identify possible resources available to support the development of action plans and to maximize the effectual utilization of existing resources to avoid duplication and inefficiencies implementing those actions. The complete listing of assets and resources, by category, is included in Appendix C.

V. Health Needs Prioritization Process

In order to streamline the process of priority setting and action planning, a work group was formed and named the Action Planning Task Force (APTF) (see Appendix A). The APTF held four weekly meetings between April 26 and May 17, 2016 during which they established priorities and developed an implementation plan.

The APTF received a binder of all survey data collected along with multiple research documents from local, county and state resources. Over the course of the four, 2-hour meetings, the group examined all data collected from the surveys, online and paper, reviewed top themes from key informant interviews, references local, county, state and national research with data documents and completed a root cause analysis to help determine action plans for priorities identified.

The priorities were limited to three, with the exception and inclusion of mental health/behavioral health, as these were significantly more frequently mentioned than others and, given the scope of the CHNA, it was thought that sufficient resources, though limited, were more likely to be available to address these top ranked priorities. Finally, the priorities were validated by means of review and discussion. The priorities identified as follows:

1. Wellness and Prevention & Nutritional and Physical Activity
2. Substance Abuse
3. Affordability of Healthcare and Prescription Medication Services

Mental Health/ Behavioral Health issues were identified as an inherent factor in each of the above three health priorities and are incorporated within each priority.

VI. Action Planning & Implementation

Following the development of the root cause analysis, brain storming sessions were held to generate ideas for potential action plans to address each of the priorities. Definitions for each of the health problem priorities were reviewed to assure consensus on the issue. Successful evidence based action plans previously developed by other organizations and communities were also reviewed as action planning for each priority area was undertaken.

Mental Health/ Behavioral Health

According to the National Institute of Mental Health, one in four Americans, approximately 43.8 million people, experience a mental illness in a given year. Good mental health is fundamental to the health and well-being of every person. Mental illness is a medical condition that disrupts a person's thinking, feeling, mood, ability to relate to others and daily functioning. It can affect persons of any age, race, religion or income. As the industry turns towards value-based care and population health management, healthcare systems are recognizing that physical healthcare alone is not sufficient. Many people in need of mental health and behavioral health services never receive necessary services due to lack of affordable and available resources. Societal stigmas regarding mental health erode confidence that mental disorders are real and treatable health conditions. Langlade County is dedicated to improving the mental health of all individuals and our community as a whole through advocacy, education and service. Mental health and behavioral health are found interwoven tightly within all three health priorities; Wellness and prevention/nutrition and physical activity, substance abuse and affordability of healthcare. Strategies for improvement will be implemented into all health priority action plans below.

Goal: Assist community with mental illness in leading more productive and autonomous lifestyles, and to promote mental health through service, advocacy, and education for all ages through priority health areas identified.

Wellness and Prevention/ Nutrition and Physical Activity

Wellness and prevention services paired with nutrition and physical activity can have a significant impact on many of the health issues identified in the research completed. The issues of substance abuse and access to healthcare can all be favorably affected by targeted wellness and prevention efforts. Increasing one's knowledge regarding successfully maintaining a healthy lifestyle can, over the long term, dramatically improve one's health and reduce both the personal and societal economic impact related to increased healthcare utilization.

In the last CHNA study, nutrition and physical activity, previously labeled as "obesity", was a priority area of its own; however, after discussion and completing the Root Cause Analysis, information indicates wellness and prevention services and nutrition and physical activity have similar strategies and actions for improvement.

The action plans below reflect the integration of the two priorities which both have a direct influence on improving and maintaining a healthy lifestyle for all demographics at any age.

Goal: To increase awareness and knowledge for persons living in the hospital service area of the positive personal health benefits to living healthy lifestyles.

Action Plan:

1. Actively promote a year-long mental health community campaign in collaboration with business, churches, school systems, in Langlade County and the surrounding service area. Planning and implementation will include researching best practices on how other communities successfully executed mental health awareness campaigns.
2. Offer training and support for working professionals in public and social service environments. These efforts would create opportunities to build relationships, connect resources and open doors for inclusive community collaboration and support.
3. Continue to provide opportunities for group physical activities, such as 100 Mile program.
4. Restorative Programming for students in Langlade County middle schools to promote education related to issues of student bullying issues.

5. Provide parent and child education opportunities on various subjects including wellness, prevention, nutrition and physical activity.
6. Expand local Head Start services to five days and offer yearlong care.
7. Promote and develop Farm- to- Hospital initiatives starting March 2016 and running through March 2017.
8. Develop and maintain a comprehensive community help guide regarding available resources, contacts and related community assets. The guide would be modeled after the similar 2-1-1 Assistance Guide which was developed for Marathon County.
9. Continue the expansion and support for the WeekEnd Backpack Program (WEB). The WEB program provides students with easy open, child friendly food for needy families to eat over the weekend. The WEB will be expanded for the next school year to include all Antigo Unified District Schools including two local parochial schools.

Measures of Success:

1. At least 10 major community presentations regarding wellness topics related to identified health problems in Langlade County will be conducted by Aspirus Langlade Hospital and Community Partners over the next three years.
2. At least 3 trainings for professionals in public and social service environments.
3. To increase access to food for schools with over 50% free and reduced rate.
4. To increase access to information regarding mental health for all demographics.

Substance Abuse

Substance abuse and chemical dependency from the use of alcohol and other drugs can impact mortality, morbidity and criminal behaviors. Abuse of these substances is one of the most serious health problems facing the United States, Wisconsin and Langlade County. Prescription Drug abuse and opioid usage has reached epidemic proportions nationwide and Langlade

county is no exception. During the five year period from 2007 to 2011, the United States has seen a 117% increase in the number of emergency room visits made by patients seeking narcotics or related drugs. Prescription Drug misuse and diversion is another leading cause of drug addiction, morbidity and mortality and ranks as the number one drug problem in the State of Wisconsin.

Goal: To reduce substance abuse where hospital and community partner intervention can have positive impact.

Action Plan:

1. Formation of the Prescription Drug Abuse Community Action Initiative, public awareness campaign. The campaign would offer a venue for informative and important round table discussion regarding prescription drug abuse in Antigo and Langlade County. In addition, research will be undertaken to determine the best practices regarding opioid prescribing policy implementation for use at Aspirus Langlade Hospital and its clinics. The research will include the best practice for execution of local awareness, information and education campaign regarding patient drug misuse.
2. Partnering with Langlade County Sheriff's Department, mental health services will be available for the incarcerated population in Langlade County Jail.
3. Develop and Education Series throughout Langlade County related to the following topics:
 - a. Adverse Childhood Experiences (ACES) and Question Persuade Refer (QPR), Trauma Informed Care provided for parents, teachers, clinicians.
 - b. Teen peer issues provided for youth, elementary, middle school, high school kids.
4. Support the work of Action Alliance of Langlade County as it continues to research evidence based programs regarding substance abuse. This will include evaluating the feasibility and effectiveness of implementing a local Drug Court to promote treatment and rehabilitation rather than focusing only on the criminal element of illicit drug usage.

Measures of Success:

1. Identification of at least one aspect of substance abuse that the hospital and its community partners can positively impact.
2. Partnership with three community businesses or organizations regarding substance abuse issues identified.
3. Implementation of specific actions to address the identified issue and measures to monitor success of the action plans.

Affordability of Healthcare and Prescription Medication Costs

The cost of Healthcare services including prescription medications in Langlade County is an important economic issue. Per capita income in Langlade County is substantially lower than state and national averages. Most recent income data indicates that 15.9% of the people living in Langlade County are living in poverty. In fact, oftentimes personal healthcare needs are forgone because disposable income is not available to cover the cost or other personal needs more pressing. This increases the likelihood that, left untreated, a personal illness may become more severe and require more costly healthcare intervention at a later date.

Goal: To increase access to healthcare services and health equity for people living in the hospitals service area who are economically or socially disadvantaged.

Action Plan:

1. Continue financial and community support for the two major projects created as a result of the 2013 CHNA. These projects are 1) the Prevention Fund for people in need of emergency financial assistance for medical needs such as medication, and the Community Patient Transportation Project to provide free transportation to patients who do not have reliable transportation.
 - a. Support of the Prevention Fund: To assist patients with an immediate need. The goal is to reduce unnecessary visits to the Emergency Room or walk-in, admissions or readmissions to the hospital by providing assistance with medications, medical supplies or any other immediate need identified.

- b. Support of Community Patient Transportation Project: Working to expand transportation resources throughout Langlade County by collaborating with Red Robin Transit (operated by Menominee Public Transit) to provide an additional On-Demand Service van to provide transportation throughout all of Langlade County, Monday-Friday 6am – 10pm and to provide two additional routes on the current in-town bus route.

Measures of Success:

1. At least 20 people in the hospitals service area will utilize the Prevention Fund each year.
2. A reduction rate of 5% of missed appointments due to transportation issues.

VIII. Additional Action

In addition to the above action plans, the APTF and Aspirus Langlade Hospital identified additional actions that will be undertaken to evaluate awareness of the CHNA as well as enhance the community-wide efforts to effectively address the key health problems identified. These are:

1. Present the results of the CHNA to numerous groups including: the Aspirus Langlade Hospital Board Planning Committee, the Aspirus Langlade Hospital Board of Trustees, the Langlade County Health Department Committee, the Langlade County Board, the City of Antigo Common Council and to all other groups and organizations that request a presentation of the results.
2. Aspirus Langlade Hospital will widely disseminate the results of the CHNA to the general public by posting the results of the CHNA on the hospitals website as well as make it available free of charge to any person requesting a copy of the results.
3. The Langlade County Health Department and Aspirus Langlade Hospital will be exploring opportunities to combine efforts regarding their respecting community improvement plans. The Health Department's *Community Health Improvement Plan* which is undertaken every five years is similar in scope and process to the hospital's *Community Health Needs Assessment* which is undertake every three years. The two organizations will explore means to reduce duplication and maximize the use of local resources in

completing future required plans as both organizations are committed to improving the health of the local population.

4. Aspirus Langlade Hospital will incorporate the findings and action plan from the CHNA into ongoing strategic planning, decision making and allocation of resources.

VII. Approval and Implementation Time Line

<u>Action</u>	<u>Date</u>
Approval of CHNA by hospital board of trustees	June 21, 2016
Dissemination of CHNA to public	June 30, 2016
Implementation of CHNA action plans begin	July 2016
Start of next CHNA cycle	September 2018

IX. Appendix

- A. Community Health Needs Assessment Action Planning Task Force Members**
- B. Community Health Needs Assessment Results and Success Document**
- C. Catalogue of Community Assets and Resources**
- D. Key Informant Interview Format**
- E. Public Survey**
- F. Public Notices**
- G. Health Priority Determination**
- H. Root Cause Analysis**

Appendix A

Community Health Needs Assessment Action Planning Task Force Members

Ron Barger, Langlade County Health Department & Langlade County Social Services
Department

Carol Blawat, White Lake Village Clerk

Kathy Bowman, Aspirus Langlade Hospital

Cathy Connor, Aspirus Langlade Hospital

Wendee Cox, AmeriCorps Representative for Langlade County

Stephanie Fassbender, Langlade County Health Department

Chelsea Filbrandt, Aspirus Langlade Hospital

Karen Hegranes, Langlade County Health Department

Carrie Kubacki, Antigo Middle School

Nicole Kubiaczyk, Aspirus Langlade Hospital

Karen Kieper, Antigo Head Start

Meghan Mattek, Aspirus Langlade Hospital

Tim Moe, Aging and Disability Resource Center

Nate Musolff, Antigo Police Department

Dan Young, Aspirus Langlade Hospital, Action Alliance

Appendix B

Langlade County Community Health Needs Assessment 2013-2016 Action, Results and Success Document

Health Priorities:

1. Affordability of Health Care and Prescription Medication Costs
2. Obesity
3. Substance Abuse
4. Wellness and Prevention

Affordability of Healthcare and Prescription Medication Costs:

Health Insurance Education Sessions: A series of classes for the public on understanding health insurance plans, health insurance terminology and understanding the Marketplace and Health Insurance Exchange.

Prevention Fund: To assist patients with an immediate need. The goal is to reduce unnecessary visits to the Emergency Room or Walk-in Clinic, admissions or readmissions to the hospital by providing assistance with medications, medical supplies or any other immediate need identified. Assist with medications (no narcotics), diabetic supplies, medical equipment at Lakeside Pharmacy (Antigo), transportation assistance or other needs which will be evaluated for appropriateness. Prescriptions are typically only given for 30 days when utilizing a voucher for payment. Class III narcotics are not covered through the voucher program. If the amount of the request is greater than \$300.00, the request needs to be reviewed and approved by the Prevention Fund program coordinator.

Transportation: Working to expand transportation resources throughout Langlade County by collaborating with Red Robin Transit (operated by Menominee Public Transit) to provide an additional Demand Service van to provide transportation in all of Langlade County Monday-Friday 6am – 10pm and to provide two additional routes on the current In-Town bus route.

Obesity:

After School Program: A 6 week program that ran two times in 2015-2016 school year. The team was given 45 minutes each day to teach nutrition education and physical activity. This was made possible by collaboration from many community partners. This was a great program that helped build relationships between different community partners which continue to strengthen with implementation with further programs such as WEB.

WeekEnd Backpack Program (WEB): Langlade County had significantly higher percentage of school aged children on free and reduced school lunches and that percentage continues to climb. Unified School District of Antigo alone has 53% students participating in free and reduced lunches. This program provides students with easy open, child friendly food to eat over the weekend. Starting with North Elementary, so far we are serving 61 children in 27 families. The group expanded to West Elementary this year and will be taking on all Antigo District Schools including the two parochial schools in November 2016 at the start of the new school year.

Substance Abuse:

The goal of the Substance Abuse priority team is to reduce substance abuse where hospital and community partner intervention can have a positive impact. The team continues to educate at school, community and employer health fairs regarding opioids, E-cigs, alcohol, etc. The group has merged with the local community group Action Alliance and together they are researching at the possibility of a Drug Court for Langlade County.

Guiding Good Choices Program: (Offered to Head Start parents and Families/ Local professionals) Guiding Good Choices (GGC) is a family skills-training program for parents and their middle-school aged children. The program is based on the social development model and its primary objectives are to enhance protective parent-child interactions and to reduce child risk for early substance use initiation. GGC consists of a five-session, multimedia drug resistance and education program for adolescents and their parents. Adolescent participants are required to attend one session which teaches peer resistance skills. The parents receive four sessions of instruction including material on the (a) identification of risk factors for adolescent substance abuse and a strategy to enhance protective family processes; (b) development of effective parenting practices, particularly regarding substance use issues; (c) family conflict management; and (d) use

of family meetings as a vehicle for improving family management and positive child involvement. Each session runs approximately two hours in length. This program has been offered multiple times and takes place by request.

Head Start- Prevent Blindness Wisconsin: A program offered to Head Start parents and families regarding the health of their children eyes. This is a child literacy program that focuses on reading activities the family can do together. This program offers education for parents of eye health assistance around the community if needed for their child while also offering free eye screenings.

Wellness and Prevention:

Employee Wellness Session: Research and discussion on bringing/providing employee wellness programs to small employers. An employee wellness lunch was held and was open to all employers in Langlade County and surrounding service area. The discussion was focused around barriers smaller employers face and also how to get employees to participate in wellness programs when offered.

Vacation Bible School: (Calvary Lutheran Church/St. Paul Lutheran Church) Program emphasizes nutrition and basic hygiene education. Vacation Bible School program- providing healthy options for kids along with an educational piece to guide them in developing some healthy habits and exposing them to healthier options during their time spent at VBS. This request provided a fun healthy snack that complimented and matched the education curriculum on hygiene and basic fundamental nutrition for children.

Clergy Appreciation Day: 20+ Clergy were sent invitations to attend a morning breakfast at Aspirus Langlade Hospital. This day was set to celebrate and connect area clergy, keep them informed on CHNA community work/ programs and ask for feedback regarding the type of situations, issues they face in their line of work. How can WE help THEM. We will continue to connect and build relationships with the area clergy as they continue to serve our communities in faith.

White Lake Community Garden: The White Lake community applied for funds to start a community garden in 2013. The garden has been up and running for three years. This year they applied for funding to create raised plating beds for elderly volunteer's in their

community. The produce from the garden goes to the volunteers, the White Lake Area Food Pantry, the school, and delivered/given to those who do not make it out of the home much. It has helped the community with healthier food options, exercise, socialization and teaching for all ages. Channel 12 News visited the White Lake Community and featured a story on how they were improving the quality of life in their small community.

Aspirus Langlade Hospital Heart Healthy Campaign: Yearlong heart health campaign with many ways for community to participate focus on various factors contributing to heart health.

1. Free summer running program for youth
2. Free Youth Fun Run
3. Music in the Park Heart Health night
4. Provider education series: series of public education classes by providers and specialists about various topics on heart health
5. Breakfast Club Heart Health Radio Series: 13 guests speaking about various topics and activities regarding heart health for all ages.
6. Two Grocery Store Tours provided to public and all community members
7. 100 Mile Club

100 Mile Club: (in association with heart health campaign) A wellness initiative that involves 11 schools- 2400 children. Goal is to run or walk 100 miles throughout the school year. Modeled after a national program, children receive prizes and incentives for hitting mile stones. We are holding three public recognition events for all participating children and end of the year celebration ceremonies for all 11 schools. This program will be running again for the 2016-2017 school year.

Boys & Girls Club: Help offset costs of providing healthier afternoon snacks daily during 11 week summer camp, providing breakfast & Lunch to club members on school vacation days and providing meals during quarterly family nights. \$14,500.00

City of Antigo Pedestrian Lights: City making improvements to intersections for children and community to walk safely across roads. Flashing light signals (much like out in front of hospital). \$26,600.00

Rising Risk Program: (population health management) A need had been identified for group education for “rising risk” population targeting pre-diabetes, diabetics in the early

stages of their disease and people with metabolic syndrome. This program was designed for the population who is yet under the radar of the chronic diseases that will move them into a higher risk category. The focus is to address the lifestyle behaviors that can be addressed by the participant. Pilot program designed for 15-20 participants. This program is starting up again in April 2016 for its second year with a full class of 20 participants.

Areas covered in 4 sessions:

1. **Introduction session** (led by diabetic educator, care coordinator, overview of weight management in relation to diabetes, heart disease, bone health, etc.)
2. **Healthy Nutrition** (by registered dietitians),
3. **Healthy Cooking and Shopping** (hands on food demos, label reading, grocery store tour)
4. **Physical Movement & Exercise** (lead by center for health and performance.)

First Breath Program Implementation for Aspirus Langlade Hospital: First Breath is a free program that helps pregnant women quit smoking through one-on-one counseling and personalized goal setting. First Breath is offered at prenatal care locations in 65 counties across Wisconsin. ALH is working on implementing this program into ALH Hospital and Clinic set for 2016-2017.

Prevent Suicide Langlade County Coalition: Smart Leaders Group: Funds requested by the coalition to fund a summer support group for students entering 7th-9th grade. Due to the number of depressed and suicidal middle school aged kids in our community, (information gathered by 2013 Youth Risk Behavior Survey), this group gives them that missing support system during the summer months. The group consists of education, activities, healthy snacks and opportunities to participate in Boys and Girls club summer field trips. By providing youth a regular safe environment to share concerns, talk with peers, learn leadership skills, and get support, the group helps youth in high risk groups (depressed/ suicidal youth) to be safe and healthier during the summer months.

Farm to Hospital Program: (March 2016-March 2017) Aspirus Langlade is 1 out of 15 hospitals accepted into the Farm to Hospital program through Wisconsin Healthy Hospitals: Farm to Hospital Community of Practice. The goal in this program is meant to provide time and space for participants to capitalize on the energy from the Healthy Hospitals and Clinics Forum and discuss new or pertinent issues in greater depth, possibly even developing individual or coordinated plans of action for solutions, or tools

that would support change. The team will conduct a Center for Disease Control Environmental Scan of their hospital café and develop 1-2 changes or adjustments that will be implemented over the course of the year.

Appendix C

Resources and Community Assets

First Tier Resources

Can provide man power and financial help under certain circumstances, not tightly defined as to whom they help.

Aging & Disability Resource Center	Head Start
AIDS Task Force	Health Care Center
Antigo Bible Church	Holy Family Catholic - Elcho
Antigo Community Church	Homestead Fellowship
Antigo Fire Department & Ambulance	Hope Presbyterian Church - White Lake
Antigo Medical Building	Aspirus Langlade Hospital
Antigo Seventh Day Adventist	Law enforcement
Apostolic Worship Center - Elton	Legislators
Arbutus Lutheran Church - Pearson	Liberty Baptist
Ascension Lutheran Church	Library
Aspirus Antigo Clinic	Lighthouse Baptist
AVAIL	Lutheran Social Services
Birth to 3	Mattoon United Methodist Church
Board of Supervisors	Media
Boys & Girls Club	Menominee
Building a Healthier Langlade County	New Life Church
Calvary Lutheran Church	Nicolet & Lakewood Clinic
Care Partners	Northcentral Technical College
Christ Gospel Church	Peace Lutheran
Church of Christ	Physicians
Church of the Nazarene - Mattoon	Potawatomi Health & Wellness
City Council	Reformation Presbyterian
Community Care of Central Wisconsin	Rosalia Gardens/Pine Meadow
Community Health Foundation	Rural Dental
County Health Department	Rural fire & rescue
Eastview Medical and Rehabilitation Center	School Districts (Antigo, Elcho, White Lake)
Elcho & Birnamwood Clinics	Social Services
Emergency Management	SS Mary & Hyacinth Parish
Evergreen Terrace	St. Ambrose Episcopal
Faith Center Church	St. James & Stanislaus Catholic - White Lake
Faith United Church of Christ	St. John Catholic Church
First Baptist Church	St. John Lutheran Church - Pickerel
Forward Services	St. John's Lutheran - Polar

Four Corners Assembly of God - White Lake

St. Joseph Holy Family Catholic Church - Phlox

St. Luke Lutheran - Elcho

Town Boards

St. Mary's Catholic - Pickerel

United Church of Christ - Elcho

St. Matthew Lutheran Church - Deerbrook

United Methodist Church

St. Matthew Lutheran Church - White Lake

United Way

St. Paul Lutheran - Birnamwood

Upper Room Family Church - Elcho

St. Peter Lutheran - Polar

UW Extension

St. Philomena Church - Birnamwood

VA

St. Wencels Catholic Church - Neva

VNA

Stockbridge-Munsee

Wetsel-Rasmussen Clinic

Second Tier Resources

Can possibly provide man power and financial resources, are more tightly defined as to whom they help.

Action Alliance

Goodwill

Al-Anon & Ala-Teen

Grief Support Group

Alcoholics Anonymous

Healthy Ways

Alzheimer's Association

Heart Healthy

American Cancer Society

Hope Pregnancy Resource Center

American Legion

Hospice

Associate for Disabled Citizens

Housing Authority

Community Association of Retirees

Job Corps

Cancer Support Group

Kiwanis

Center for Health & Performance

Knights of Columbus

Child Care Center

Lifeline

City Park & Rec

MADD

Communities for Medication Safety

Meals on Wheels

Compassionate Friends

Narcotics Anonymous

Crimestoppers

Optimist Club

DARE

Parent Teacher Organizations (PTO)

Eating Disorders

Red Cross

Epilepsy disorders

Relay for Life

Faith in Action

SADD

Family Planning

Salvation Army

Family Resource Center

Special Olympics

First Call

Suicide Prevention

Food Pantry - White Lake, Antigo

Veterans of Foreign Wars

Free & reduced lunch

Weight Watchers

Giving Tree

Woman Infant Children (WIC)

Third Tier Resources

Can be called on in specific situations to help or can help direct people to where the help can be found.

4-H	Gartzke Flowage
Adult baseball league	Golf courses
Airport	Grocery stores
Antigo Community Theater	Habitat for Humanity
Antigo Music Association	Historical Society
Aquatic Center	Home schooling group
Area Businesses	Hot meal sites
Athletic Clubs	HS meal services
ATV Club	Humane Society
Auxiliary & Volunteers	Hwy Dept
AVA	Ice Age Trail
Badgerland Classics & Customs	Jack Lake
Bike Club	Jail
Blackwell	Junior Women's Club
BMO/Harris Bank	Kettlebowl
Booster Clubs	Kids TravelSafe of Langlade County
Casinos	Lake Associations
Chamber of Commerce	Land Conservation
Chase Bank	LAVA
Chiropractors	Lions Club
Church youth groups	Little league
Citizens Bank	Manufact. Assoc.
Community at Large	Moccasin trail
Community band	Museum
Community exercise – yoga, Zumba	Music in the Park
Community Theater	National Guard
Courthouse & City Hall	Nurses Association
CoVantage Credit Union	Optometrist
CSA	Pharmacies
Dentists	Political groups
DMV	Recruiters
DNR	Red Robin Transit
Drug Rep	REGI
Elks club	Restaurants
Farm Associations - WPVGA, etc.	Rotary Club
Farmers Market	School Ambassador Groups
Figure Skating Club	Scout troops
Forestry & Park Dept	Shooting range

Garden Group
Ski Club
Sled Dog Club
Snowmobile Clubs
Spec. Stores
State Patrol
Tavern League

Silver Birch Ranch
Teachers Association
Triple R Riding Club
Trout Unlimited, Ducks Unlimited
Van Services
Vets
Youth football

Appendix D

Key Informant Interviews

**Aspirus Langlade Hospital
Community Health Needs Assessment 2016
Key Informant Interview
November 2015**

Estimated Interview Time: 30 minutes

Instructions: Introduce our effort to complete our 2nd cycle in conducting a community health needs assessment over the next several months. Explain our intent to gather relevant information from many different sources to determine the most significant health needs in Langlade County and the surrounding area. Our ultimate goal is to prioritize those needs and to develop an action plan to positively impact those needs. Explain that their input is important to us and will be included among the information that we are collecting. Finally, assure them that we will widely disseminate the results of our community health needs assessment when completed.

Name/Title of Key Informant: _____
Occupation: _____
Residence Zip Code: _____
Date of Interview: __/__/____
Name of Person Conducting the Interview: _____

1. From your perspective, what do you believe are the most significant health issues affecting the people living in Langlade County and the surrounding area?

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

Notes: _____

2. Of those health issues which you have identified, which one or two would you consider to be the most significant or serious issues and Why?

1. Issue _____

Why? _____

What Factors do you think contribute to the issue?

2. Issue _____

Why? _____

What Factors do you think contribute to the issue?

Notes: _____

3. What group or population of people do you believe are most affected by this/these issue(s)?

1. Group/population _____

2. Group/population _____

Notes: _____

4. In your estimation, what has been done or is now being done to positively impact this/these issue(s)?

1.What? _____

2.What? _____

Notes: _____

5. What barriers do you believe make improvement with this/these issue(s) more difficult?

1.Barriers: _____

2.Barriers: _____

Notes: _____

6. In your opinion, what could be done, that perhaps hasn't been done, to positively impact this/these significant health issue(s)?

1.Issue: _____

2.Issue: _____

Notes: _____

7. Have you heard of the Langlade Health Coalition?

___ Yes ___ No

****PLEASE THANK THE INFORMANT FOR SHARING THEIR INSIGHTS AND PERSPECTIVES****

Appendix E

Community Health Needs Public Survey

Community Health Needs Survey 2016



Passion for excellence. Compassion for people.

Aspirus Langlade Hospital wants to know what you think are the most troubling health problems facing the people living in the Langlade County area. The hospital is doing this survey as part of a Community Health Needs study. The hospital will use the results of the study to help improve the health problems that are found to be the most important. The hospital is working with other public, health and social services groups to complete the study and results will be made available in the summer of 2016.

Your opinion is important to us so please take just a few minutes to answer the questions on the survey and help us learn more about our local health needs. If you have any questions concerning this survey please call 715-623-9520.

Thank you for your participation!

David R. Schneider
Executive Director
Aspirus Langlade Hospital
112 E Fifth Avenue
Antigo, WI 54409

Meghan O'Hearn
Community Health Improvement Specialist
Aspirus Langlade Hospital
112 E Fifth Avenue
Antigo, WI 54409

1. Please enter your 5-digit zip code

2. Please select your gender

- Female
- Male

3. Please select your age range

- 0-17
- 18-20
- 21-29
- 30-39
- 40-49
- 50-59
- 60-69
- 70-79
- 80-89
- 90+

4. Please select your race. Check all that apply. (Optional)

- White
- African American
- Asian
- American Indian
- Pacific Islander

5. Please select your ethnicity. Check all that apply. (Optional)

- Hispanic
- Latino
- Non-Hispanic or Non-Latino

6. What do you see as the most important health issues facing Llanglade County and the surrounding area? Please select all those that apply.

- Wellness & prevention services
- Prenatal care
- Coordination of health care
- Prescription drug affordability

- Ability to see my regular medical provider
- Heart disease & stroke
- Cancer
- Mental health
- Substance abuse/chemical dependency
- Reliable health information
- Teen pregnancy
- Sexually transmitted diseases
- Motor vehicle crashes & other accidental injuries
- Oral health / dental services
- Diabetes
- Poverty
- Obesity
- Childhood behavioral issues
- Suicide

Other (please specify)

7. Which of the two health issues in question #5 would you consider to be the most significant or serious in Langlade County and the surrounding area? Please select only two.

- Lack of wellness & prevention services
- Lack of prenatal care
- Coordination of health care
- Prescription drug affordability
- Ability to see my regular medical provider
- Heart disease & stroke
- Cancer
- Mental health
- Substance abuse/chemical dependency
- Lack of reliable health information
- Teen pregnancy
- Sexually transmitted diseases

- Motor vehicle crashes & other accidental injuries
- Lack of oral health / dental services
- Diabetes
- Poverty
- Obesity
- Childhood behavioral issues
- Suicide

Other (please specify)

8. What do you think causes these issues chosen above?

9. What are the greatest difficulties to accessing health care services in Langlade County and surrounding area? Check all that apply

- Lack of time
- Unable to get time off for appointments
- Transportation
- Having no insurance
- Appointments not available after hours or weekends
- Lack of knowledge about available resources
- Cost of healthcare
- Language / cultural differences
- Appointments not available during the week
- Availability of needed services in our area

Other (please specify)

10. What are the greatest needs in the health care services in Langlade County and surrounding areas?

- Services for those with disabilities
- Mental health services
- Substance abuse services
- End-of-life care (hospice, palliative care)

- Primary care (one main medical provider)
- Services for senior citizens
- Prescription drug assistance
- Ability to serve different cultures/languages
- Specialty care
- Dental care
- Services for migrant population
- Services for low income residents
- Services for children
- Services for Veterans
- Services for childhood behavioral issues

Other (please specify)

11. What are the greatest needs regarding health education and preventative services?

Check all that apply.

- Reproductive health
- Tobacco prevention & cessation
- Healthy lifestyles (diet, exercise, etc.)
- Mental health & substance abuse
- Obesity prevention
- Disease specific information (heart disease, cancer, diabetes, etc.)
- Translated health information for non-English speakers
- Oral/dental health
- Health screenings (checkups)
- Child development and parent education

Other (please specify)

12. Where do you go to seek/obtain health information? Check all that apply

- Public Health Department
- Doctor office/visits
- Schools

- Hospital website
- Magazines or other publications
- Church, Clergy
- Medical provider
- Internet searching
- Television
- Chiropractor
- Local newspaper
- Friends or relatives
- Radio
- Social Groups

Other (please specify)

13. Who are the local vulnerable populations most affected by insufficient health care needs? Check all that apply.

- Senior citizens
- Low income or "working poor"
- Migrants
- Early to elementary childhood
- Youth/teen
- Victims of violence
- Hispanics/Latinos
- Native Americans
- Asians
- African Americans
- Single Parent households
- Uninsured
- Veterans

Other (please specify)

14. What do you consider to be the most important public concerns in Laclede County and surrounding area? Please select only three.

- Lack of social support (isolation)
- Poverty
- Separated families
- Services for senior citizens
- Education levels
- Homelessness
- Discrimination
- Alcohol abuse/addiction
- Migrant population
- Unemployment
- Crime/violence
- Drug abuse (illegal & prescription)
- Child abuse/neglect
- Domestic violence
- Suicide
- Gang-related activity
- Language & other cultural barriers
- Transportation
- Incarcerated population

Other (please specify)

15. Please share with us any groups that you represent or are part of. Check all that may apply.

- Agriculture
- Business community (non-agriculture)
- Corrections
- Disabled
- Healthcare
- Education

- Elected official
- Faith community
- Government agency
- Health care provider (medical, dental, mental)
- Interested citizen not affiliated with an organization
- Law enforcement
- Media (newspaper, radio, etc.)
- Minorities
- Public health
- Senior citizen
- Social service
- Youth
- Manufacturing
- Unemployed
- Community organization

Other (please specify)

The following data would help provide us some information about those responding to this survey. This information is optional, and you may choose to leave it blank and remain anonymous, or only include partial information if you desire.

16. Please enter as much information as you are comfortable sharing. Feel free to leave blank if you prefer to remain anonymous.

Name:

Organization (if any):

Address:

Address 2:

City/Town:

State:

ZIP:

Country:

Email Address:
Phone Number:

Survey available in other languages, please call for availability: 715-623-9758

Encuesta disponible en otros idiomas, por favor llame para disponibilidad: 715-623-9758

Appendix F

Public Notification Letter



Passion for excellence. Compassion for people.

112 East Fifth Avenue, Antigo, WI 54409
P 715.623.2331 | aspirus.org

Religious Hospitaliers of St. Joseph Health Corporation

October 22, 2015

Dear Community Advocate:

The purpose of this letter is to make you aware that we are initiating the Community Health Needs Assessment (CHNA) process once again at Aspirus Langlade Hospital. The hospital conducted its first CHNA in June 2013 in collaboration with many community partners. Completion of a CHNA is now an ongoing requirement of all not-for-profit hospitals as outlined in the Patient Protection and Affordable Care Act signed into law in March 2010. We are now in our third year of a three year cycle and will be starting up efforts again to conduct Langlade County's CHNA starting next month and expect to complete the process by June 2016.

As a result of the June 2013 Community Health Needs Assessment, many community programs have emerged addressing the following identified health priorities: Affordability of Healthcare and Prescription Medication Costs, Obesity, Substance Abuse and Wellness and Prevention. The Langlade Health Coalition, a local community team of government, social service and health care organizations, was established as a result of the first CHNA and will continue to work on the identified health initiatives.

Some of the programs re-vitalized and/or started within the community due to the CHNA process and research include the Vacation Bible School Nutrition and Hygiene Education program, an after school program for kids designed to teach basics on nutrition and healthy active lifestyle habits, a yearlong community heart health campaign, the 100 Mile Club designed to encourage kids to walk or run during the school year, the WeekEnd Backpack Program for children and family living in poverty, and the Aspirus Langlade Hospital Prevention Fund to support local community health needs and emergencies, are just to name a few. You will be receiving a full report on these and the many programs that have been established over the last three years from the CHNA efforts.

We would like to call upon you to complete an interview with you to gain your perspective on health related issues in Langlade County as part of our CHNA process. Our county has seen great success with collaboration of multiple community entities and will continue to push forward with the next CHNA process and research just as we've done the first time around.

We would sincerely appreciate your consideration of our request when we call upon you. This will be another opportunity for people in community leadership roles to positively impact the quality of life for those of us living in Langlade County. Thank you for your consideration of this important project.

Sincerely,

A handwritten signature in blue ink that reads "David Schneider".

David Schneider
Executive Director

A handwritten signature in black ink that reads "Meghan O'Hearn".

Meghan O'Hearn
Community Health Improvement Specialist

Appendix F

Public Notice- Sample flyer, sign and mass email

We Want To Hear From You!

Aspirus Langlade Hospital wants to know what you think are the most troubling health problems facing the people living in the Langlade County area.

The hospital is conducting a survey as part of a Community Health Needs Assessment. The hospital will use the results of the study to help improve the health problems that are found to be the most important. We are working with other public, health and social services groups to complete the study and will make the results available in the summer of 2016.

Your opinion is important to us! Please take just a few minutes to take the hard copy survey OR visit https://www.surveymonkey.com/r/2016_ALH_CHNA and complete the online survey to help us learn more about our local health needs.

Thank you for your participation!



ASPIRUS™

LANGLADE HOSPITAL™

Passion for excellence. Compassion for people.

Appendix F

Public Notices- Aspirus Langlade Hospital Winter 2015 Pathways Article sent to over 26,000 homes in primary service area



How far we've come!

Community health goals reach milestones of achievement

IN June 2013, Aspirus Langlade Hospital and community partners completed a Community Health Needs Assessment that identified four health priorities:

- ▶ Affordability of health care and prescription medication costs.
- ▶ Obesity.
- ▶ Substance abuse.
- ▶ Wellness and prevention.

The Langlade Health Coalition was established to address these health needs.

Two Coalition teams implemented great programs this year that have been making a meaningful impact on our community: the 100 Mile Club®, a national program designed for students to run or walk 100 miles during the school year, and WeekEnd Backpacks (WEB), a food program for schoolkids.

The 100 Mile Club®

The Unified School District of Antigo continues to see success with its participation in the 100 Mile Club® program, which has been implemented in 11 schools. More than 2,100 students have accepted the challenge.

As of December 2015, over 655 children have earned 25 miles or more—receiving rewards and incentives and progressing

in physical activity along the way. A public recognition event was held Oct. 16 at a varsity football game, and more community events will be held during the school year.

WeekEnd Backpacks

WEB began at an elementary school where 80 percent of the children are on free or reduced-cost school lunches. During the first week of the program, the Coalition team packed 30 backpacks of food for 66 children. Each item is ready to eat or easy for children to prepare. One weekend a month, the backpacks also contain food for the child's family members.

Excitement for the WEB program is evident—volunteers are booked for every week for the first year. Community members can sponsor a backpack for \$120 a year. Donations can be made to the Antigo Community Food Pantry.

For more information about WEB, email Program Coordinator Kari Lazars at kari.lazars@ces.uwex.edu or call 715-627-6236. Parents or guardians can get applications for the program, which are kept confidential, from their child's principal or by contacting Lazars.



More strides toward community health goals

Some other programs that were created or revitalized to meet community health needs include the Vacation Bible School Nutrition and Hygiene Education program, an after-school program for kids designed to teach basics on nutrition and healthy active lifestyle habits; a yearlong community heart health campaign; and the Aspirus Langlade Hospital Prevention Fund to support local community health needs and emergencies.



LET US KNOW WHAT YOU THINK

Take the Community Health Needs Assessment survey today at www.surveymonkey.com/r/2016_ALH_CHNA.

Appendix G

Health Priority Determination by Source

Key Informant Interviews

1. Mental Health
2. Substance Abuse/ Chemical dependency
3. Child Abuse/ neglect
4. Overall wellness
5. Lack of resources
6. Lack of support for professionals

Online/ Mail in Surveys

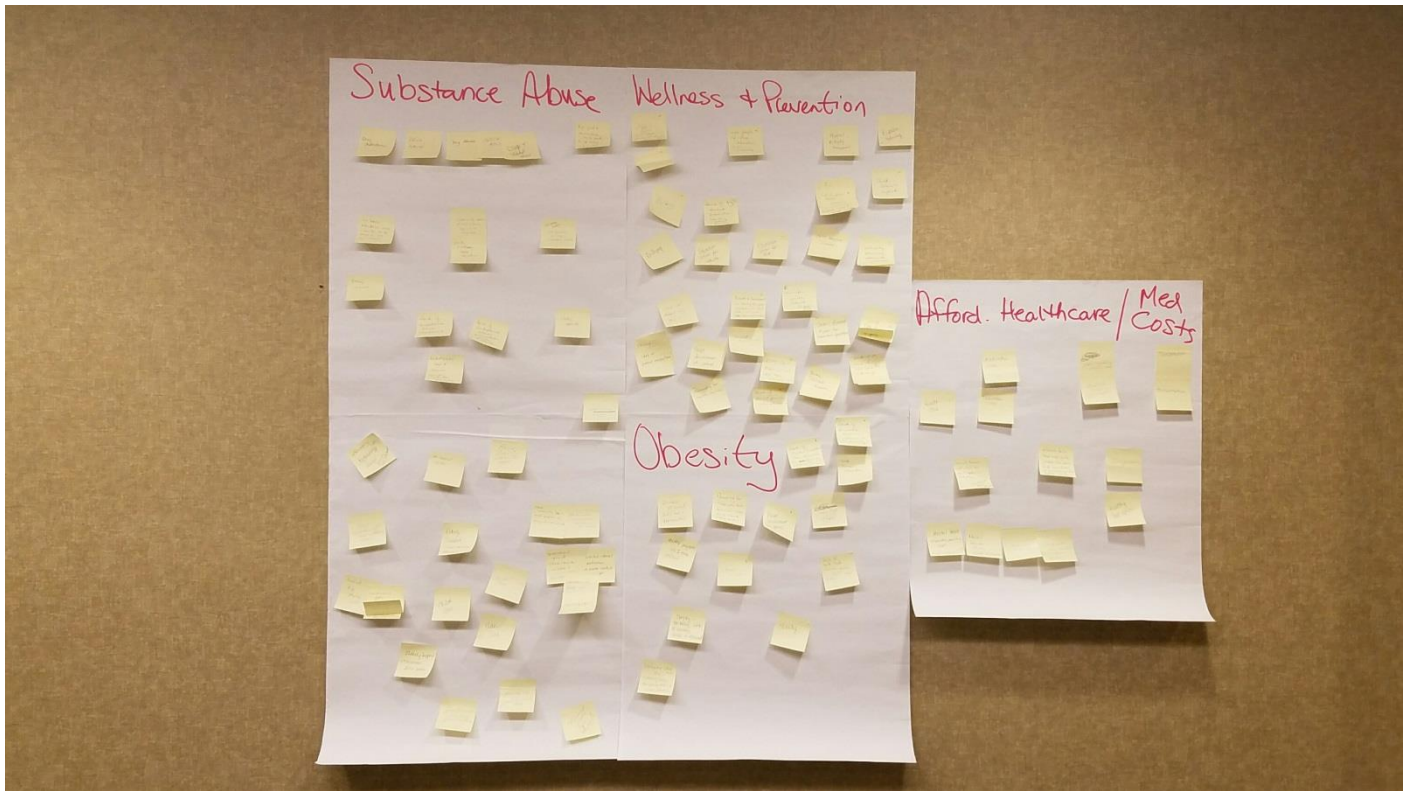
1. Mental Health
2. Substance Abuse
3. Affordability of Healthcare/Prescription Drug Affordability
4. Wellness and prevention services
5. Obesity
6. Child Behavioral Issues/ Parenting Issues
7. Cancer
8. Lack of resources

Issues Identified by Outside Sources

1. Mental Health
2. Obesity
3. Substance Abuse
4. Child Abuse and neglect
5. Lack of providers

Appendix H

Root Cause Analysis Activity



X. References

"2015 Langelade County." *WISH- Wisconsin Interactive Statistics on Health*. Office of Health Informatics- Division of Public Health, 2015. Web. Mar.-Apr. 2016. <<https://www.dhs.wisconsin.gov/wish/index.htm>>.

2015 Wisconsin Health Trends: Making Wisconsin the Healthiest State. Rep. University of Wisconsin Population Health Institute, School of Medicine and Public Health, Feb. 2016. Web. Mar.-Apr. 2016. <<https://uwphi.pophealth.wisc.edu/publications/other/wisconsin-health-trends-2015-progress-report.pdf>>.

Annual SYNAR Report. Rep. no. 0930-0222. State Council on Alcohol and Other Drug Abuse, 2016. Web. Mar.-Apr. 2016. <<https://scaoda.wisconsin.gov/>>.

Annual Wisconsin Death Report. Rep. Wisconsin Department of Health Services, Sept.-Oct. 2015. Web. Mar.-Apr. 2016. <<https://www.dhs.wisconsin.gov/publications/p01170-16.pdf>>.

"Applying Research Principles to the Community Health Needs Assessment Process." *HPOE.org*. Hospitals in Pursuit of Excellence- American Hospital Association, 2014. Web. Mar.-Apr. 2016. <<http://www.hpoe.org/resources/hpoehealth-guides/2858>>.

"Approaches to Population Health in 2015: A National Survey of Hospitals." *Hospitals in Pursuit of Excellence- American Hospital Association*. American Hospital Association, 2014. Web. Mar.-Apr. 2016. <<http://www.hpoe.org/resources/hpoehealth-guides/2650#>>.

Aspirus Langlade Hospital Patient Volumes in Primary Service Area. Dec. 2015. Raw data.
Langlade County, Antigo.

Aspirus Langlade Hospital Uninsured Patients as a Percentage of Total Patients
2013,2014,2015,3/31/2016. 2016. Raw data. Langlade County, Antigo.

"Assessing and Improving Community Health in Wisconsin." *Assessing and Improving
Community Health in Wisconsin*. University of Wisconsin Population Health Institute,
2016. Web. Mar.-Apr. 2016. <<http://www.improvingwihealth.org/>>.

"Association for Community Health Improvement." *AHA Community Health*. American Hospital
Association, 2016. Web. Mar.-Apr. 2016. <<http://www.healthycommunities.org/>>.

The Burden of Excessive Alcohol Use in Wisconsin. Rep. University of Wisconsin Population
Health Institute, Mar. 2013. Web. Mar.-Apr. 2016.
<https://law.wisc.edu/wapp/alcohol_burden_full_report.pdf>.

"Community Health Improvement Toolkit - Health Resource in Action." *Advancing Public Health
and Medical Resources*. Health Resources in Action, 2013. Web. Mar.-Apr. 2016.
<<https://hria.org/resources/community-health-improvement-toolkit/>>.

"County Level Summary Data for WI, 2015." *U.S. Department of Health and Human Services*.
2015. Web. Mar.-Apr. 2016.

Data Access and Dissemination Systems (DADS). "Community Facts- Langlade County, WI." *U.S.
Census Bureau*. U.S. Department of Commerce, 2010. Web. Mar.-Apr. 2016.
<http://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml?src=bkmk>.

Date, By. "Wisconsin Council on Children and Families- Langlade County Data." *WCCF*.

Wisconsin Council on Children and Families, Inc, 2015. Web. Mar.-Apr. 2016.

<<http://www.wccf.org/>>.

Developing an Effective Evaluation Plan. Setting the Course for Effective Program Evaluation.

National Center for Chronic Disease Prevention and Health Promotion, 2011. Web.

<<http://www.cdc.gov/obesity/downloads/CDC-Evaluation-Workbook-508.pdf>>.

"Healthiest Wisconsin 2020 Baseline and Health Disparities Report." *Wisconsin Department of Health Services*.

Wisconsin Department of Health Services, 02 Sept. 2015. Web. Mar.-

Apr. 2016. <<https://www.dhs.wisconsin.gov/hw2020/baseline.htm>>.

"Langlade County Community Health Improvement Plan." Langlade County Health Department.

Web. 2015. <<http://www.co.langlade.wi.us/healthdepartmentchipreport.pdf>>.

Langlade County Community Health Needs Assessment June 2013. Rep. Antigo: Aspirus

Langlade Hospital, 2013. Web. Mar.-Apr. 2015. <[http://langladecountyhealth.org/wp-](http://langladecountyhealth.org/wp-content/uploads/2013/10/Langlade-CHNA-Final-Report-June-2013.pdf)

[content/uploads/2013/10/Langlade-CHNA-Final-Report-June-2013.pdf](http://langladecountyhealth.org/wp-content/uploads/2013/10/Langlade-CHNA-Final-Report-June-2013.pdf)>.

"Langlade County Facts and Information." *Centers for Disease Control and Prevention*. Centers

for Disease Control and Prevention, 28 Jan. 2016. Web. Mar.-Apr. 2016.

<<http://www.cdc.gov/>>.

"Langlade County, WI | County Health Rankings." *County Health Rankings & Roadmaps*.

University of Wisconsin Population Health Institute, 2015. Web. Mar.-Apr. 2016.

<<http://www.countyhealthrankings.org/>>.

Langlade County Workforce & Economic Profile 2015. Rep. Web. Mar.-Apr. 2016.

<<http://dwd.wisconsin.gov/oea>>.

National Cancer Facts and Figures 2016. Publication no. 500816. American Cancer Society, Jan. 2016. Web. Mar.-Apr. 2016.

<<http://www.cancer.org/acs/groups/content/@research/documents/document/acspc-047079.pdf>>.

"Poverty and Food Security in Langlade County, Wisconsin." (2014). Web. Mar.-Apr. 2016.

<http://www.apl.wisc.edu/resource_profiles/pfs_profiles/langlade_2014.pdf>.

"Prescription Painkillers. After the Pain, They're Just Killers." *Dose of Reality WI*. Wisconsin Department of Justice, 2016. Web. Mar.-Apr. 2016. <<http://doseofrealitywi.gov/>>.

"Resource Center for Community Health Assessments and Community Health Improvement

Plans." *The National Connection for Local Public Health Information*. National

Association of County and City Health Officials, 2015. Web. Mar.-Apr. 2016.

<<http://archived.naccho.org/topics/infrastructure/CHAIP/chachip-online-resource-center.cfm>>.

Smoking During Pregnancy in Wisconsin: An Update on Trends and Patterns. Rep. University of

Wisconsin Milwaukee, 2013. Web. Mar.-Apr. 2016. <[http://uwm.edu/cuir/wp-](http://uwm.edu/cuir/wp-content/uploads/sites/111/2016/05/Smoking-During-Pregnancy_1990-thru-2013_released-5-4-2016.pdf)

[content/uploads/sites/111/2016/05/Smoking-During-Pregnancy_1990-thru-](http://uwm.edu/cuir/wp-content/uploads/sites/111/2016/05/Smoking-During-Pregnancy_1990-thru-2013_released-5-4-2016.pdf)

[2013_released-5-4-2016.pdf](http://uwm.edu/cuir/wp-content/uploads/sites/111/2016/05/Smoking-During-Pregnancy_1990-thru-2013_released-5-4-2016.pdf)>.

SNAP (Food Stamps) Participation in Langlade County Vs. Wisconsin 2010-2014. July 2013. Raw data. Langlade County, Antigo.

"Social Services." *Welcome to Langlade County, Wisconsin*. Langlade County Department of Social Services, 2012. Web. Mar.-Apr. 2016.

<<http://www.co.langlade.wi.us/socialservices.htm>>.

"Substance Abuse Services - Resources." *Wisconsin Department of Health Services*. 20 Sept. 2016. Web. Mar.-Apr. 2016. <<https://www.dhs.wisconsin.gov/aoda/index.htm>>.

"UW Population Health Institute." *UW Population Health Institute*. Department of Population Health Services, 2015. Web. Mar.-Apr. 2016. <<https://uwphi.pophealth.wisc.edu/>>.

"Wisconsin Department of Health Services." *Wisconsin Department of Health Services*. 2015. Web. Mar.-Apr. 2016. <<https://www.dhs.wisconsin.gov/>>.

"Wisconsin Epidemiological Profile on Alcohol and Other Drug Use, 2014." Sept. 2014. Web. Mar.-Apr. 2016. <<https://www.dhs.wisconsin.gov/publications/p4/p45718-14.pdf>>.

Wisconsin Poverty Report: Poverty Rises in 2013 Despite Growth in Jobs. Rep. University of Wisconsin Madison Institute for Research on Poverty, Apr. 2015. Web. Mar.-Apr. 2016. <<http://www.irp.wisc.edu/research/WisconsinPoverty/pdfs/WI-PovertyReport2015.pdf>>.

"Wisconsin State Council On Alcohol and Other Drug Abuse." *SCAODA | State Council On Alcohol and Other Drug Abuse*. 2015. Web. Mar.-Apr. 2016. <<https://scaoda.wisconsin.gov/>>.

"Wisconsin Suicide Prevention." *Wisconsin Facts and Figures*. Wisconsin Department of Health Services, 02 Sept. 2015. Web. Mar.-Apr. 2016. <<https://www.dhs.wisconsin.gov/injury-prevention/suicideprevention.htm>>.