2014 *Community Health Needs Assessment* Report

2015-2017 *Implementation* Strategy

Aurora Sheboygan Memorial Medical Center

Aurora Sheboygan Memorial Medical Center
2929 N. 7th Street
Sheboygan, WI 53083

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Introduction

Aurora Health Care

Aurora Health Care, a not-for-profit, integrated health care system, is Wisconsin's most comprehensive health care provider and the state's largest private employer. As caregivers, we serve more than 1.2 million patients every year. Our patients enjoy care that is coordinated across an integrated network of facilities, services and providers. Aurora's 15 hospitals are bringing the latest technologies to communities across eastern Wisconsin and northern Illinois. Primary care clinics offer a wide array of primary and specialty physicians, diagnostic services and wellness programs. Home care, which includes nursing, durable medical equipment, hospice and therapy services, is coordinated through *Aurora at Home*. Our pharmacies, behavioral health services and labs all work together to provide a vital link in the continuum of care.

Hospital Profile: Aurora Sheboygan Memorial Medical Center (ASMMC)

Who we are. What we do

Aurora Sheboygan Memorial Medical Center was built to be a patient-centered health care facility within Aurora's integrated not-for-profit health care system. ASMMC has been named one of America's Top 100 Hospitals five of the past six years by Thomson Reuters. With over 150 physicians and providers, Aurora Sheboygan Memorial offers more than 25 specialties to serve the overall health needs of Sheboygan County. Aurora Sheboygan Memorial also provides the only inpatient behavioral health unit in Sheboygan and surrounding counties.

Who we serve

Our primary service area extends from Lake Michigan west to Plymouth. In addition to Sheboygan, this primary service area includes the communities of Howards Grove, Kohler, Oostburg, Plymouth and Sheboygan Falls. We also serve the Greater Sheboygan County area, including Adell, Cascade, Cedar Grove, Glenbeulah, Greenbush, Elkhart Lake, Random Lake and Waldo, as well as the neighboring communities of Kiel and New Holstein.

Aurora Sheboygan Memorial Medical Center by the Numbers (2013)

- 185 licensed hospital beds

More than

- 77,500 outpatient visits
- 5,400 inpatient visits
- 18,300 emergency department visits
- 900 newborn deliveries
- 5,800 surgical cases (inpatient and outpatient)

Area facilities

- Aurora Sheboygan Memorial Medical Center
- Aurora Surgery Center *(Plymouth)*
- Aurora Sheboygan Clinic *(two locations)*
- Community-based clinics *(seven sites, located in Cedar Grove, Howards Grove, Kiel, New Holstein, Plymouth, Random Lake, Sheboygan Falls)*
- Aurora Pharmacy *(five sites, some within community clinics)*

Ancillary service partners

- ACL Laboratories
- Aurora QuickCare
- Aurora Vision Center
- *Aurora at Home*
- Davita Dialysis
- Total Health and Wellness
- Vince Lombardi Cancer Clinic

Aurora Sheboygan Memorial Medical Center Distinctions

- **The Joint Commission**
  - *Joint Replacement Certification (Hip and Knee)*
  - *Primary Stroke Center Gold Seal of Approval*
  - *Spine Center of Excellence certificate*
- **Thomson Reuters**
  - *Top 100 Hospitals (five of the past six years)*

To learn more about our hospital, please click here.

Economic impact study – Sheboygan County (published June 2013)
A report by the University of Wisconsin-Milwaukee found that Aurora Health Care's economic impact is substantial in every county in which its hospitals, clinics and other ambulatory facilities operate.[1]

- Aurora's combined operations rank among the top five employers in Sheboygan County, at number three with 1,728 jobs. When taking into account the additional employment generated in the county through the ripple effects of Aurora's operations on other business, the number grows to 2,630 jobs (pg. 25).

- When all multiplier effects are calculated, Aurora's economic impact accounts for an estimated 5.3 percent of all employment and 7.4 percent of total payroll in Sheboygan County (pg. 26).

- Aurora's business output/input revenue for Sheboygan County has a total impact of $341.87 million (pg. 24).

Aurora Sheboygan Memorial Medical Center 2013 Community Benefits
- Community Benefits: $1,081,430
- Uncompensated Care: $9,702,000
  Community Benefit Report 2013 Aurora Sheboygan Memorial Medical Center (published May 2014)

Aurora Sheboygan Memorial Medical Center (ASMMC) 2014 Community Health Needs Assessment (CHNA) Report

The first report of its kind, entitled 2013 Community Health Needs Assessment Report, was adopted by the Social Responsibility Committee of the Aurora Health Care Board of Directors on November 22, 2013 and posted to the Community Benefits website. Over the past year there have been no written comments or public input. The 2014 Community Health Needs Assessment Report updates and expands upon the previously adopted version. To review the previous CHNA Report, visit http://www.aurora.org/commbenefits.

This report presents the findings from the Community Health Needs Assessment (CHNA) conducted January – August 2014 using a collaborative approach. These findings will be used to inform the priority focus areas for our hospital's Community Benefits three-year Implementation Strategy. The main body of this report is divided into the following sections: community served, how the CHNA was conducted, significant health needs identified through the CHNA and prioritized significant health needs.

Section 1 | Community served: Sheboygan County

Although Aurora Sheboygan Memorial Medical Center serves patients from Sheboygan County and beyond, for the purpose of the community health needs assessment the community served is defined as Sheboygan County.

Sheboygan County is located between Milwaukee and Green Bay along Lake Michigan. Sheboygan County is home to a wide variety of global brands, from companies such as Johnsonville and Bemis to Kohler and Sargento. The County has several academic centers including Lakeshore Technical College, Lakeland College, University of Wisconsin-Sheboygan and the Marquette-Kohler MBA Program.[2]

Sheboygan County is made up of suburban, rural and lakefront communities:[3]

- Cities of Plymouth, Sheboygan, Sheboygan Falls
- Villages of Adell, Cascade, Cedar Grove, Elkhart Lake, Glenbeulah, Howards Grove, Kohler, Oostburg, Random Lake, Waldo
- Towns of Greenbush, Herman, Holland, Lima, Lyndon, Mitchell, Mosel, Plymouth, Rhine, Russell, Scott, Sheboygan, Sheboygan Falls, Sherman, Wilson
- Unincorporated communities of Ada, Batavia, Beechwood, Cranberry Marsh, Edwards, Franklin, German Corners, Gibbsville, Gooseville, Greenbush, Haven, Hayen, Hingham, Hulls Crossing, Idlewood Beach, Johnsonville, Mosel, New Paris, Ourtown, Parnell, Rhine Center, St. Anna (partial), Silver Creek

Sheboygan County Demographic Information

According to the 2008-2012 American Community Survey, the population of Sheboygan County is 115,377. From the 2000 to 2010 Census, the County gained 2,861 residents, a 2.5% increase in population.

Age of population

Sheboygan County's age distribution is relatively similar to Wisconsin, with a slightly higher percentage of older adults. Sheboygan County median age is 40.2 years, older than Wisconsin (38.5 years).

	Sheboygan County	Wisconsin
0 -9 years	12.7%	12.6%
10 – 19 years	13.6%	13.6%
20 – 29 years	11.3%	13.3%
30 – 39 years	12.2%	12.3%
40 – 49 years	14.9%	14.3%
50 – 59 years	15.2%	14.4%
60 – 69 years	9.6%	9.5%
70 – 79 years	6.1%	5.6%
80+ years	4.6%	4.1%

-Secondary Data Report (Source #2), 2008-2012 American Community Survey.
Note: Some totals may be more or less than 100% due to rounding or response category distribution

Population change by age (2000 to 2010)

From the 2000 to 2010 Census, the age groups with the greatest decrease were among 10 – 19 years and 30 – 39 years. Conversely, the greatest increases were among 50 – 59 years and 60 – 69 years.

Age	2000 to 2010 Census Estimate change
0 – 9 years	-417
10 – 19 years	-1,138
20 – 29 years	-33
30 – 39 years	-3,347
40 – 49 years	-700
50 – 59 years	+5,215
60 – 69 years	+3,143
70 – 79 years	-457
80+ years	+595

-Secondary Data Report (Source #2), University of Wisconsin Extension,
The Applied Population Laboratory

Aging population

According to the Wisconsin Department of Administration, Demographic Services Center, in 2010, 14.6% of the total population was 65 years and older. It is projected this percentage will increase to 24.4% in 2020, which is five years from now. A greater number of older adults and increasing chronic disease will place further strains on resources and will have consequences for public health, health care financing and delivery systems, and informal caregiving.

Race and ethnicity of population

Sheboygan County's population is predominantly non-Hispanic White. The Hispanic/Latino population comprises 5.5% and the non-Hispanic Asian population comprises 4.7% of the total population. Sheboygan County's White and Asian population is higher compared to the state while the African American population is lower compared to the state.

Race/ethnicity	Sheboygan County	Wisconsin
Non-Hispanic White	91.0%	87.2%
Non-Hispanic Black	1.5%	6.2%
Non-Hispanic Asian	4.7%	2.3%
American Indian and Alaska Native	0.5%	0.9%
Some Other Race	0.8%	1.4%
Hispanic or Latino (of any race)	5.5%	5.9%

-Secondary Data Report (Source #2), 2008-2012 American Community Survey. Note: Some totals may be more or less than 100% due to rounding or response category distribution

Population change by race and ethnicity

From the 2000 to 2010 Census, the largest increases for race/ethnicity were among Hispanic or Latino population, followed by non-Hispanic Asian, and non-Hispanic Black, while non-Hispanic White declined.

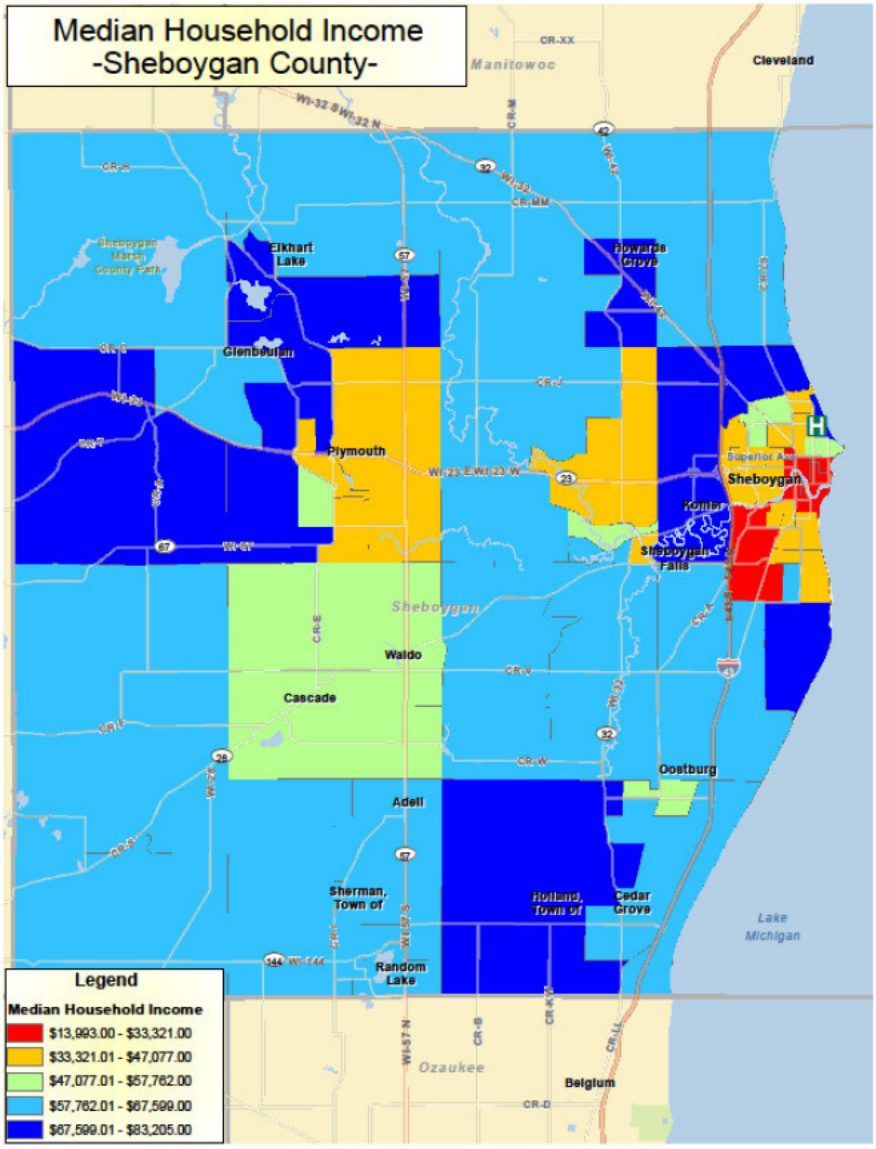
Race and ethnicity	2000 to 2010 Census Estimate change
Hispanic or Latino Population	+2,540
Not Hispanic or Latino	+321
White alone	-2,108
Black alone	+416
Asian alone	+1,610
Two or More Races	+321

-Secondary Data Report (Source #2), University of Wisconsin Extension, The Applied Population Laboratory

Median Household Income

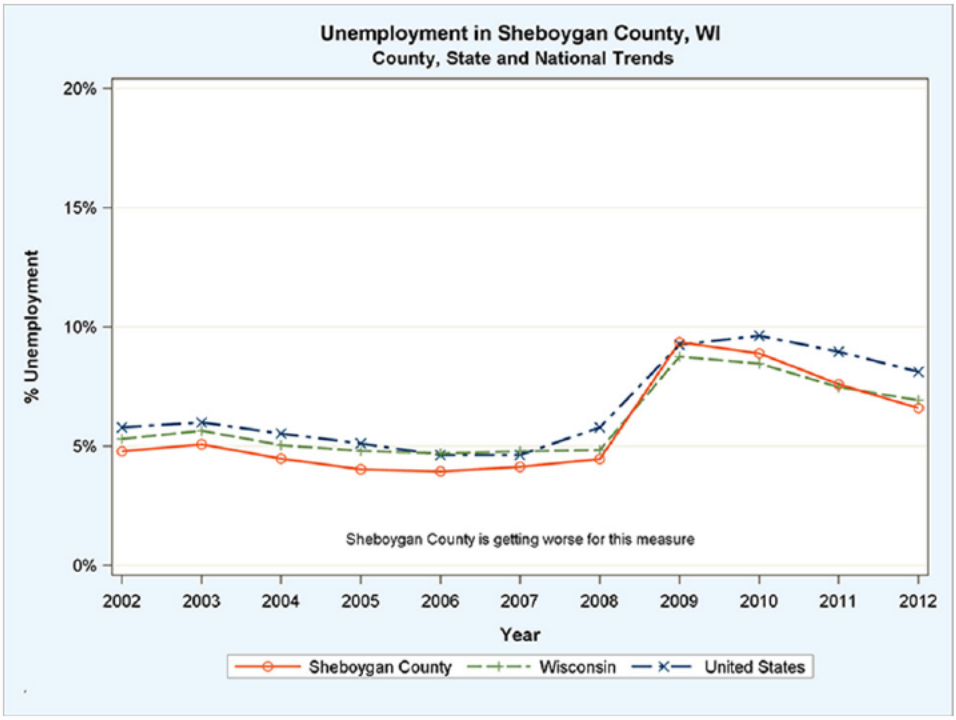
Median household income in Sheboygan County ($52,967) is almost identical to the state ($52,627). The map below presents the distribution of median household income and noted concentrated areas of wealth within the county. The census blocks with highest median household income levels are Elkhart Lake, Glenbeulah, Howard Grove, Kohler, Sheboygan Falls and the town of Holland (ranging from $67,599 - $83, 205).

The census blocks with the lowest median household income level are within the city of Sheboygan (ranging from $13,993 - $33,321).



Unemployment

From 2002 to 2008 Sheboygan County's unemployment rate held steady at around 5%, increased sharply from 2008 – 2009 to almost 10%, and from 2009 to 2012 has gradually declined. In 2012, Sheboygan County unemployment rate was similar to Wisconsin and slightly less than the national unemployment rate.



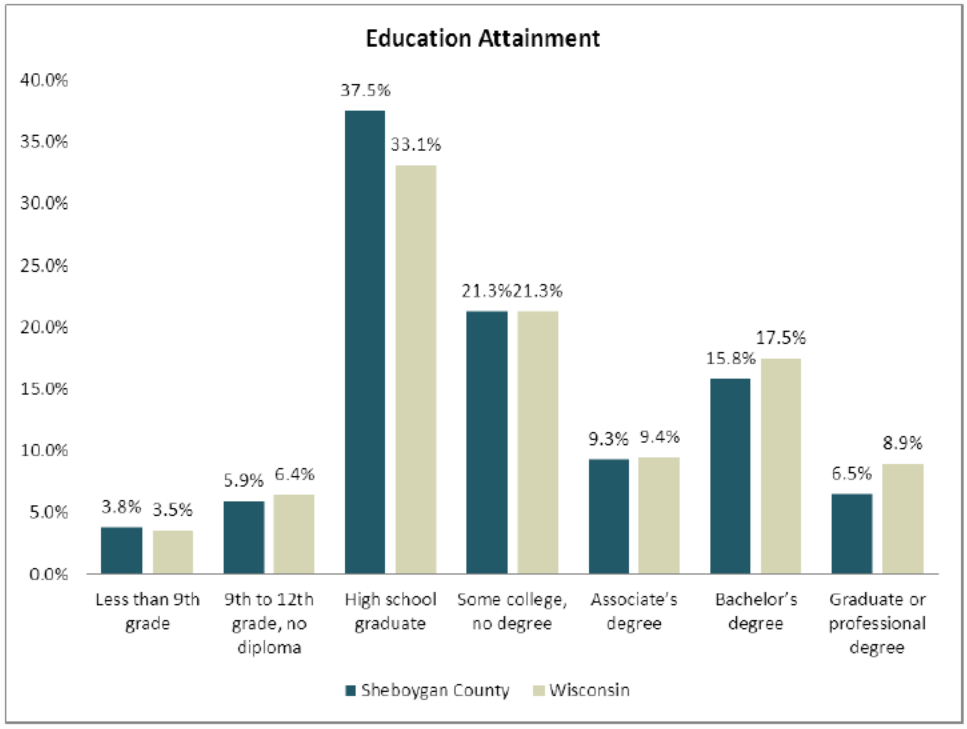
-Secondary Data Report (Source #2), County Health Rankings

Poverty

Based on figures from the U.S. Census Bureau, 2008-2012 American Community Survey, the percent of individuals living below poverty in the last 12 months was 8.8% in Sheboygan County, lower compared to the state (12.5%). In Sheboygan County 7.0% of people in families living below poverty in the last 12 months, lower compared to the state (9.5%).

Education Attainment of Population

Sheboygan County's education attainment for less than high school degree, some college, associate's degree and bachelor's degree is similar to Wisconsin. Compared to the state, Sheboygan County has a greater percentage of its population with a high school degree and a lower percentage with a graduate or professional degree.



Section 2 | How the Community Health Needs Assessment was conducted

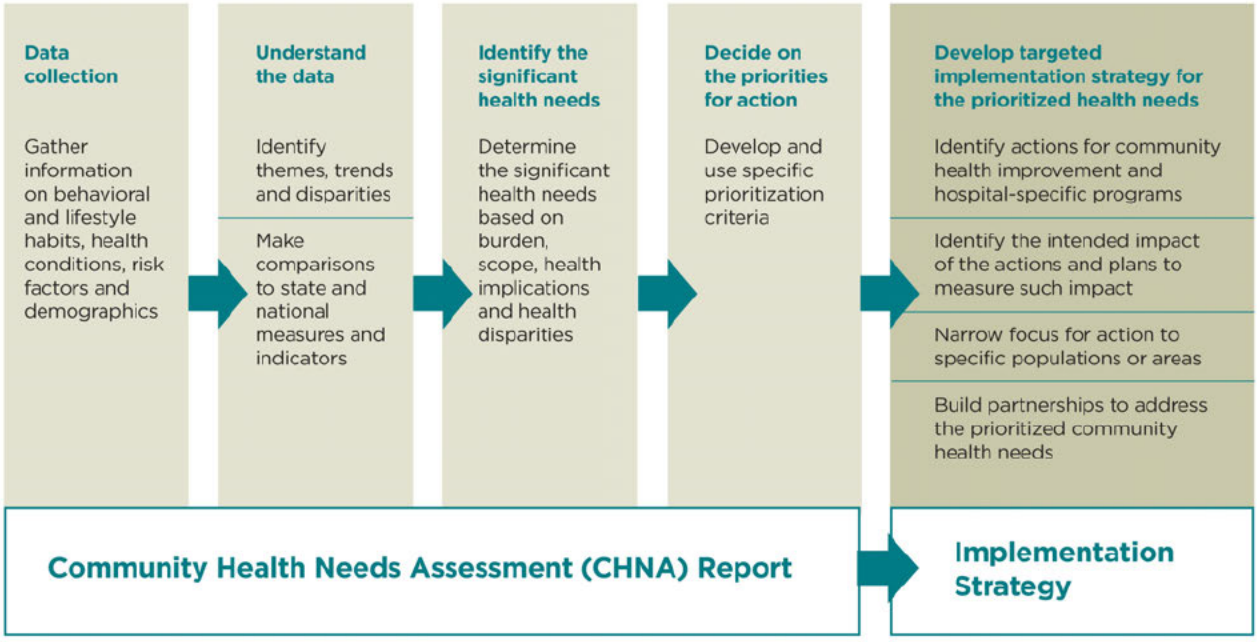
Partnership

Aurora Health Care, Lakeshore Community Health Center, St. Nicholas Hospital, Sheboygan County Health & Human Services - Division of Public Health, United Way of Sheboygan County and UW-Extension Sheboygan County worked in partnership to conduct the 2014 CHNA. The Center for Urban Population Health analyzed and prepared the key informant interview report.

The 2014 Community Health Needs Assessment is based on prior efforts undertaken by Aurora Health Care to assess community health needs. Since 2003, Aurora Health Care has underwritten a community health survey of Sheboygan County every three years, conducted in partnership with the Sheboygan County Department Health & Human Services – Division of Public Health. This helped the Division of Public Health focus its resources on population health issues and enabled Aurora Health Care to align our charitable resources and expertise to respond to the identified community health priorities. To view community health surveys dating back to 2003, visit http://www.aurora.org/commbenefits.

Purpose and process of the shared Community Health Needs Assessment

From January through August 2014, a shared Community Health Needs Assessment (CHNA) was conducted to 1) determine current community health needs in Sheboygan County, 2) gather input from persons who represent the broad interests of the community and to identify community assets, 3) identify and prioritize significant health needs, and 4) develop implementation strategies to address the prioritized health needs within the context of the hospital's existing programs, resources, strategic goals and partnerships. The process of conducting the CHNA is illustrated below and is described in this report.



Data collection and analysis

Quantitative data was collected through primary and secondary sources and was supplemented with qualitative data gathered through key informant interviews. Different data sources were collected, analyzed and published at different intervals and therefore the data years (e.g. 2014, 2012) will vary in this report. The most current data available was used for the CHNA.

The core data sources for the CHNA include:

Quantitative data sources

Sheboygan County Community Health Survey Report

The community health survey is a source of primary community health data. The latest telephone survey was completed between May 13 and June 4, 2014. This comprehensive phone-based survey gathers specific data on behavioral and lifestyle habits of the adult population. In addition, this report collects data on the prevalence of risk factors and disease conditions existing within the adult population and compares, where appropriate and available, health data of residents to state and national measures. Conducted every three years, the survey can be used to identify community trends and changes over time. New questions have been added at different points in time. JKV Research, LLC, analyzed the data and prepared the final report. For further description see Appendix A and for the community health survey summary see Appendix D.

Secondary Data Report

The report summarizes the demographic and health-related information for Sheboygan County. Data used in the report came from publicly available data sources. Data for each indicator is presented by race, ethnicity and gender when the data is available. The report was prepared by staff from Aurora Health Care, St. Nicholas Hospital and the Sheboygan County Health & Human Services – Division of Public Health. For further description see Appendix B.

Qualitative data source

Key Informant Interview Report

Twenty-two individual key informant interviews were conducted between May and July 2014. Each key informant was asked to rank order the top 3 to 5 major health-related issues for Sheboygan County, based on the focus areas presented in Wisconsin's State Health Plan, *Healthiest Wisconsin 2020*. For each top-ranked health topic the informant was asked to specify existing strategies to address the issue, barriers or challenges to addressing the issue, additional strategies needed and key groups in the community that hospitals should partner with to improve community health. Key informants included leaders from government agencies, education, local health care systems, human services, health centers and community organizations. These key informants focus on a range of public health issues and represent the broad interest of the community served, including medically underserved, low income and minority populations. For further description see Appendix C.

The Key Informant Interview Report compiles the results, including summaries of the top five health issues as well as additional identified health issues (Appendix C). The report was prepared by the Center for Urban Population Health.

Additional sources of data and information were used to prepare the Aurora Sheboygan Memorial Medical Center CHNA and considered when identifying significant community health needs:

Mental Health Conversation on Mental Health and Alcohol and Drug Abuse
On March 21, 2014 over 300 community stakeholders attended a Community Conversation about Mental Health and Alcohol and Drug Abuse at the Blue Harbor Resort in Sheboygan Wisconsin. The objectives of the day were as follows: 1) identify 3-5 community priorities to improve mental health and alcohol and drug abuse systems in Sheboygan County, 2) encourage community involvement through recruitment of action team members to move priorities forward, 3) move in a direction to create good mental health in our community, and 4) educate the community regarding the services available in Sheboygan County.

The sponsors included: Aurora Health Care, Healthy Sheboygan County 2020, Lakeshore Community Health Center, Mental Health America in Sheboygan County, Safe Harbor, Sheboygan County Health and Human Services Department, Sheboygan County Service Providers, St. Nicholas Hospital/Prevea Health, The Salvation Army, and United Community for Youth-Drug Free Community Grant, and United Way of Sheboygan County.

The Community Conversation on Mental Health executive summary and supporting documents are available at http://www.mhasheboygan.org/Pages/CommunityResources.aspx

Health Literacy Focus Group
The Sheboygan County Health Literacy Focus Group Study consisted of five focus groups held in late 2013 and early 2014 in Sheboygan at the Health & Human Services Building, the Hmong Mutual Assistance Association office, and the Partners for Community Development office, and in Sheboygan Falls at the Aging and Disability Resource Center. The groups consisted of county residents in the following “at risk” categories: 1) “Young” adults in the 18-35 age range, 2) “Senior” adults over the age of 65, 3) low-income adults, 4) Hmong-American adults and 5) Spanish speaking adults.

The primary purposes of the focus groups were to help local health care professionals to: 1) Gain a more in-depth understanding of the challenges facing certain “at risk” groups; 2) Comprehend more fully the obstacles preventing these groups from accurately and fully understanding their health care provider’s instructions; 3) Identify specific ways in which these groups might be helped to improve their health literacy.

The Sheboygan County Health Literacy Focus Group Report is available at http://www.healthysheboygancounty.org/resources/healthlitfocusgroupsfinalreport.pdf

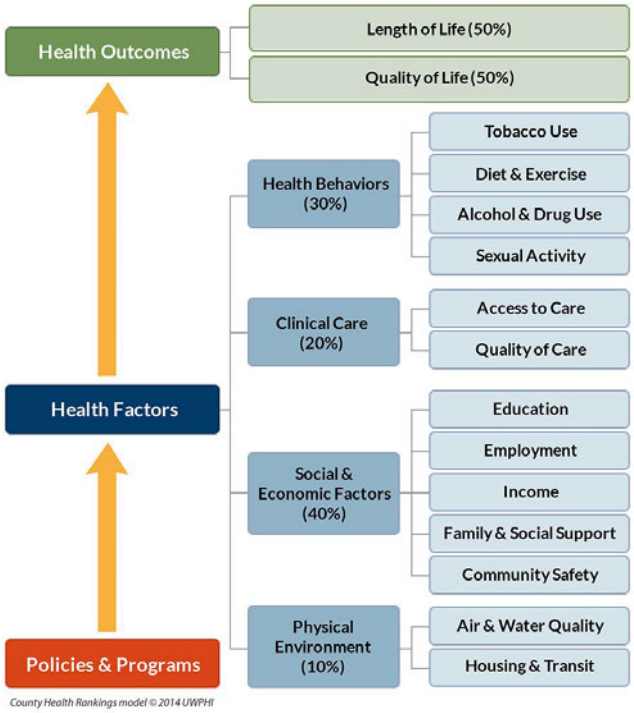
Data gaps and limitations

It is important to note that data were collected at one point in time, so while these findings are valuable and informative indicators, they should not be interpreted as definitive. While a comprehensive, collaborative approach was utilized and valid data sources were used for the community health needs assessment, some gaps and limitations exist. These are noted below.

- County level data are often not available for health topics (e.g. alcohol and drug dependence). Similarly, data is not available at the zip code level.
- In some cases, data are aggregated across multiple years to increase sample size (e.g. 2006-2010).
- Public health surveillance data has its limitations regarding whether the sample size for specific population groups is large enough for sub-group analyses. Several sources did not provide current data stratified by race/ethnicity, gender or age; therefore, this data could only be analyzed by total population.
- Countywide data that characterize health conditions, risk factors and lifestyle behaviors such as childhood obesity, diabetes, nutrition, exercise, tobacco use and mental health, are limited or not available for children and adolescents.
- Although the most recently available data were used for this assessment, several secondary data sources are one or more years old due to the nature of the reporting system used.
- While the key informant interviews are an essential part of the assessment and provide important insight into existing and emerging population health issues, the report relies on the opinions and experiences of a limited number of experts identified as having the community's pulse and responses may not be representative of the overall perception of community strengths and needs.

Section 3 | Significant health needs identified through the Community Health Needs Assessment (CHNA) for Sheboygan County

The following *County Health Rankings* diagram is based on a model of population health that emphasizes the many factors that, if improved, can help make communities healthier places to live, learn, work and play. The health of individuals and communities is influenced by many health factors, including obesity, smoking, access to care, education, income, employment status and level of family and social support. Factors such as income and education are also referred to upstream factors or social determinants of health.



Health factors, such as the ones listed above, can impact health outcomes. In the case of the *Rankings*, health outcomes represent how healthy a county is and are measured in two ways: 1) length of life (mortality) and 2) quality of life (how healthy people feel while alive).

According to the 2014 County Health Rankings released by the University of Wisconsin Population Health Institute and the Robert Wood Johnson Foundation, Sheboygan County ranked 27th in health outcomes and 12th in health factors (out of 72 counties) for Wisconsin's healthiest counties.[4]

Informed by this framework, this assessment provides information on many of these factors and key health outcomes among the people of Sheboygan County.

The significant health needs (health needs and issues that rose to the top) identified through the CHNA are also identified as key health issues for the state as outlined in the state health plan, *Healthiest Wisconsin 2020*, and the nation's health plan, *Healthy People 2020*, and are among major focus areas of the Centers for Disease Control and Prevention (CDC). From a county perspective, the significant health needs identified through the CHNA have an impact on community health, both for the community at-large and in particular specific areas within the community (such as neighborhoods or populations experiencing health disparities).

The *Healthy People 2020* definition of a health disparity:

> If a health outcome is seen in greater or lesser extent between populations, there is disparity. Race or ethnicity, sex, sexual identity, age, disability, socioeconomic status and geographic location all contribute to an individual's ability to achieve good health.

A wide variety of health issues and needs were identified in the 2014 community health needs assessment. To help select the major or most significant health issues, the following criteria were used:

- Burden of the health issue on individuals, families, hospitals and/or health care systems (e.g., illness, complications, cost, death);
- Scope of the health issue within the community and the health implications;
- Health disparities linked with the health issue; and/or
- Health priorities identified in the municipal health department Community Health Improvement Plan (CHIP)

Based on the criteria listed above, the most significant health issues for Sheboygan County include:

- Access
- Health care coverage
- Chronic disease (including diabetes, heart disease/condition, high blood pressure, cancer and stroke)
- Alcohol, drug & tobacco use
- Nutrition and physical activity
- High cholesterol
- Overweight and obesity
- Mental health
- Injury hospitalizations and falls
- Health literacy

The remainder of this section provides a summary of key findings from the 2014 community health survey, secondary data and key informant report.

Overview of significant health needs identified for Sheboygan County

Access

2014 Community Health Survey key findings

- In 2014, 1 of 7 respondents reported prescription medications were not taken by a household member due to costs in the past 12 months.
- In 2014, 15% of respondents reported there was a time in the last 12 months they did not receive medical care needed, nearly double from 2008. This translates to about 13,350 adults in Sheboygan County.
- In 2014, 16% reported unmet dental care in the past 12 months, which doubled from 2008.
- About 1 of 5 respondents reported they currently have swollen or bleeding gums, a toothache, a cracked tooth, or a cavity for which they need to see a dentist but have not gone for treatment (current unmet dental need).
- Unmet dental and medical care needs are on rise and improvements are needed to reach the *Healthy People 2020* targets.

How these findings are trending

	2008	2011	2014	
Prescription meds not taken due to cost (household) (past 12 months)	---	12%	14%	*Healthy People 2020* target: 3%
Unmet medical care (past 12 months)	9%	8%	15%	*Healthy People 2020* target: 4%
Unmet dental care (past 12 months)	7%	---	16%	*Healthy People 2020* target: 5%
Current unmet dental need	---	---	22%	

Who reported

Percent of respondents reported in 2014	Respondents more likely to report this:	Why is this significant?
 **Prescription meds not taken due to cost (household) (past 12 months)**	• bottom 40 percent household income bracket • children in the household	Lack of access to prescribed medication can decrease medication adherence and reduce self-management of chronic diseases and other health issues.[5]
 **Unmet medical care (past 12 months)**	• 18 to 44 years old • bottom 40 percent household income	Unmet medical care can lead to further health complications and increase future costs. Access to medical care can detect and treat disease at an earlier stage, improve overall health, prevent disease and disability, and reduce preventable deaths.[6]
 **Unmet dental care (past 12 months)**	• 18 to 34 years old • some post high school education • bottom 40 percent household income bracket • unmarried	Unmet dental care can increase the likelihood for oral disease, ranging from cavities to oral cancer, which can lead to pain and disability.
 **Current unmet dental need**	• 18 to 34 years old • bottom 40 percent household income bracket • unmarried	Access to oral health services can prevent cavities, gum disease and tooth loss, improve the detection of oral cancer and reduce future dental care costs.[7]

Reasons cited by respondents for unmet dental and medical care

- 64 respondents who reported they did not receive the dental care needed in 2014 were able to indicate more than one response:
  - 35% reported the inability to pay
  - 25% reported being uninsured
  - 16% reported they were unable to find a dentist to take Medicaid or other insurance
  - 15% reported insurance did not cover it

- 61 respondents who reported an unmet medical need in 2014 were able to indicate more than one response:
  - 42% reported the reason was poor medical care
  - 30% reported an inability to pay
  - 13% reported they were unable to get an appointment

2014 Key Informant Interview findings

Access as a top five health issue (ranked #3)

Existing Strategies:

- Lakeshore Community Health Center, Mental Health America and the Employee Assistance Program
- Other strategies in play are collaboration across agencies and creating awareness that access is an issue

Barriers and Challenges:

- Bureaucracy, paperwork, costs, and funding
- Lack of knowledge, resources, and successful navigation of existing resources to get appropriate access to services at the right time
- Language barriers and lack of child care at appointments

Needed Strategies:

- Increased funding and education for providers on services offered in the community
- Use of social media sites such as Facebook and Twitter

Oral health as a top five health issue (ranked #4)

Existing Strategies:

- Lakeshore Community Health Center's dental program as a key strategy to address oral health issues in Sheboygan County. This health center is the only local provider that serves individuals on medical assistance (e.g., Medicaid and BadgerCare) and those who have no insurance.
- Dental Access Committee and the Give a Kid a Smile program

Barriers and Challenges:

- Adequate number of dentists to work with clients on medical assistance
- Limited capacity of dental care providers in comparison to the number of people who need care

Needed Strategies:

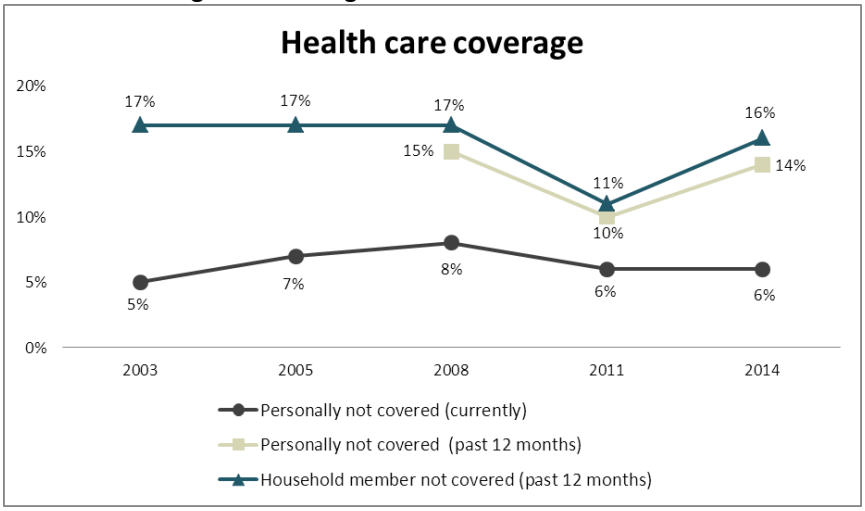
- Additional education for the community on oral health
- Increasing reimbursement for dentists to encourage their willingness to accept BadgerCare patients could help address this issue

Health Care Coverage

2014 Community Health Survey key findings

- Between 2003 and 2014 the percentage of respondents reporting personally not covered currently stayed relatively stable, ranging from 5% - 8%. In 2014, 6% of respondents reported personally not covered currently, which is lower compared to Wisconsin and the United States.
- From 2008 to 2014 the percentage of respondents reporting personally not covered (past 12 months) fluctuated, with 15% in 2008, decreased to 10% in 2011, and increased to 14% in 2014.
- Percentage of household members reporting not being covered in the past 12 months held steady at 17% from 2003 and 2008, decreased to 11% in 2011, but has since increased to 16% in 2014.
- The *Healthy People 2020* target for health care coverage is 100%

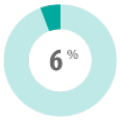
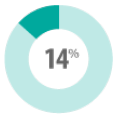
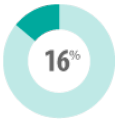
How these findings are trending



2012 Behavioral Risk Factor Surveillance System
Personally not covered (currently)
WI: 12% U.S.: 14%

***Healthy People 2020* target**: 100%

Who reported

Percent of respondents reported in 2014	In 2014, respondents more likely to report this:	Why is this significant?
 **Personally not covered (currently)**	• 18 to 34 years old • bottom 40 percent household income bracket • unmarried	Adults without consistent health care coverage are more likely to skip medical care because of cost concerns, which can lead to poorer health, higher long-term health care costs and early death.[8]
 **Personally not covered (past 12 months)**	• 18 to 34 years old • bottom 40 percent household income bracket • unmarried	
 **Household member not covered (past 12 months)**	• bottom 40 percent household income bracket • unmarried	

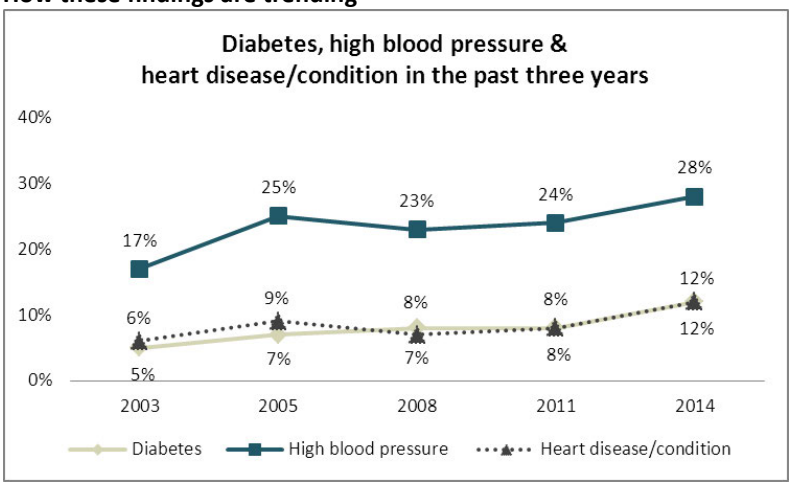
Chronic disease (diabetes, heart disease, high blood pressure, cancer and stroke)

2014 Community Health Survey key findings

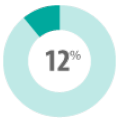
- From 2003 to 2014 diabetes, heart disease/conditions and high blood pressure increased.
- In 2014, 12% of respondents reported diabetes in the past three years. This translated to approximately 10,680 adults in Sheboygan County. Similar findings were reported for heart disease/condition.
- In 2014, about 1 of 4 respondents reported high blood pressure in the past three years.

Chronic conditions such as diabetes and heart disease can result in health complications, compromised quality of life and escalating health care costs.

How these findings are trending



Who reported

Percent of respondents reported in 2014	Respondents more likely to report this:	Why is this significant?
 **Diabetes in the past three years**	• 65 years and older • bottom 40 percent household income bracket • overweight/obese • inactive	Diabetes can cause serious health complications including heart disease, blindness, kidney failure, and lower-extremity amputations.[9]
 **Heart disease/condition in the past three years**	• 65 years and older • bottom 40 percent household income bracket • overweight/obese • nonsmokers	The term "heart disease" refers to several types of heart conditions, such as coronary heart disease, which can lead to heart attack, angina, heart failure and arrhythmias. Heart disease is a leading cause of death in Sheboygan County.[10]
 **High blood pressure in the past three years**	• 65 years and older • bottom 40 percent household income bracket • overweight/obese • did not meet the recommended amount of physical activity	High blood pressure increases the risk for heart disease and stroke. Fortunately, there are ways to prevent high blood pressure or treat it if it is already high.[11]

Secondary Data Report key findings

Cancer is a leading cause of death in Sheboygan County. A person's cancer risk can be reduced in a number of ways, including but not limited to, receiving regular medical care, avoiding tobacco, limiting alcohol use, avoiding excessive exposure to ultraviolet rays from the sun and tanning beds, eating a diet rich in fruits and vegetables, maintaining a healthy weight and being physically active.[12]

- The Sheboygan County cancer incidence rate is higher compared to Wisconsin, while cancer mortality rate was lower compared to the state.
- Top five cancer incidence rates for Sheboygan County: prostate, breast, lung and bronchus, colon and rectum and melanoma of the skin.
- Top five cancer mortality rates for Sheboygan County: lung and bronchus, prostate, colon and rectum, breast and pancreas.

Cancer incidence rates (2007-2011)
(Top 5 for Sheboygan County)

Age-adjusted rate per 100,000		
	Sheboygan County	**Wisconsin**
All Cancer	**548.4**	**501.2**
Prostate (males only)	174.1	139.3
Breast*	93.5	83.1
Lung and bronchus	59.6	62.2
Colon & rectum	55.4	43.7
Melanoma (skin)	30.7	28.3

*breast (female only) incidence rate for Sheboygan County is 177.1 per 100,000

Cancer mortality rates (2006-2010)
(Top 5 for Sheboygan County)

Age-adjusted rate per 100,000		
	Sheboygan County	**Wisconsin**
All Cancer	**169.2**	**175.6**
Lung and bronchus	42.1	46.9
Prostate (males only)	26.7	24.5
Colon and rectum	18.4	15.0
Breast*	12.8	11.8
Pancreas	10.5	11.2

*breast (female only) mortality rate for Sheboygan County is 22.6 per 100,000

Sheboygan County cancer incidence and mortality rates by gender

- Incidence and mortality cancer rates are higher for males compared to females.
- In Sheboygan County, the leading cancer mortality rates for females (per 100,000) are: lung and bronchus (35.5), breast (22.6) and colorectal (14.3).
- In Sheboygan County, the leading cancer mortality rates for males (per 100,000) are: lung and bronchus (51.5), prostate (26.7) and colorectal (24.3).

Cancer incidence rates by gender (2007-2011), Sheboygan County

Female Age-adjusted rate per 100,000	
All sites	**515.7**
Breast	177.1
Lung & bronchus	50.7
Colon & rectum	49.2
In situ breast	33.9
Corpus Uteri	30.5

Male Age-adjusted rate per 100,000	
All sites	**605.0**
Prostate	174.1
Lung & bronchus	72.1
Colon & rectum	64.3
Urinary bladder	45.0
Melanoma of the skin	35.3

-Source: Wisconsin Cancer Reporting System

Cancer mortality rates by gender (2006-2010), Sheboygan County

Female Age-adjusted rate per 100,000	
All sites	**141.7**
Lung & bronchus	35.4
Breast	22.6
Colon & rectum	14.3
Ovary	10.1
Pancreas	8.3

Male Age-adjusted rate per 100,000	
All sites	**209.4**
Lung & bronchus	51.5
Prostate	26.7
Colon & rectum	24.3
Pancreas	13.1
Esophagus	7.4

Cerebrovascular disease (stroke) death rate

Cerebrovascular disease, also referred to as stroke, is a leading cause of death and is a major cause of adult disability. A healthy lifestyle may prevent or reduce the risk of stroke. Additionally, knowing the signs and symptoms, and receiving fast treatment is important to prevent death and disability from stroke.

- In 2011, the Sheboygan County cerebrovascular disease death rate was 47.0 per 100,000, slightly higher compared to Wisconsin (45.0 per 100,000).
  -Source: 2011 Public Health Profile

Alcohol use, tobacco use and other drug use

Four modifiable health risk behaviors are responsible for the main share of premature death and illness related to chronic diseases: excessive alcohol use, tobacco use, lack of physical activity and poor nutrition.[13]

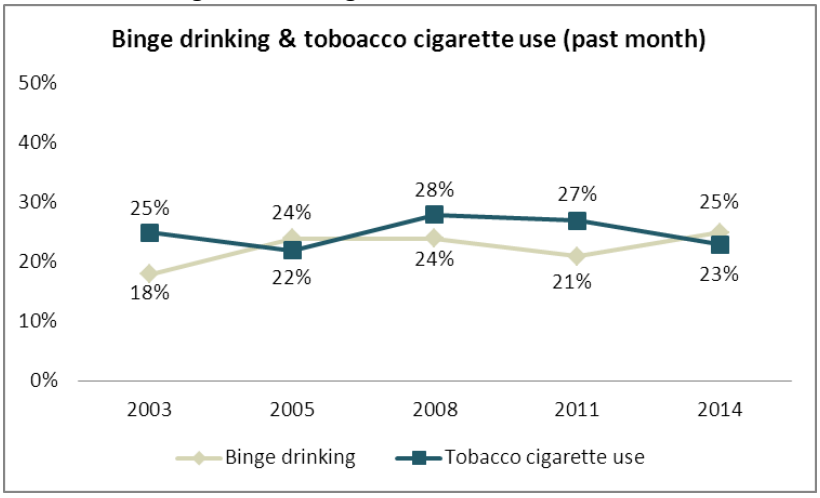
2014 Community Health Survey key findings

In 2003, 2011 and 2014, the survey defined binge drinking as four or more drinks per occasion for females and five or more drinks per occasion for males to account for weight and metabolism differences. This is the definition used by the Centers for Disease Control and Prevention. All other study years were five or more drinks, regardless of gender.

Current smoker is defined as someone who smoked a tobacco cigarette at least some days in the past thirty days.

- From 2003 to 2014 the percent of respondents reporting binge drinking in the past month increased, with 25% of respondents reporting binge drinking in the past month in 2014. This is the same as Wisconsin (25%) but higher compared to the United States (17%).
- In 2014, 23% of respondents were current tobacco cigarette smokers, slightly higher compared to Wisconsin and the United States (20%). In 2014, 6% smoked some days and 17% smoked everyday in the past month.
- Adult binge drinking and cigarette smoking do not meet the *Healthy People 2020*.
- In 2014, 7% respondents reported using electronic cigarettes (also known as e-cigarettes; question added in 2014).

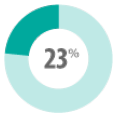
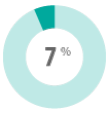
How these findings are trending



2012 Behavioral Risk Factor Surveillance System
Binge Drinking | WI: 25% U.S.:17%
Current smoker| WI: 20% U.S.: 20%

Healthy People 2020 Target
- Adult binge drinking: 24%
- Adult smoking: 12%

Who reported

Percent of respondents reported in 2014	Respondents more likely to report this:	Why is this significant?
 **Binge drinking in the past month**	• 18 to 34 years old	Binge drinking (also referred to as excessive drinking) is associated with an array of health problems, including but not limited to unintentional injuries (e.g. car crashes, falls, burns, drowning), intentional injuries (e.g., firearm injuries, sexual assault, domestic violence), alcohol poisoning, sexually transmitted infections, unintended pregnancy, high blood pressure, stroke and other cardiovascular diseases, and poor control of diabetes.[14]
 **Tobacco cigarette smoking in the past month (current smoker)**	• male • 18 to 44 years old • high school education or less • bottom 40 percent household income bracket • unmarried	Smoking increases the risk of coronary heart disease, stroke and several types of cancer (acute myeloid leukemia, bladder, cervix, esophagus, kidney, larynx, lung, mouth, pancreatic, throat and stomach). 90% of all deaths from chronic obstructive lung disease are caused by smoking.[15] Cancer is a leading cause of death in Sheboygan County.
 **Electronic cigarettes**	• high school education or less	Little is actually known yet about the health risks of using e-cigarettes. Although they do not produce tobacco smoke, e-cigarettes still contain nicotine and other potentially harmful chemicals. Nicotine is a highly addictive drug, and recent research suggests nicotine exposure may also prime the brain to become addicted to other substances.[16]

Secondary Data Report key findings

Excessive alcohol use

For the purpose of the figures below, excessive alcohol consumption was defined as binge drinking (≥4 drinks per occasion for a woman, and ≥5 drinks per occasion for a man); heavy drinking (>1 drink per day on average for a woman, and >2 drinks per day on average for a man); any alcohol consumption by youth aged <21 years; and any alcohol consumption by pregnant women.

- The annual economic cost of excessive alcohol use in Sheboygan County is $192.8 million.
  - ➞ $21.1 million for healthcare
  - ➞ $139.2 million of lost productivity
  - ➞ $32.5 million in other (includes costs associated with the criminal justice system, motor vehicle crashes and other consequences)
- Cost per Sheboygan County resident is $1,669

-Source: The Burden of Excessive Alcohol Use in Wisconsin

Smoking during pregnancy

Research has shown that smoking during pregnancy can cause health problems for both mother and baby, such as pregnancy complications, premature birth, low birth weight infants and stillbirth.[17]

- From 2010 – 2012, the percent of Sheboygan County mothers indicating smoking during pregnancy increased slightly (from 15.4% to 16.6%), which is higher compared to Wisconsin (14.1%). This does not meet *Healthy People 2020* target (1.4% or less).
- Based on education level, in 2012, mothers indicating smoking during pregnancy was higher among high school graduates (49.0%), followed by some college (31.6%) and some high school or less (14.6%). The lowest percent was among college graduates (2.8%).
  -Source: Wisconsin Interactive Statistics on Health (WISH)

Alcohol and drug abuse as underlying or contributing cause of death

- In 2011, tobacco was the most common underlying or contributing cause of death, far exceeding alcohol and other drugs.
- The alcohol and tobacco rates for underlying or contributing cause of death were similar for Sheboygan County and Wisconsin.

Alcohol and Drug Abuse as Underlying or Contributing Cause of Death (2011) Rate per 100,000

	Sheboygan County	Wisconsin
Alcohol	19	16
Tobacco Use	147	145
Other Drugs	---	11

-Source: 2011 Sheboygan County Public Health Profile

Drug-related hospitalizations

- From 2008 – 2010, the drug-related hospitalization rate increased for Sheboygan County and Wisconsin.
- From 2008 – 2010, the Sheboygan County drug-related hospitalization rate was slightly lower compared to the state.

Drug-related hospitalizations Rate per 100,000

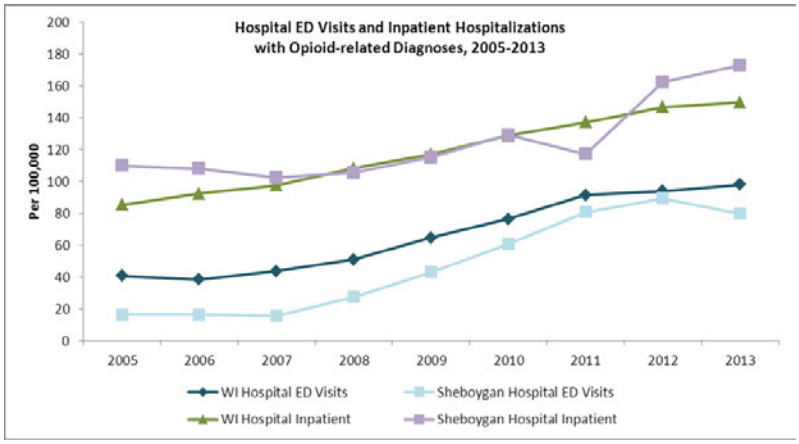
	2008 – 2009	2009 – 2010
Sheboygan County	245	253
Wisconsin	259	262

-Source: Wisconsin Epidemiological Profile on Alcohol and Other Drug Use, 2012

Opioid-related diagnoses

According to the Substance Abuse and Mental Health Services Administration, the number of people using, misusing and abusing illicit and prescription opioids has been on the rise. Health care providers have increasingly been prescribing opioids for the treatment of pain at an alarming rate – fourfold since 2001. With that comes an increased risk of overdose and accidental death.[18]

- As depicted in the graph, from 2005 – 2013, hospital ED visits and inpatient hospitalizations with opioid-related diagnoses has steadily increased in Sheboygan County and Wisconsin.
- Sheboygan County ED visit rate is lower compared Wisconsin, while the hospital inpatient rate has remained similar to or slightly higher compared to the state.



-Wisconsin Hospital Patient Data System, Office of Health Informatics

2014 Key Informant Interview findings

Alcohol and drugs as a top five health issue (ranked #2)

Existing Strategies:

- Programs such as AA, Genesis, DARE, Sheboygan County Heroin Initiative, Healthy Sheboygan County 2020 Alcohol and Other Drug Abuse (AODA) Committee
- Health care provider and law enforcement efforts

Barriers and Challenges:

- Cultural acceptance of drinking and its status as a social norm in the state of Wisconsin
- A lack of knowledge, resources, treatment options, and capacity

Needed Strategies:

- Increase in education on alcohol and drug usage, specifically focusing on youth, as well as educating school staff, parents, community members, and health care providers
- Generally speaking, participants discussed the need for more information to be available to the community and an increased awareness about which specific drugs are issues in Sheboygan County
- Coordinating efforts within the community and across different agencies

Tobacco use as a top five health issue (ranked #5, tied with physical activity)

Existing Strategies:

- State tobacco laws for smoke-free zones and companies' smoke-free policies
- Public health campaigns, education on the risks and consequences of smoking, and smoking cessation activities

Barriers and Challenges:

- Cultural influences for tobacco use and the perception that it is "cool to smoke."
- Smoking is habit forming and addictive that was referenced

Needed Strategies:

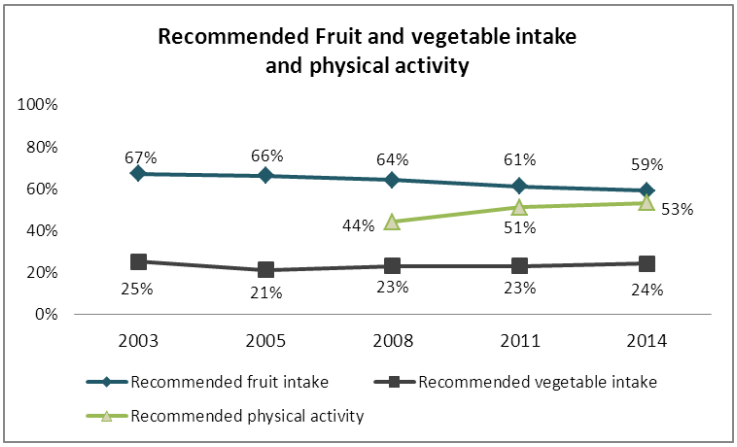
- Participants cited more education for parents, teachers, youth leaders, and the community in general

Nutrition and physical activity

In the Sheboygan County Community Health Survey, recommended physical activity is defined as moderate physical activity for at least 30 minutes on five or more days of the week or vigorous physical activity for at least 20 minutes on three or more days of the week (recommended amount of physical activity by the Centers for Disease Control and Prevention). Recommended fruit intake is defined as at least two servings of fruit each day and vegetable intake as at least three servings of vegetables (USDA dietary guideline for fruit intake).

2014 Community Health Survey key findings

- From 2003 to 2014 recommended fruit intake declined gradually while vegetable intake has held steady over time.
- From 2008 to 2014 reported recommended physical activity has gradually increased.
- In 2014, little over half of respondents reported they engaged in recommended physical activity, about 3 of 5 reported consuming recommended fruit intake, and approximately 1 of 4 reported eating recommended vegetable intake.



Who reported

Percent of respondents reported in 2014:	In 2014, respondents more likely to report this:	Why is this significant?
 **Recommended moderate or vigorous physical activity**	• 18 to 34 years old • middle 20 percent household income bracket • not overweight	Inactive adults have a higher risk for obesity, coronary heart disease, type 2 diabetes, stroke, some cancers, depression and other health conditions. Regular physical activity can have numerous benefits on overall health and wellbeing.
 **Recommended fruit intake (2+ servings/day)**	• female • middle 20 percent household income bracket • married • not overweight	A healthy and balanced diet, including eating fruits and vegetables, is associated with reduced risk for many diseases, including several of the leading causes of death: heart disease, cancer, stroke and diabetes. A poor diet can lead to energy imbalance (e.g., eating more calories than one expends through physical activity) and can increase one's risk for overweight and obesity. Healthy eating helps reduce one's risk for developing osteoporosis, iron deficiency and dental cavities.[19]
 **Recommended vegetable intake (3+ servings/day)**	• female • married • met the recommended amount of physical activity	

Secondary Data Report key findings

Food index and access to exercise

There are many facets to a healthy food environment and adequate access to exercise. The food environment index is a measure ranging from 0 (worst) to 10 (best) (ranging in Wisconsin is 5.0 – 9.5) which equally weighs two indicators of the food environment: 1) limited access to healthy foods estimates the proportion of the population that are low income and do not live close to a grocery store, and 2) food insecurity estimates the percentage of the population that did not have access to reliable source of food during the past year.

Access to exercise opportunities is the first national measure created which captures the many places where individuals have the opportunity to participate in physical activity outside of their homes. Individuals who reside in a census block within a half mile of a park, or in urban areas reside within one mile of a recreational facility, or in rural areas reside within three miles of a recreational facility, are considered to have adequate access to opportunities for physical activity.

- Sheboygan County scores better on the food environment index compared to Wisconsin and the top U.S. performers.
- Conversely, the percentage of the Sheboygan County population with adequate access to locations for physical activity is considerably lower compared to the state and the top U.S. performers.

	Sheboygan County	Top U.S. Performers*	Wisconsin
Food environment index	8.9	8.7	8.3
Access to exercise opportunities	65%	85%	78%

-Source: County Health Rankings
*90th percentile, i.e., only 10% are better (national benchmark)

Free and reduced lunch/meal eligibility

- Of the 50 public school buildings in Sheboygan County in fiscal year 2014, over 30% of students were eligible for free and reduced meal/lunch. Three schools in the Sheboygan Area School District had over 80% of students eligible for free or reduced meal/lunch (Jefferson Elementary, Longfellow Elementary and Sheridan Elementary)
  -Source: Wisconsin Department of Education

FoodShare recipients

FoodShare Wisconsin was created to help stop hunger and to improve health and nutrition. FoodShare recipients includes persons of all ages who have a job but have low incomes, are living on small or fixed incomes, have lost their job, retired or are disabled and not able to work.

- The number of FoodShare child and adult recipients has steadily increased from 2000 to 2013. In 2000 there were approximately 1,651 child and 1,436 adult recipients. In 2013, the number rose to 8,504 child and 11,307 adult recipients.
  -Source: Wisconsin Department of Health Services, Eligibility Management (Income Maintenance)

Women, Infants & Children (WIC)

- In 2013, 29.2% infants breastfed for six months, an increase from 2006 (26.7%) and similar to the state (29.6%).
  -Source: Sheboygan County Department of Health & Human Services, Division of Public Health

2014 Key Informant Interview findings

Physical activity as a top five health issue (ranked #5, tied with tobacco).

Existing Strategies:

- Non-motor Transportation Group, traffic calming measures, Walk to School Days, trail systems, paid state parks and the YMCA

Barriers and Challenges:

- A variety of socioeconomic factors that affect physical activity levels, including a lack of education
- Individual behaviors and cultures
- Winter and the weather as a main barrier

Needed Strategies:

- Overall most participants felt more education was needed
- Create walking clubs to particular destinations such as local farmer's markets
- Create more bike routes and increasing funding

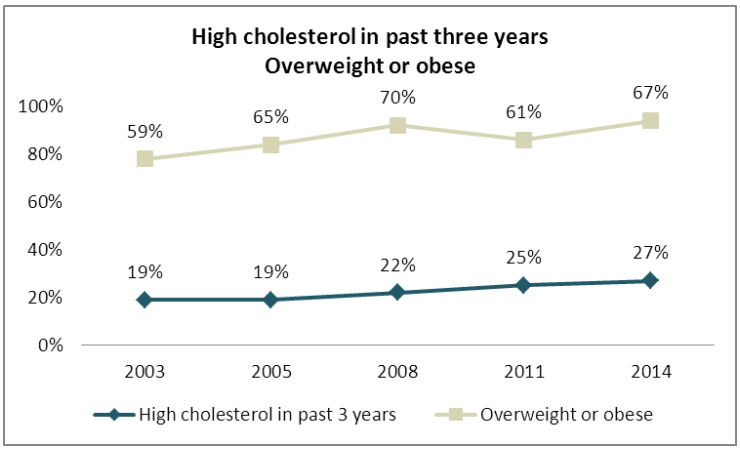
High cholesterol and overweight/obesity

2014 Community Health Survey key findings

- From 2003 to 2014 high cholesterol in the past three years increased gradually.
- In 2014, about one fourth of respondents reported high cholesterol in the past three years.

In the Sheboygan County Community Health Survey, the category "overweight" includes overweight and obese respondents. One nationally used definition of overweight status developed by the CDC is when a person's body mass index (BMI) is greater or equal to 25.0. A BMI of 30.0 or more is considered obese. Body Mass Index is calculated by using kilograms/meter^2.

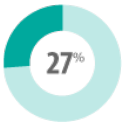
- The percentage of respondents classified as overweight has fluctuated over time, ranging from 59% to 70%.
- In 2014, about two out of three respondents were classified as overweight.
- In 2014, the percent of respondents classified as overweight or obese is the same as Wisconsin, but higher compared to the United States.
- This does not meet the *Healthy People 2020* target.



2012 Behavioral Risk Factor Surveillance System
Adults overweight/obese
WI: 67%, U.S. 64%

Healthy People 2020 target for percent of adults overweight/obese: 66%

Who reported

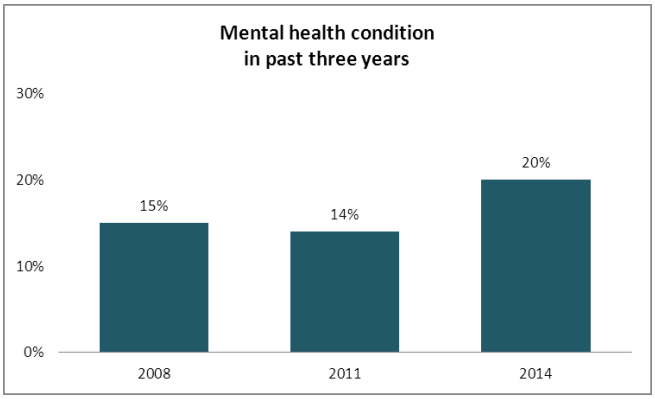
Percent of respondents reported in 2014	In 2014, respondents more likely to report this:	Why is this significant?
 **High cholesterol levels in the past three years**	• 65 years or older • overweight	High cholesterol is a risk factor for heart disease. Heart disease was a leading cause of death in Sheboygan County. Fortunately, there are ways to prevent high cholesterol or treat it if it is already high.
 **Overweight or obese**	• 55 to 64 years old • top 40 percent household income bracket • insufficient amount of physical activity	Overweight and obesity can increase the risk for high blood pressure, high cholesterol levels, coronary heart disease, type 2 diabetes, stroke, some cancers and other health conditions.[20]

Mental Health

Overall health depends on both physical and mental well-being.

2014 Community Health Survey key findings

- From 2008 to 2014 respondents reporting a mental health condition in the past three years increased.
- In 2014, one of five respondents reported a mental health condition such as depression, anxiety, post-traumatic stress disorder in the past three years. This translates to approxinmately 17,800 adults in Sheboygan County.



Who reported

Percent of respondents reported in 2014	Respondents more likely to report this:	Why is this significant?
 **Mental health condition such as depression, anxiety, post-traumatic stress disorder (past three years)**	• female • 45 to 54 years old • bottom 40 percent household income bracket • unmarried	Mental health conditions are extremely costly to society, due to diminished personal, social and occupational functioning. Mental health conditions are associated with chronic diseases such as cardiovascular disease, diabetes and obesity, and related to risk behaviors for chronic disease, such as physical inactivity, smoking and excessive drinking.[21]

Secondary Source Data Reports key findings

Poor mental health days, mental health providers and social support

- Sheboygan County's average poor mental health days is higher compared to the top U.S. performers but relatively similar to the state.
- Sheboygan County has far more residents per mental health provider as compared to the top U.S. performers and higher compared to the state.
- Fewer Sheboygan County respondents reported inadequate social support as compared to Wisconsin, with relatively similar percentage as the top U.S. performers.

	Description	Sheboygan County	Top U.S. Performers*	Wisconsin
Poor mental health days	This measure is based on survey responses to the question: "Thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?" The value reported in the *County Health Rankings* is the average number of days a county's adult respondents report that their mental health was not good.	3.2	2.4	3.0
Mental health providers	This measure represents the ratio of the county population to the number of mental health providers including psychiatrists, psychologists, licensed clinical social workers, counselors, and advanced practice nurses specializing in mental health care.	1,873:1	536:1	1,050:1
Inadequate social support	The social and emotional support measure is based on responses to the question: "How often do you get the social and emotional support you need?" The *County Health Rankings* reports the percent of the adult population that responds that they "never," "rarely," or "sometimes" get the support they need.	15%	14%	17%

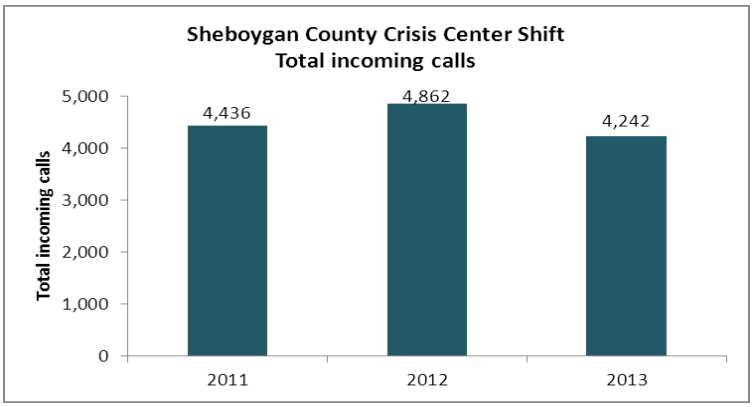
-Source: 2014 County Health Rankings
*90th percentile, i.e., only 10% are better (national benchmark)

Crisis calls and sessions

- Crisis calls increased from 2011 to 2012 and decreased from 2012 to 2013.
- From 2011 – 2012 mobile in-person sessions increased and from 2012 -2013 remained relatively stable.
- Suicide, mental health and anxiety/depression were among the top five issues for both crisis calls and in-person crisis sessions.
- In-person clients are largely uninsured or underinsured, with 39.2% of clients receiving Medicaid and 30.4% having no insurance coverage.

In 2013, top 5 issues of crisis calls

1. Suicide
2. Mental health
3. Information and referral
4. Anxiety/depression
5. Crisis care management

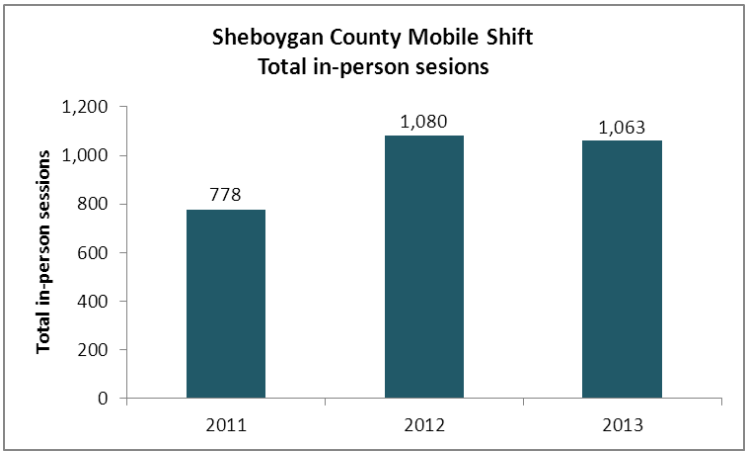


In 2013, top 5 reasons for in-person crisis sessions

1. Suicide
2. Anxiety/depression
3. Mental health
4. Alcohol/drug
5. Family

In 2013, in-person client insurance information

- 20.3% Private insurance
- 39.2% Medicaid
- 10.1% Medicare
- 30.4% No insurance coverage



-Source: Sheboygan County Crisis Center & Mobile Services

Psychiatric hospitalization rate

- In 2011 the Sheboygan County psychiatric hospitalization rate was slightly higher compared the state. Additionally, the county and state has similar average stay days, but Sheboygan County had higher average charges compared to Wisconsin.
- Individuals 18-44 years had the highest rates for psychiatric hospitalizations in Sheboygan County and Wisconsin.
- Although the age group 65 years and older had the lowest rate of psychiatric hospitalizations, this age group had higher average stay days and higher average charges.

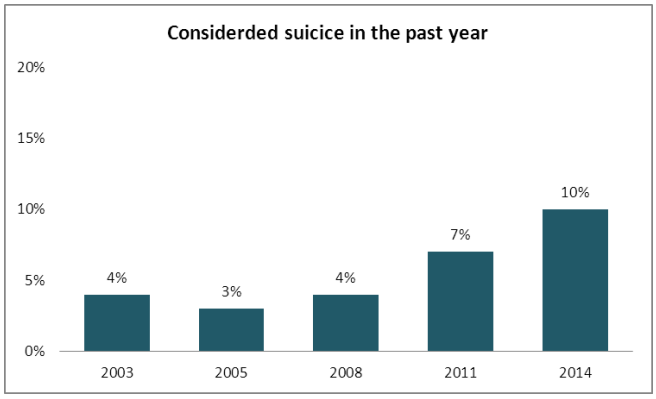
Psychiatric hospitalizations (2011)						
	Sheboygan County			Wisconsin		
	Per 1,000 Population	Average Stay (Days)	Average Charge	Per 1,000 Population	Average Stay (Days)	Average Charge
Total	6.9	6.5	$14,536	6.5	6.4	$12,030
<18	5.6	6.2	$13,874	5.9	5.8	$12,364
18-44	10.5	5.5	$12,325	8.8	5.9	$10,380
45-64	6.0	7.7	$17,799	5.7	7.2	$13,085
65+	2.4	12.3	$24,491	3.3	8.9	$18,493

-Source: 2011 Sheboygan County Public Health Profile

Suicide is a serious public health problem that can have lasting harmful effects on individuals, families and communities. While its causes are complex and determined by multiple factors, the goal of suicide prevention is to reduce factors that increase risk and improve factors that promote resilience.[22]

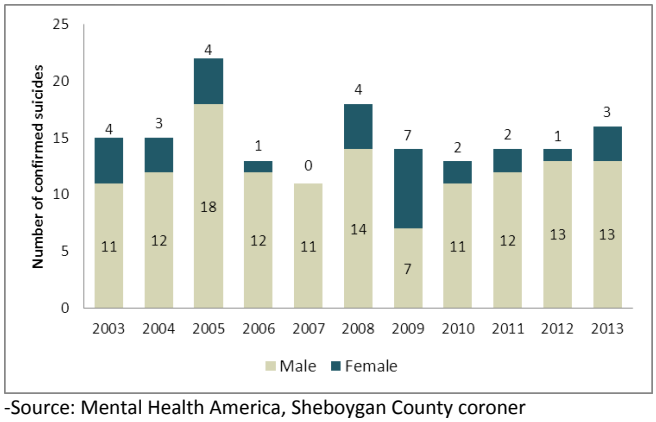
2014 Community Health Survey key findings

- There has been steady increase in the percent of respondents reported considering suicide in the past year. The percentages more than doubled from 2003 to 2014.
- In 2014, about one in ten respondents reported considering suicide in the past year. Respondents 18 to 34 years, 45 to 54 years, some post high school education or less, bottom 40% household income bracket or unmarried were more likely to report this.



Secondary Data Report key findings

- From 2003 to 2013 there were 165 confirmed suicides in Sheboygan County. Over this time period the trend has fluctuated, with the highest annual number of suicides occurring in 2005 (22 confirmed suicides).
- Of the 165 confirmed suicides, 31 (18.8%) were female and 134 (81.2%) were male.



-Source: Mental Health America, Sheboygan County coroner

Community Conversation about Mental Health and Alcohol and Drug Abuse key findings

- *Why is good mental health important to our community?* Economic development, education achievement, overall health, livable communities, public safety and strong families.
- *What is currently working within our community for mental health and alcohol/drug abuse support?* Corporate sponsorship and partnership, effective providers and service delivery, faith community, law enforcement and criminal justice, non-profit organizations and initiatives, philanthropic supports, schools and support groups.
- *What are barriers that prevent people from accessing services?* Lack of continuum of care, cultural norms, financial burden, mental health/alcohol & other drug abuse workforce limitations, public awareness, and public policy.
- *What is missing/gaps in the services available in our community?* Advocacy, community as a whole, reimbursement & funding, health care capacity, missing or insufficient services, professional development & workforce issues, and related services (e.g. domestic violence shelters, homeless services, housing).
- *How do we build on what is working and the strengths?* Community coalitions, comprehensive mental health and alcohol/other drug abuse services, funding (e.g. better use of existing resources), public education, and public policy (e.g. address prevention versus reaction to mental health).

From this important community discussion, three priorities were identified:

- **Access**: address areas of prevention, eligibility, and availability to support families and individuals utilizing the mental health & alcohol/drug services throughout Sheboygan County.
- **Education**: focus on general community, consumer & family, and provider populations to provide mental health education through resource fairs, anti-stigma campaign, and training curriculum.
- **Care Coordination**: address system changes, program development and integration of care in our community through resource mapping, networking opportunities, and exploring and implementing new programs.

2014 Key Informant Report findings

Mental health is ranked as a top five health issue (ranked #1).

Existing Strategies:

- A plethora of existing programs and organizations working to address mental health issues in the County, including Mental Health America, Lakeshore Community Health Center, Community Conversation, the Healthy Sheboygan County 2020 Committee on mental health, the AODA, the Mobile Crisis Response Team, and Bridgepoint Health.
- Mental health care providers, guidance counselors, public services, church community, and public education and awareness events such as Mental Health Screening Day

Barriers and Challenges:

- Denial and stigma associated with mental health
- A lack of understanding of mental health issues and the lack of personal and financial resources to obtain services
- Transportation to and from services, along with problems with continuity of care for individuals who have persistent mental health issues
- Insurance barriers are also an immense challenge for individuals with and without insurance. For those with insurance, often times insurance companies have limited coverage for mental health care, and for those without insurance, finding a professional to provide services can prove difficult
- Supply of mental health care providers does not meet the demand, partially due to the difficulty in recruiting and retaining professionals into a field that is not highly desirable
- For mental health providers in the area, another barrier is their lack of knowledge of existing community resources
- Overall lack of mental health providers for children and adolescents

Needed Strategies:

- Run an anti-stigma campaign
- Increase educational programs for the general public revolving around mental health issues
- Increase the number of providers (especially for youth populations) and increasing funding to address mental health
- Create more transitional programs like halfway houses
- Coordination and cooperation across different levels of care and within the community

Injury

Injuries are a leading cause of death for people ages 1 – 44 in the United States. Each year, millions of people are injured and survive. They are faced with life-long mental, physical, and financial problems. Injuries, such as burns, falls, drowning, and sports injuries are the leading cause of death for U.S. children ages 19 or younger.[23] Each year, one in every three adults age 65 and older falls. Falls can cause moderate to severe injuries, such as hip fractures and head injuries, and can increase the risk of early death. Fortunately, there are prevention strategies to reduce falls and related injuries.[24]

Secondary Data Report key findings

Injury hospitalizations

- From 2010 to 2012 the injury hospitalization rate in Sheboygan County increased (from 815.5 to 863.7 per 100,000). This does not meet the *Healthy People 2020* target of 555.8 per 100,000.
- In 2012, for Sheboygan County injury hospitalizations the average age was 56.3 years, average hospital charges were $27,879 and total hospital charges were $27,767,471.
- In 2012, injury hospitalizations for females (902.6 per 100,000) were greater compared to males (825.6 per 100,000).
  -Source: Wisconsin Interactive Statistics on Health

Emergency Department (ED) visits for injury

- In 2012, the most common cause of ED visits for injury was falls (1,771.0 per 100,000), followed by struck by or against object or person (917.0 per 100,000).
  -Source: Wisconsin Interactive Statistics on Health

Injury death rate for falls

- In 2012, the injury death rate for falls among all ages in Sheboygan County was 33.8 per 100,000, higher compared to the state (19.4 per 100,000). For adults aged 65 years and older the injury death rate for falls in Sheboygan County was 222.9 per 100,000, considerably higher compared to the state (120.9 per 100,000).
  -Source: Wisconsin Interactive Statistics on Health

Health Literacy

According to the Centers for Disease Control & Prevention, obtaining, communicating, processing, and understanding health information and services are essential steps in making appropriate health decisions; however, research indicates that today's health information is presented in ways that are not usable by most adults. "Limited health literacy" occurs when people can't find and use the health information and services they need.[25]

Health Literacy Focus Groups key findings

The five health literacy focus groups included: young adults (age range from early 20s to early 30s), seniors (65 years and older), low-income families, and Hmong and Hispanic ethnicity.

Several themes were prevalent across all five groups:

- Too much time was spent waiting for care—and not enough time was allocated for receiving care, listening to concerns, and answering questions.
- Visuals helped patients better understand their diagnosis and treatment, even when they understood English well.
- People were impressed by physicians with a "personal touch," who listened carefully and made an effort to treat them as individual human beings.
- Individuals often struggle with deciding whether their symptoms or the symptoms of a loved one in their care are serious enough to warrant medical attention.

Each group had its own unique traits as well, including:

- Young adults: relied heavily on their own research for health care information and were more likely to have doubts about medical professionals.
- Seniors: were more likely to have multiple specialists caring for them and multiple prescriptions. They found that their overall care was not always as coordinated as it needed to be.
- Low-income families: had greater difficulties with insurance coverage and paperwork.
- Hmong: often struggled with reconciling traditional health care practices with Western medical care.
- Hispanic: often had difficulty with interpreters who did not know their language as well as should be expected.

Community assets and potential resources and partners to address community health issues

As part of the key informant interviews, informants identified key partners and community assets for the five issues identified by the key informants. These include mental health, alcohol and drugs, access, oral health, physical activity and tobacco.

Mental health (ranked #1)

- Bridgepoint Health
- Church community
- Employers
- Faith-based organizations
- Family members & patients themselves
- Healthy Sheboygan County 2020 Committee on Mental Health and AODA
- Hospitals, health care providers (medical and mental health)
- Lakeshore Community Health Center
- Law enforcement agencies
- Mental Health America
- Mental health care providers, guidance counselors, public services
- Mental Health Community Conversation
- Mobile Crisis Response Team
- Public education and awareness events such as Mental Health Screening Day
- Public health personnel
- Schools

Alcohol and Drug Use (ranked #2)

- Church community
- Civic organizations
- Health care providers and law enforcement efforts
- Healthy Sheboygan County 2020 Alcohol and Other Drug Abuse (AODA) Committee
- Law enforcement agencies
- Local hospitals, mental health and general health care providers
- Mental Health America
- Programs such as AA, Genesis, DARE
- Public health agencies
- Schools
- Sheboygan County Heroin Initiative
- Tavern and restaurant associations as a group to include when working to combat alcohol and drug issues in the community

Access (ranked #3)

- Employee Assistance Program
- Entire medical community, including acute, long-term, hospice and community care providers.
- Department of Health & Human Services
- Insurance companies and employers
- Lakeshore Community Health Center
- Mental Health America
- Safe Harbor
- Salvation Army
- United Way

Oral health (ranked #4)

- Dental Access Committee
- Dentists
- Give a Kid a Smile program
- Head Start
- Lakeshore Community Health Center's dental program
- Lakeshore Technical College and K-12 schools
- Public health professionals,
- Sheboygan Dental Association

Physical activity (ranked #5)

- Boys and Girls Club
- Family Resource Center
- Head Start
- Health care providers
- Non-motor Transportation Group
- Nourish
- Schools
- Sheboygan County Interfaith Organization
- State parks
- Traffic calming measures
- Trail systems
- UW-Extension
- Walk to School Days
- YMCA

Tobacco use (ranked #5, tied with physical activity)

- Businesses
- Health care providers and hospital systems
- Public health campaigns (education on the risks and consequences of smoking)
- Public health professionals
- Schools
- Smoking cessation activities also help to address tobacco use in the County Hospitals
- State tobacco laws for smoke-free zones and companies' smoke-free policies

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Section 4 | Prioritized significant health needs

The following criteria were used to identify the significant health issues to be addressed in our 2015 – 2017 implementation strategy:

Social Responsibility Committee focus area	In October 2012, Aurora Health Care Board of Directors' Social Responsibility Committee adopted a "signature community benefit focus" for all Aurora Health Care hospital facilities was determined: • A demonstrable increase in health home capacity and utilization by underserved populations across Aurora's footprint (Medicaid-eligible and uninsured)
Resources	The extent to which our hospital has the resources, expertise and competencies to address the health need/issue
Partnerships	The extent of community collaboration and partnerships that exist to address the health need/issue
Leadership	Leadership is in place and functioning to address the issue

The following significant health needs or issues will be addressed in our implementation strategy:

- Access
- Alcohol, tobacco and drug use (abuse)
- Cancer
- Health care coverage
- Health literacy
- High blood pressure and high cholesterol
- Injury
- Mental health
- Nutrition and physical activity
- Overweight/obesity
- Stroke

Significant health needs not being addressed in the implementation strategy and the reason:
The implementation strategy does not include specific strategies for diabtes and heart disease/conditions since these are part of the standard continuum of clinical care at ASMMC and Aurora clinics. Our stroke awareness efforts provide education on reducing risk factors for stroke, such as maintaining a healthy weight, eating healthy foods, engaging in physicial activity and preventing or controlling high blood pressure and cholersterol. These are also relevant to reducing the risk for heart disease.

This Community Health Needs Assessment (CHNA) Report was adopted by the Social Responsibility Committee of the Aurora Health Care Board of Directors on December 11, 2014.

To submit written comments about the Community Health Needs Assessment (CHNA) report or request a paper version of the report, click here.

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Introduction

Responsible stewardship of limited charitable resources: Our not-for-profit role in the community
As an affiliate of Aurora Health Care Inc., the leading not-for-profit healthcare provider in eastern Wisconsin, our purpose is to help people live well. We recognize our role in addressing concerns about the accessibility and affordability of health care in Sheboygan County. Further, we recognize that we are accountable to our patients and communities and that our initiatives to support our communities must fit our role as a not-for-profit community hospital.

It is not surprising that we are asked to support a wide array of community activities and events in our area. However, today's community health needs require us to reserve limited charitable resources for programs and initiatives that improve access for underserved persons and specifically support community health improvement initiatives.

The implementation strategies presented here are the result of our process for assessing community health needs, obtaining input from community members and public health representatives, prioritizing needs and consulting with our hospital staff and physician partners. Our strategies are organized into three main categories in alignment with three core principles of community benefit as shown below.

Category	Community Benefit Core Principle	Focus area
Priority #1: Access	Access for persons in our community with disproportionate unmet health needs	• Access • Health care coverage • Mental health • Injury (older adults) • Emergency dispatch
Priority #2: Community Health Improvement	Build links between our clinical services and local health department community health improvement plan	• Alcohol/drug abuse, tobacco use • Mental health • Health literacy • Nutrition, physical activity and overweight/obesity • High blood pressure and cholesterol
Priority #3: Community Benefit Hospital Focus	Address the underlying causes of persistent health problems	• Stroke • Cancer

These implementation strategies do not constitute the entirety of the community benefits our hospital provides each year. A full accounting of our community benefits are reported each year and can be found by visiting http://www.aurora.org/commbenefits.

Principal community health improvement tool: Community Partnerships
For any community health concern, it is widely recognized that a diverse team of engaged community partners is essential for implementing strategic community health improvement initiatives that make a difference. Therefore, we recognize the need to be a good community partner. Our implementation strategies strongly reinforce our role as a partner for community capacity-building to address unmet community health needs.

This Community Benefit Implementation Strategy was adopted by the Social Responsibility Committee of the Aurora Health Care Board of Directors on December 11, 2014.

Focus | Access to care is a an Aurora Health Care signature community benefit focus

Based on the 2014 Sheboygan County Community Health Survey:

- 14% of respondents reported in the past 12 months someone in their household had not taken their prescription medication due to costs (up from 12% in 2011).
- 15% of respondents reported unmet medical care in the past 12 months (up from 9% in 2008).
- 16% of respondents reported unmet dental care in the past 12 months (up from 7% in 2008).

Access to medical care can detect and treat disease at an earlier stage, improve overall health, prevent disease and disability, and reduce preventable deaths. Likewise, access to oral health services can prevent cavities, gum disease and tooth loss, improve the detection of oral cancer and reduce future dental care costs.

Principal partners

- Aurora Consolidated Labs
- Aurora Family Service *Public Benefits Connection*
- Aurora Health Care Medical Group (AHCMG) at Aurora Sheboygan Clinic
- Aurora Medical Center Grafton
- Aurora Pharmacy
- Aurora Radiology
- Aurora Sheboygan Palliative Care Program

Community partners

- Lakeshore Community Health Center (LCHC) – A Federally Qualified Health Center, provides primary and preventive medical, oral and behavioral health services to uninsured and underinsured individuals in Sheboygan County and surrounding communities
- Salvation Army Red Shield Free Clinic (SARSFC) – Opened in 1992 to provide medical, dental and optometric care to qualified uninsured Sheboygan County residents, staffed by area physicians, nurses and support personnel on a volunteer basis
- East Central Income Maintenance Partnership/Partners for Community Development – Two federal grants were awarded in 2013 for the sole purpose of assisting low income, underinsured or uninsured individuals and families by providing resources for education and enrollment in the ACA Marketplace
- Sheboygan County Affordable Care Act Task Force
- United Way of Sheboygan County
- Mental Health America

Target population

- Uninsured and Medicaid-eligible patients using our hospital emergency department (ED) for primary, dental and/or mental health/AODA care; frequent ED users for non-emergent conditions

Intended impact

- A demonstrable increase in “medical home” capacity and utilization by underserved populations across Aurora’s footprint (Medicaid-eligible and uninsured) in Sheboygan County
- Target population is successfully transitioned to a “medical home”
- Uninsured and Medicaid eligible patients will successfully transition to affordable health insurance plans
- Reduction in hospital readmission rate for high-risk patients
- Achieve Wisconsin average of 23 days for patients being admitted to hospice care

Measures to evaluate impact

- Number of non-emergent ED visits without a primary care physician (compare to 2014 baseline data)
- Of those ED visits classified as non-emergent and had no primary care provider, percent who saw an Aurora Health Care primary care provider within 28 days of the ED visit (compare to 2014 baseline data)
- Number of uninsured screened and enrolled in financial assistance programs (e.g., *Aurora Helping Hand*, health insurance plans, etc.) or the Marketplace (the health insurance exchange)
- ED and hospital readmission rates for high-risk patients aged 65 and over
- Average hospice care days (2014 baseline of 17 days)
- Length of stay for inpatient and outpatient hospice care program
- Increased number of patients being followed by our palliative care team
- Admissions to hospital partial-inpatient mental health/addiction program and reduction in ED admissions
- Data from EMS Dispatch reports

Action Plan	**Target Date**
Ensure appropriate follow-up services for uninsured and Medicaid-eligible persons and frequent users of our hospital ED to receive primary and dental care:	
• Provide patients with information on the benefits of receiving routine primary, dental and preventive care in a "health home"; assist patients with referral and navigation to and Lakeshore Community Health Center (LCHC) for primary and dental care or Salvation Army Red Shield Free Clinic (SARSFC) for medical care	Ongoing
• Continue to support Aurora Health Care Medical Group physicians who volunteer at SARSFC and provide necessary ancillary services including lab, radiology and pharmacy	
• Continue to provide operating costs to maintain reliable transportation services for patients in Plymouth	
• Develop protocol and methodology to track navigation to health home and follow-through	
• Provide resources through our "Better Together Fund" for the FQHC and free clinics in Sheboygan County to support expansion of primary care and behavioral health services	2015
Ensure coverage for uninsured and Medicaid-eligible patients using our ED for primary and dental care:	
• Actively screen uninsured patients seen in the ED for financial assistance programs, including Aurora's *Helping Hand Patient Financial Assistance* program, and assist with application processes	Ongoing
• Through our specially trained financial advocates, inform and educate all uninsured patients about the benefits of securing coverage through the Marketplace (the health insurance exchange) and assist those who need help	
• Collaborate with Aurora Family Service and the Sheboygan County Affordable Care Act Task Force to provide space within our facilities to educate and enroll individuals into the Marketplace	During open enrollment
Increase access to care for specialty services and at-risk patients:	
• Support LCHC in developing its expansion plan to include behavioral health and obstetrics services	2015-2017
• Expand ED case manager role to conduct screening and assesement for high-risk falls and ED readmissions (adults 65 years and older)	2015
• Expand new inpatient and outpatient palliative care iniative by adding hospital-based hospice coordinator	
Increase access to behavioral health services by expanding capacity within our hospital:	
• Fill the gap for mid-level mental health services by expanding of our partial-inpatient hospital behavioral health program	2015
Increase timely access to Emergency Medical Services:	
• Expand Sheboygan County EMS Dispatch program to provide each 911 public service answering points (PSAP) in Sheboygan County with the training and software needed to deliver EMS pre-arrival: step-by-step instructions to caller before first-responders arrive	2016

Focus | Alcohol, tobacco and other drug abuse and mental health – Healthy Sheboygan 2020 AODA Committee

- Among the key informants interviewed, mental health (ranked #1) and alcohol and drugs (ranked #2) were included as top five health issues in Sheboygan County.
- Based on findings from the County Health Rankings, Sheboygan County has far more residents per mental health provider as compared to Wisconsin and the national benchmark.
- Based on data from the Wisconsin Hospital Patient Data System, hospital ED visits and inpatient hospitalization with opioid-related diagnoses has increased steadily in Sheboygan County and Wisconsin.

  According to the Substance Abuse and Mental Health Services Administration, the number of people using, misusing and abusing illicit and prescription opioids has been on the rise. Health care providers have increasingly been prescribing opioids for the treatment of pain at an alarming rate. With that comes an increased risk of overdose and accidental death.

  Overall health depends on both physical and mental well-being.

Principal partners

- Aurora Health Care Medical Group and its Leadership Council
- Aurora Pharmacies

Community partners

- Acuity
- Advanced Pain Management
- CSM/Marsho Medical Group
- Law enforcement - County and local
- Mental Health America
- Sheboygan County Division of Public Health
- Sheboygan Heroin Task Force
  - *ACUITY* has contributed $100,000 in support of efforts in the Sheboygan County area to tackle the growing heroin problem.
  - *ACUITY*'s donation will be administered by a task force under the direction of the Sheboygan Police Department Captain. The task force includes the police department, the Sheboygan County Health and Human Services Department, Aurora Sheboygan Memorial Medical Center, St. Nicholas Hospital, Healthy Sheboygan County 2020, the district attorney's office, and the Sheboygan Area School District.
- St. Nicholas Hospital/Prevea

Target population

- Sheboygan County residents with mental health and/or addiction issues

Intended impact

- Improved access to appropriate levels of mental health services increased by our partial-inpatient and intensive outpatient behavioral health program and treatment options for those with heroin addiction
- Reduction in 30-day readmissions for inpatient mental health and stigma associated with a mental health diagnosis
- Successful placement of additional Behavioral Health Services providers, including those trained in addiction
- Successful opening of Behavioral Health Wellness Center by December 2017 or sooner

Measures to evaluate impact

- Increase in intake triage hours toward a goal of 24/7
- Number of people served by the partial-inpatient and intensive outpatient behavioral health program and decrease in their ED/hospital admissions
- 30-day readmission rates for inpatient mental health (January – December 2015, 2016 and 2017)
- Number of physicians, pharmacists and dentists trained on medication misuse

Action plan	**Target date**
Support the* Healthy Sheboygan County 2020 *AODA Committee to reduce substance abuse in Sheboygan County:	
• Close the gap on mental health intake triage to avoid default readmissions to ED	2015, 2016
• Recruit adult addiction providers and adolescent psychotherapists	
• Dedicate Aurora caregivers to serve on each of the community conversation work groups (below) or *Healthy Sheboygan County 2020* work groups	Ongoing
• Provide professional education on medication misuse to physicians, pharmacists and dentists in our community	
• Provide outreach and education to local community members on the problem of medication misuse and abuse	
• Continue discussion with the Sheboygan County Health & Human Services – Division of Public Health on coordination of community health improvement strategies	
• Cultivate partnerships and plans to develop a Behavioral Health Wellness Center	
• Provide financial support or time and talent support to fund-raising efforts of *Mental Health America*	
• Highlight Behavioral Health Services funds (*Light the Way* campaign) within the Aurora Employee Partnership Campaign	
• Expand community education to include behavioral health topics	
• Expand Behavioral Health Services in our community clinics	2015

Based on the Community Conversation about Mental Health and Alcohol and Drug Abuse held on March 21, 2014 (see page 13), three workgroups have been developed:

- **Access**: address areas of prevention, eligibility, and availability to support families and individuals utilizing the mental health & alcohol/drug services throughout Sheboygan County.
- **Education**: focus on general community, consumer & family, and provider populations to provide mental health education through resource fairs, anti-stigma campaign, and training curriculum.
- **Care Coordination**: address system changes, program development and integration of care in our community through resource mapping, networking opportunities, and exploring and implementing new programs.

Focus | Health literacy – Healthy Sheboygan 2020 Health Literacy Committee

Health literacy is the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions. (Source: Healthy People 2010)

According to the Centers for Disease Control & Prevention, obtaining, communicating, processing, and understanding health information and services are essential steps in making appropriate health decisions; however, research indicates that today's health information is presented in ways that are not usable by most adults. "Limited health literacy" occurs when people can't find and use the health information and services they need.

Principal partners

- Aurora Central Billing Office
- Aurora Health Care Medical Group
- Aurora Pharmacies
- *Aurora At Home*

Community partners

- Aging and Disability Resource Center (ADRC)
- Area Health Education Council
- *Healthy Sheboygan 2020* Health Literacy Committee
- Lakeshore Technical College
- St. Nicholas/Prevea
- UW Sheboygan Extension

Target population

- Sheboygan County residents

Intended impact

- Improved patient comprehension of health and financial wellbeing over time (Hmong, Hispanic and elderly populations specifically)

Measures to evaluate impact

- Measures developed by the Healthy Sheboygan Health Literacy Committee (TBD)

Action plan	**Target date**
Support the* Healthy Sheboygan County 2020 *Health Literacy Committee:	
• Dedicate an Aurora caregiver to actively serve on the committee	2015
• Participate and engage employees in the OK 2/Ask Campaign	Ongoing
• Engage in the creation and execution of the Sheboygan Community Health Improvement Plan	
• *Aurora Central Billing Office*: Enhance clarity with billing specifically reading and understanding the Aurora bills	
• *Aurora Health Care Medical Group (clinic)*: Consistently provide after-visit summaries using the Electronic Education Modules (EMMI)	
• *Aurora Pharmacy*: Provide patient education using plain language	

Focus | Nutrition, physical activity & overweight/obesity, high blood pressure and cholesterol

Overweight/Obesity

- Among the key informants interviewed, physical activity (ranked #5) was included as top five health issues for Sheboygan County.
- Based on findings from the 2014 Sheboygan County Community Health Survey, about two of three (67%) adult respondents were classified as overweight or obese (up from 59% in 2003).
- While countywide data on childhood obesity is unavailable, data from the 2011 National Survey of Children's Health found 28.8% of children in Wisconsin age 10 – 17 years are overweight or obese.

High blood pressure and cholesterol

Based on the 2014 Sheboygan County Community Health Survey, 27% of respondents reported high cholesterol (up from 19% in 2003) and 28% reported high blood pressure (up from 17% in 2003) in the past three years. As outlined by the Centers for Disease Control and Prevention, high blood pressure and cholesterol are risk factors for heart disease and stroke.

Principal partner

- Aurora Health Care Medical Group (AHCMG)

Community partner

- The YMCA *KidShape 2.0* program, a six week community-based program for students who are overweight or obese and their families, which includes instruction and activities related to healthy eating, physical activity and behavior modification.
- YMCA or other local facilities looking to partner to create employer Wellness Center
- Interra Health

Target population

- Students who are overweight or obese and their families
- AHCMG pediatric patients
- Employee populations of small employers in Sheboygan County

Intended impact

- Children referred to *KidShape 2.0* achieve a reduction in body mass index (BMI) and live healthier lifestyles with their families
- Through employer-based health risk assessment (HRA), employees will identify risk factors and will have resources to help reduce modifiable risks such as high blood pressure, high cholesterol and BMI
- Blood pressure, cholesterol and BMI will be reduced in employee populations and Return on Investment (ROI) will be shared with local employers

Measures to evaluate impact

- Number of children and families enrolled in *KidShape 2.0* (per 6-week session); BMI/weight before and after 6-week session; behavior modification assessment before and after 6-week session
- Number of employees enrolled in the Wellness Center who participate in screenings to identify risk factors and participate in alternative activities to reduce the modifiable risks

Action plan (see next page)

Action plan	Target date
Support the* Healthy Sheboygan County 2020 *CHIP goal to reduce the incidence of obesity in Sheboygan County in children and adults	
• Provide hospital caregivers to serve as content experts on the *Healthy Sheboygan County 2020* committee on nutrition, physical activity and overweight/obesity	Ongoing
• Provide clinical staff to participate on planning committees to implement the *KidShape 2.0* program – Assist with staff training and as expert presenter for healthy eating components – Sponsor families who cannot afford the program fee that are referred by our AHCMG physicians	
Develop an off-site Wellness Center to address health and fitness needs of adults	
• Complete feasibility study and recruit partners for *Wellness Center*	2015
• Develop site, funding and programming for *Wellness Center*	2016
• Develop steering committee of local employers and community partners	2016
• Open *Wellness Center*	2017

Focus | Stroke

Cerebrovascular disease, also referred to as stroke, is a leading cause of death and is a major cause of adult disability. A healthy lifestyle may prevent or reduce the risk of stroke. Additionally, knowing the signs and symptoms, and receiving fast treatment, are important to prevent death and disability from stroke.

- Based on the 2011 Public Health Profile, the Sheboygan County cerebrovascular disease death rate was 47.0 per 100,000, slightly higher compared to Wisconsin (45.0 per 100,000).

Principal partner

- Aurora Health Care Medical Group
- Aurora Pharmacy
- *Aurora at Home*

Community partners

- American Heart and Stroke Association
- Local churches
- Community organizations (i.e. Elks, Lions Club, Rotary)

Target population

- School age children
- Adults 65 years and older, Medicare population
- Broader community
- Emergency Medical Services (EMS) providers

Intended impact

- Increased public knowledge of risk factors and warning signs for stroke, and the acronym F.A.S.T.
- Improved outcomes for EMS patients presenting with signs of stroke
- Hospital Stroke Center of Excellence accreditation is maintained

Measures to evaluate impact

- Number of adults participating in health promotion events
- Number of screenings; screening results
- Risk factor questionnaire response
- Number of patients presenting via EMS versus on their own

Action plan	**Ongoing**
Advance knowledge and awareness of risk factors, warning signs and treatment of stroke:	
• Partner with Sheboygan Area School District to provide education in 35 schools	
• Partner with *Strike out Stroke* and Aurora Health Care system leadership to partner and sponsor events	
• Provide stroke education at local community organizations	
• Provide free blood pressure screenings at community talks	
• Distribute risk factor questionnaire at community talks	

Focus | Cancer

Secondary data report key findings
Based on the Wisconsin Cancer Reporting System:

- Top five cancer incidence rates for Sheboygan County: prostate, breast, lung and bronchus, colon and rectum and melanoma of the skin.
- Top five cancer mortality rates for Sheboygan County: lung and bronchus, prostate, colon and rectum, breast and pancreas.

Cancer is a leading cause of death in Sheboygan County. A person's cancer risk can be reduced in a number of ways, including but not limited to, receiving regular medical care, avoiding tobacco, limiting alcohol use, avoiding excessive exposure to ultraviolet rays from the sun and tanning beds, eating a diet rich in fruits and vegetables, maintaining a healthy weight and being physically active.

Principal partners

- Aurora Health Care Medical Group
- Vince Lombardi Cancer Clinic

Community partners

- Local employers
- Sheboygan YMCA – Livestrong program
- Lakeshore Community Health Center
- Sheboygan County Cancer Care Fund

Target population

- Employees at worksite locations across Sheboygan County
- Women who are at high risk for breast cancer
- Individuals who do not have access to screenings for monetary reasons

Intended impact

- Improved access to resources for Individuals at high risk for breast cancer and not clear on their options
- Increased screenings for patients at high-risk for lung cancer
- Increased participation in Fecal Occult Blood Test (FOBT) testing
- Increased screening options for those who do not have access to screenings for monetary reasons

Measures to evaluate impact

- Number of cancer education activities implemented
- Number of high-risk screenings completed, high-risk patients identified and continued with treatment
- Number of FOBT kits distributed and patients who follow through upon positive findings

Action plan (see next page)

Action plan	Target date
Understand and identify risk factors for cancer and take preventive measures to offset those risk factors:	
• Maintain our current Breast Center of Excellence accreditation	Annual
• Continue to promote our high-risk breast clinic to capture potential high-risk candidates	Ongoing
• Provide education and awareness activities to the community on breast and prostate cancer screenings, as well as other prevention screenings	Ongoing
• Operationalize a plan to provide Fecal Occult Blood Test (FOBT) kits to patients who are non-compliant or can't afford other screening options. – Note: there is no charge to process the FOBT and the patient selects the physician to receive the results	2015
• Initiate a screening program for persons at high-risk for lung cancer identified in the EMR (55 years or older with significant smoking pack history) to follow-up with lung cancer nurse navigator for: – low-dose CT chest screening – long-term follow-up – smoking cessation	2015

Data Collection
Respondents were scientifically selected so the survey would be representative of all adults 18 years old and older in the county. The sampling strategy was two-fold. 1) A random-digit-dial landline sample of telephone numbers which included listed and unlisted numbers. The respondent within each household was randomly selected by computer and based on the number of adults in the household (n=300). 2) A cell phone-only sample where the person answering the phone was selected as the respondent (n=100). At least 8 attempts were made to contact a respondent in both samples. Screener questions verifying location were included. Data collection was conducted by Management Decisions Incorporated. A total of 400 telephone interviews were completed between May 13 and June 4, 2014.

Weighting of Data
For the landline sample, weighting was based on the number of adults in the household and the number of residential phone numbers, excluding fax and computer lines, to take into account the probability of selection. For the cell-phone only sample, it was assumed the respondent, if an adult, was the primary cell phone user. Combined, post-stratification was conducted by sex and age to reflect the 2010 census proportion of these characteristics in the area.

Margin of Error
With a sample size of 400, we can be 95% sure that the sample percentage reported would not vary by more than ±5 percent from what would have been obtained by interviewing all persons 18 years old and older with telephones in the county. This margin of error provides us with confidence in the data; 95 times out of 100, the true value will likely be somewhere between the lower and upper bound. The margin of error for smaller subgroups will be larger than ±5 percent, since fewer respondents are in that category (e.g., adults 65 years old or older who were asked if they ever received a pneumonia vaccination).

In 2013, the Census Bureau estimated 88,540 adult residents in the county. Thus, in this report, one percentage point equals approximately 890 adults. So when 18% of respondents reported their health was fair or poor, this roughly equals 16,020 residents ±4,450 individuals. Therefore, from 11,570 to 20,470 residents likely have fair or poor health. Because the margin of error is ±5%, events or health risks that are small will include zero.

In 2013, the Census Bureau estimated 50,491 occupied housing units in Sheboygan County. In certain questions of the Community Health Survey, respondents were asked to report information about their household. Using the 2013 household estimate, each percentage point for household-level data represents approximately 500 households.

Statistical Significance
The use of statistics is to determine whether a true difference between two percentages is likely to exist. If a difference is statistically significant, it is unlikely that the difference between the two percentages is due to chance. Conversely, if a difference is not statistically significant, it is likely there is no real difference. For example, the difference between the percentage of adults reporting current asthma in 2003 (6%) and the percentage of adults reporting current asthma in 2014 (9%) is not statistically significant and so it is likely not a real difference, it is within the margin of error of the survey.

Data Interpretation
Data that has been found "statistically significant" and "not statistically significant" are both important for stakeholders to better understand county residents as they work on action plans. Additionally, demographic cross-tabulations provide information on whether or not there are statistically significant differences within the demographic categories (gender, age, education, household income level and marital status). Demographic data cannot be broken down for race and ethnicity because there are too few cases in the sample. Finally, Healthy People 2020 goals as well as Wisconsin and national percentages are included to provide another perspective of the health issues.

Household income definition
Household income: It is difficult to compare household income data throughout the years as the real dollar value changes. Each year, the Census Bureau classifies household income into five equal brackets, rounded to the nearest dollar. It is not possible to exactly match the survey income categories to the Census Bureau brackets since the survey categories are in increments of $10,000 or more; however, it is the best way to track household income. This report looks at the Census Bureau's bottom 40%, middle 20% and top 40% household income brackets each survey year. In 2003 and 2005, the bottom 40% income bracket included survey categories less than $30,001, the middle 20% income bracket was $30,001 to $50,000 and the top 40% income bracket was at least $50,001. In 2008, 2011 and 2014, the bottom 40% income bracket included survey categories less than $40,001, the middle 20% income bracket was $40,001 to $60,000 and the top 40% income bracket was at least $60,001.

Partners & Contracts: This report is sponsored by Aurora Health Care, Lakeshore Community Health Center, St. Nicholas Hospital, Sheboygan County Health & Human Services – Division of Public Health, United Way of Sheboygan County, and in partnership with UW-Extension Sheboygan County. The data was analyzed and prepared by JKV Research, LLC. Data collection was conducted by Management Decisions Incorporated.

Appendix B| Sheboygan County Health Data Report: A summary of secondary data sources, 2014

The report is available at http://www.aurora.org/commbenefits

Data Collection & Analysis: From June 1 – August 1, 2014, staff from Aurora Health Care, Sheboygan County Health & Human Services – Division of Public Health and St. Nicholas Hospital enlisted to compile secondary data to supplement the community health survey and key informant interviews. This report summarizes the demographic and health-related information for Sheboygan County.

Publicly available data sources used for the Secondary Data Report

Data Source	Description
American FactFinder and American Community Survey	American FactFinder provides access to data about the United States. The data comes from several censuses and surveys. The American Community Survey (ACS) is a nationwide survey designed to provide information how communities are changing. ACS collects and produces population and housing information every year, and provides single and multi-year estimates. *Source: United States Department of Commerce, US Census Bureau*
Getfacts – Wisconsin Demographic Information	Getfacts is a tool for exploring and downloading Wisconsin demographic data and shapefiles at a range of geographic scales. Data is compiled from the 2000 & 2010 Census, 2008-2012 American Community Survey (ACS) 5-year estimates, and 2010 Wisconsin Department of Revenue (revenue and expenditures). *Source: Applied Population Lab, University of Wisconsin – Madison*
Wisconsin Interactive Statistics on Health (WISH)	WISH uses protected databases containing Wisconsin data from a variety of sources and provides information about health indicators (measure of health). Select topics include Behavioral Risk Factor Survey, birth counts, fertility, infant mortality, low birth weight, prenatal care teen births, cancer, injury emergency department visits, injury hospitalizations, injury mortality, mortality, and violent death. *Source: Wisconsin Department of Health Services, Division of Public Health, Office of Health Informatics*
County Health Rankings & Roadmaps	Each year the overall health of almost every county in all 50 states is assessed and ranked using the latest publically available data. Ranking includes health outcomes (mortality and morbidity) and health factors (health behaviors, clinical care, social and economic factors and physical environment). *Source: Collaboration of the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute*
Public Health Profile (2011) – Sheboygan County	Public Health Profiles are published annually and provide concise health and demographic information about each county in Wisconsin. Health information includes, but not limited to, births, deaths and hospitalizations. *Source: Wisconsin Department of Health Services*
Wisconsin Domestic Abuse Incident Report	The Wisconsin Department of Justice's Office of Crime Victim Services, with the cooperation of district attorneys' offices across the state, presents the Wisconsin Domestic Abuse Incident Report. The purpose of the report is to provide a snapshot of the criminal justice system response to domestic violence cases referred to district attorneys' offices in Wisconsin. Note: the report only reflects information about incidents that were both reported to law enforcement and referred to district attorneys, it only represents a portion of all domestic abuse incidents that actually occur each year. Data is collected at the county level and reported to the Department of Justice ("Department"), pursuant to Wisconsin Statutes § 968.075(9), by Wisconsin district attorneys' offices. *Source: Wisconsin Department of Justice, Office of Crime Victim Services*
Wisconsin Child Abuse and Neglect Report	The Wisconsin Child Abuse and Neglect Report reflects data collected during calendar year regarding reports of child maltreatment in Wisconsin. Data for this report is from the electronic Wisconsin Statewide Automated Child Welfare Information System. The body of the report provides statewide composite data and county-specific detail is in the appendices. *Source: Wisconsin Department of Children & Families*
Wisconsin Epidemiological Profile on Alcohol and Other Drug Use, 2012 (P-	This report presents data on the use and abuse of alcohol and other substances in Wisconsin. When available, the profile includes data at the county level.

45718-12)	*Source: Office of Health Informatics, Division of Public Health, in consultation with the Division of Mental Health and Substance Abuse Services and the University of Wisconsin Population Health Institute*
The Burden of Excessive Alcohol Use in Wisconsin (report)	The purpose of this report is to present estimates of the economic costs of excessive alcohol consumption in Wisconsin and its impact on the state. *Source: University of Wisconsin Population Health Institute*
Arrests in Wisconsin (report)	As mandated by the Wisconsin Legislature [Wisconsin Statute 16.964(1m)(g)], the Wisconsin Department of Justice (DOJ) is responsible for reporting information concerning the number and nature of criminal offenses known to have been committed in the state. This includes collecting crime and arrest data from 398 separate law enforcement agencies for the FBI's Uniform Crime Reporting Program (a nationwide cooperative statistical effort of more than 17,000 law enforcement agencies voluntarily reporting data on crime). *Source: Wisconsin Statistical Analysis Center, Crime Information Bureau, Office of Justice*
Wisconsin Traffic Crash Facts	Statewide information on the human consequences of traffic crashes. Reports are offered in several levels of detail, including the number and type of crashes, type of vehicles involved in crashes, severity of injuries, and information about the drivers involved. *Source: Wisconsin Department of Transportation, Safety & Consumer Protection*
Burden of Asthma in Wisconsin 2013	This document represents the cumulative efforts of a range of statewide partners to comprehensively describe the current state of the burden of asthma in Wisconsin. *Source: Wisconsin Department of Health Services, Division of Public Health, Bureau of Environmental & Occupational Health, Wisconsin Asthma Program*
Wisconsin Cancer Reporting System	Generates customized maps, graphs and tables of Wisconsin cancer incidence and mortality rates. *Source: Wisconsin Department of Health Services*
Wisconsin STD, Immunization and Tuberculosis Program	Annual or semi-annual reports outlining incidence and prevalence, and data to inform practice and policy change (department or program specific). *Source: Wisconsin Department of Health Services, Division of Public Health*
Annual Reports of Childhood Lead Poisoning in Wisconsin	These reports include the number of Wisconsin children tested and poisoned and the number of cases at ages 1 – 5 year olds not previously tested for local health department jurisdiction. Also includes prevalence rates for children enrolled in Medicaid and Women, Infants and Children (WIC) programs. *Source: Wisconsin Department of Health Services*
Wisconsin Air Quality Trends	This report presents the overall air quality in Wisconsin. *Source: Wisconsin Dept of Natural Resources*
Environmental Public Health Tracking	The website provides the data and information about environment and health in one location. The health topics focus on chronic disease like asthma and cancer. In addition, the website offers summary reports of the environmental health in each county. *Source: Wisconsin Department of Health Services, Division of Public Health*
Wisconsin Children in Out-of-Home Care, Annual Report	This report includes information on children in an out-of-home care placement during the calendar year. Data from this report was taken from the eWiSACWIS SM10a112 Placement Activity and Detail Report. *Source: Wisconsin Department of Children and Families*
Wisconsin Information System for Education Data Dashboard and Wisconsin Information Network for Successful Schools	This site compares statistics about Wisconsin public schools, including academic performance, attendance, enrollment, graduation and post-graduation. *Source: Wisconsin Department of Public Instruction*
Eligibility Management (Income Maintenance) – FoodShare Wisconsin Data	This report displays the number of unduplicated individuals that were eligible to receive FoodShare, within an agency, at least once during a specific calendar year. This count of unique recipients is also broken down into subgroups of eligible adults and eligible children. *Source: Wisconsin Department of Health Services*

Partners: This report is sponsored by Aurora Health Care, Lakeshore Community Health Center, St. Nicholas Hospital, Sheboygan County Health & Human Services – Division of Public Health, United Way of Sheboygan County and UW-Extension Sheboygan County.

Appendix C | Sheboygan County Health Needs Assessment: A summary of key informant, 2014
The report is available at http://www.aurora.org/commbenefits

Data Collection and Analysis: Twenty-two individual interviews were conducted between May and July 2014 in Sheboygan County. The organizations were selected based on the following criteria:

- Provided a broad interest of the community and the health needs in Washington County,
- Comprised of leaders within the organization with knowledge or expertise relevant to the health needs of the community, health disparities or public health, and/or
- Served, represented, partnered or worked with members of the medically underserved, low income and/or minority populations

The selection of the key informants were determined by Aurora Health Care, Lakeshore Community Health Center, Sheboygan County Health & Human Services-Division of Public Health, St. Nicholas Hospital, United Way of Sheboygan County and UW-Extension Sheboygan County. Key informants represented public health, mental health, law enforcement, business, education, other government offices and non-profit agencies. Cumulatively, these organizations focus on a range of public health issues and represent the broad interests of community, including medically underserved, low-income and/or minority populations.

Aurora Health Care, Lakeshore Community Health Center, St. Nicholas Hospital, and UW-Extension Sheboygan County invited the informants to participate, and conducted the interviews from May - July 2014. The interviewers used a standard interview script that included the following elements:

- Each key informant was asked to rank order the top 3 to 5 major health-related issues for Sheboygan County, which is based on the focus areas presented in Wisconsin's State Health Plan, *Healthiest Wisconsin 2020.*
- For each top-ranked health topic the informant was asked to specify existing strategies to address the issue, barriers or challenges to addressing the issue, additional strategies needed, and key groups in the community that hospitals should partner with to improve community health.

  Healthiest Wisconsin 2020 focus areas include alcohol and drug, chronic disease, communicable disease, environmental and occupational health, growth and development, mental health, nutrition, oral health, physical activity, reproductive & sexual health, tobacco, access, and injury and violence.

Focus Area	# Key Informants Ranking Issue Among Top 5 Health Issues
Alcohol and Drug	16
Chronic Disease	5
Communicable Disease	0
Environmental and Occupational	1
Growth and Development	4
Mental Health	19
Nutrition	4
Oral Health	7
Physical Activity	6
Reproductive and Sexual	2
Tobacco	6
Access	9
Injury and Violence	4

Summary of the organizations representing the broad interest of the community

Sheboygan County Key Informant	Title	Organization
Jose Araujo	Community Service Project Manager	Partners for Community Development
Aaron Brault	Director	Sheboygan County Planning & Conservation
Kevin Bruggink	Superintendent	Oostburg School District
Dr. Howard Croft	MD Emergency Medicine	St. Nicholas Hospital
Amy Culver	Social Work	Health and Human Services
Patty Fallon †	Health and Nutrition	Sheboygan County Head Start
Mark Hillesheim	Service Line Director, Employer & Retail Services	Prevea
David Hughes	CFO	Lakeshore Community Health Clinic
Jason Kaat	Youth Minister	Redeemer Lutheran Church
Todd Kronberg	Police Liason Officer	Plymouth School District
James Lammers	Program Coordinator	Crisis Center – Sheboygan with Family Services Northeast Wisconsin
Christine Larson	Director of Operations (RN)	Aurora Health Care
Gina Lemmenes	Director of Nursing	Pine Haven Christian Home
Diane Liebenthal	Program Supervisor	Health and Human Services
Amy Onsager	Hospice Administrator	Sharon Richardson
Todd Priebe	Sheriff	Sheboygan County Sheriff
MaryAdele Revoy	Coordinator of Resource and Development	Family Resource Center
Sherri Samuels-Fuerst	HR Administration Director	Sargento
Pam Sandee †, ††	Clinic Coordinator	Salvation Army
LuAnn Travis	Executive Director	Family Resource Center
Ann Wondergem	Director of Operations & Program Management	United Way
Mai Xiong †††	Southeast Asian Outreach Coordinator	Safe Harbor

† Denotes this individual's position/organization represents low-income populations
†† Denotes this individual's position/organization represents medically underserved populations
††† Denotes this individual's position/organization represents minority populations

Qualitative analysis of responses focused on relationships between issues, with emerging themes used to inform the final rankings. The report presents the results of this process, including cross-cutting themes and summaries of top five health issues. The analysis and report writing was conducted by the Center for Urban Population Health.

Partners & Contracts: This report is sponsored by Aurora Health Care, Lakeshore Community Health Center, St. Nicholas Hospital, Sheboygan County Health & Human Services – Division of Public Health, United Way of Sheboygan County and UW-Extension Sheboygan County. The report was prepared by the staff from Aurora Health Care, Sheboygan County Health & Human Services – Division of Public Health and St. Nicholas Hospital. The report was prepared by the Center for Urban Population Health.

Sheboygan County Community Health Survey Summary

This research provides valuable behavioral data, lifestyle habits, and the prevalence of risk factors and disease conditions of Sheboygan County residents. This summary was prepared by JKV Research, LLC for Aurora Health Care, Lakeshore Community Health Center, St. Nicholas Hospital, Sheboygan County Health and Human Services—Division of Public Health, United Way of Sheboygan County, and UW-Extension Sheboygan County. Additional data is available at www.aurora.org/commbenefits and www.sheboygancounty.com/government/departments-f-q/health-and-human-services/public-health/health-promotion.

Overall Health					
Sheboygan County	2003	2005	2008	2011	2014
Excellent	21%	17%	24%	17%	15%
Very Good	35%	38%	34%	34%	38%
Fair or Poor	12%	15%	15%	18%	18%
Other Research: (2012)				*WI*	*U.S.*
Fair or Poor				*14%*	*17%*

Health Care Coverage					
Sheboygan County	2003	2005	2008	2011	2014
Not Covered					
Personally (currently)	5%	7%	8%	6%	6%
Personally (past 12 months)			15%	10%	14%
Household Member (past 12 months)	17%	17%	17%	11%	16%
Other Research: (2012)				*WI*	*U.S.*
Personally Not Covered (currently)				*12%*	*17%*

Did Not Receive Care Needed					
Sheboygan County	2003	2005	2008	2011	2014
Prescript. Meds Not Taken Due to					
Cost (Household) (past 12 months)				12%	14%
Unmet Care					
Medical Care (past 12 months)			9%	8%	15%
Dental Care (past 12 months)			7%	--	16%
Current Unmet Dental Need					22%

Financial Burden of Health Care					
Sheboygan County	2003	2005	2008	2011	2014
Problems Paying or Unable to Pay in Past Year					18%
Paying a Bill Off Over Time (Currently)					14%
Unable to Pay a Bill at All (Currently)					10%

Health Information and Services					
Sheboygan County	2003	2005	2008	2011	2014
Primary Source of Health Information					
Internet				56%	57%
Doctor				46%	38%
Family/Friends				10%	11%
Other Health Professional				16%	9%
Primary Health Services					
Doctor/nurse practitioner's office		84%	78%	72%	70%
Public health clinic/com. health center		7%	8%	8%	10%
Urgent care center		2%	6%	7%	9%
Hospital emergency room		2%	2%	2%	3%
Hospital outpatient		2%	3%	2%	2%
No usual place		3%	3%	9%	6%
Very/Somewhat Difficult to Understand Health					
Care Provider's Written or Verbal Explanations				10%	19%
Advance Care Plan	36%	40%	41%	38%	42%

Vaccinations (65 and Older)					
Sheboygan County	2003	2005	2008	2011	2014
Flu Vaccination (past year)	64%	45%	58%	57%	68%
Pneumonia (ever)	45%	73%	73%	69%	74%
Other Research: (2012)				*WI*	*U.S.*
Flu Vaccination (past year)				*51%*	*60%*
Pneumonia (ever)				*70%*	*69%*

Health Conditions in Past 3 Years					
Sheboygan County	2003	2005	2008	2011	2014
High Blood Pressure	17%	25%	23%	24%	28%
High Blood Cholesterol	19%	19%	22%	25%	27%
Mental Health Condition			15%	14%	20%
Heart Disease/Condition	6%	9%	7%	8%	12%
Diabetes	5%	7%	8%	8%	12%
Asthma (Current)	6%	6%	7%	7%	9%
Condition Controlled Through Meds, Exercise, Therapy or Lifestyle Changes					2014
High Blood Pressure (n=112)					94%
High Blood Cholesterol (n=107)					83%
Mental Health Condition (n=79)					84%
Heart Disease/Condition (n=48)					90%
Diabetes (n=46)					100%
Asthma (Current) (n=36)					97%

Routine Procedures					
Sheboygan County	2003	2005	2008	2011	2014
Routine Checkup (2 yrs. ago or less)	84%	83%	78%	77%	80%
Cholesterol Test (4 years ago or less)	69%	75%	74%	71%	76%
Dental Checkup (past year)	76%	68%	70%	62%	66%
Eye Exam (past year)	52%	42%	42%	42%	53%
Other Research:				*WI*	*U.S.*
Routine Checkup (≤2 years; 2000)				*79%*	*84%*
Cholesterol Test (≤5 years; 2011)				*76%*	*76%*
Dental Checkup (past year; 2012)				*72%*	*67%*

Physical Health					
Sheboygan County	2003	2005	2008	2011	2014
Physical Activity/Week					
Moderate Activity (5 times/30 min)	25%	33%	32%	42%	43%
Vigorous Activity (3 times/20 min)			24%	21%	29%
Recommended Moderate or Vigorous			44%	51%	53%
Overweight	59%	65%	70%	61%	67%
Fruit Intake (2+ servings/day)	67%	66%	64%	61%	59%
Vegetable Intake (3+ servings/day)	25%	21%	23%	23%	24%
Other Research:				*WI*	*U.S.*
Overweight (2012)				*67%*	*64%*
Recommended Mod. Or Vig. Activity (2009)				*53%*	*51%*

Women's Health					
Sheboygan County	2003	2005	2008	2011	2014
Mammogram (50+; within past 2 years)	70%	66%	82%	80%	76%
Bone Density Scan (65 and older)		53%	66%	66%	84%
Cervical Cancer Screening					
Pap Smear (18 – 65; within past 3 yrs)	89%	87%	91%	78%	82%
HPV Test (18 – 65; within past 5 yrs)					44%
Screening in Recommended Time Frame					
(18-29: Pap every 3 yrs; 30 to 64: Pap and HPV					
every 5 yrs or Pap only every 3 yrs)					84%
Other Research:				*WI*	*U.S.*
Mammogram (50+; within past 2 yrs; 2012)				*80%*	*78%*
Pap Smear (18+; within past 3 years; 2010)				*85%*	*81%*

Colorectal Cancer Screenings (50 and Older)					
Sheboygan County	2003	2005	2008	2011	2014
Blood Stool Test (within past year)	28%	21%	--	--	10%
Sigmoidoscopy (within past 5 years)			9%	5%	8%
Colonoscopy (within past 10 years)			59%	64%	69%
Screening in Recommended Time Frame			60%	65%	72%

Tobacco Cigarette Use					
Sheboygan County	2003	2005	2008	2011	2014
Current Smokers (past 30 days)	25%	22%	28%	27%	23%
Of Current Smokers…					
Quit Smoking 1 Day or More in Past					
Year Because Trying to Quit	46%	37%	56%	51%	46%
Saw a Health Care Professional Past Yr					
And Advised to Quit Smoking		75%	82%	69%	90%
Other Research:				*WI*	*U.S.*
Current Smokers (2012)				*20%*	*20%*
Tried to Quit (2005)				*49%*	*56%*

Exposure to Cigarette Smoke					
Sheboygan County	2003	2005	2008	2011	2014
Smoking Policy at Home					
Not allowed anywhere			73%	76%	79%
Allowed in some places/at some times			10%	8%	7%
Allowed anywhere			5%	2%	3%
No rules inside home			13%	15%	11%
Nonsmokers Exposed to Second-Hand					
Smoke in Past Seven Days			25%	16%	13%

Other Tobacco Products (Past Month)					
Sheboygan County	2003	2005	2008	2011	2014
Electronic Cigarettes					7%
Smokeless Tobacco					5%
Cigars, Cigarillos or Little Cigars					4%

Alcohol Use in Past Month					
Sheboygan County	2003	2005	2008	2011	2014
Of all Respondents in Past Month					
Heavy Drinker	5%	7%	6%	7%	7%
Binge Drinker	18%	24%	24%	21%	25%
Passenger/Driver When Driver					
Perhaps Had Too Much to Drink	3%	3%	3%	3%	3%
Household Problem with Drinking (past year)		4%	2%	3%	2%
Other Research: (2012)				*WI*	*U.S.*
Binge Drinker				*25%*	*17%*
Heavy Drinker				*9%*	*6%*

Passenger/Driver When Driver Used…					
Sheboygan County	2003	2005	2008	2011	2014
Marijuana/Illicit Drugs					2%

Mental Health Status					
Sheboygan County	2003	2005	2008	2011	2014
Felt Sad, Blue or Depressed					
Always/Nearly Always (past 30 days)	6%	5%	5%	7%	9%
Find Meaning & Purpose in Daily					
Life Seldom/Never	8%	4%	3%	7%	7%
Considered Suicide (past year)	4%	3%	4%	7%	10%

Personal Safety in Past Year					
Sheboygan County	2003	2005	2008	2011	2014
Afraid for Their Safety	4%	3%	5%	3%	9%
Pushed, Kicked, Slapped, or Hit	3%	4%	3%	4%	4%
At Least One of the Safety Issues	6%	6%	8%	6%	10%

Presence of Firearms in Household					
Sheboygan County	2003	2005	2008	2011	2014
Of All Households					
Firearm in Household	34%	40%	39%	37%	34%
Handgun in Household			15%	17%	17%
Rifle or Shotgun in Household			35%	34%	32%

Air Quality					
Sheboygan County	2003	2005	2008	2011	2014
Look for Air Quality Notices/					
Advisories To Take Precautions				11%	17%

Seat Belt and Helmet Use					
Sheboygan County	2003	2005	2008	2011	2014
Always/Nearly Always Use Seat Belt	85%	87%	87%	91%	97%
Always/Nearly Always Wear Helmet	32%	26%	32%	32%	41%

--Not asked

Overall Health and Health Care Key Findings

In 2014, 53% of respondents reported their health as excellent or very good; 18% reported fair or poor. Respondents 45 to 54 years old, in the bottom 40 percent household income bracket, inactive respondents or smokers were more likely to report fair or poor conditions. *From 2003 to 2014, there was a statistical increase in the overall percent of respondents who reported their health as fair or poor.*

In 2014, 6% of respondents reported they were not currently covered by health care insurance; respondents 18 to 34 years old, in the bottom 40 percent household income bracket or unmarried respondents were more likely to report this. Fourteen percent of respondents reported they personally did not have health care coverage at least part of the time in the past 12 months; respondents 18 to 34 years old, in the bottom 40 percent household income bracket or unmarried respondents were more likely to report this. Sixteen percent of respondents reported someone in their household was not covered at least part of the time in the past 12 months; respondents who were in the bottom 40 percent household income bracket or unmarried were more likely to report this. *From 2003 to 2014, the overall percent statistically remained the same for respondents 18 and older as well as for respondents 18 to 64 years old who reported no current personal health care coverage. From 2008 to 2014, the overall percent statistically remained the same for respondents who reported no personal health care coverage at least part of the time in the past 12 months. From 2003 to 2014, the overall percent statistically remained the same for respondents who reported someone in the household was not covered at least part of the time in the past 12 months.*

In 2014, 14% of respondents reported that someone in their household had not taken their prescribed medication due to prescription costs in the past 12 months; respondents in the bottom 40 percent household income bracket or with children in the household were more likely to report this. Fifteen percent of respondents reported there was a time in the last 12 months they did not receive the medical care needed; respondents who were 18 to 44 years old or in the bottom 40 percent household income bracket were more likely to report this. Sixteen percent of respondents reported there was a time in the last 12 months they did not receive the dental care needed; respondents who were 18 to 34 years old, with some post high school education, in the bottom 40 percent household income bracket or unmarried were more likely to report they did not receive the dental care needed. Twenty-two percent of respondents reported they currently have an unmet dental need from swollen or bleeding gums, a toothache, a cracked tooth, or a cavity for which they need to see a dentist but have not gone for treatment. Respondents who were 18 to 34 years old, in the bottom 40 percent household income bracket or unmarried were more likely to report a current unmet dental need. *From 2011 to 2014, the overall percent statistically remained the same for respondents who reported that someone in their household had not taken their prescribed medication due to prescription costs in the past 12 months. From 2008 to 2014, the overall percent statistically increased for respondents who reported unmet medical care or dental care in the past 12 months.*

In 2014, 18% of respondents reported there was a time in the last 12 months they had problems paying or were unable to pay any medical, dental, or mental health bills. Fourteen percent of respondents reported they currently have a medical, dental or mental health bill being paid off over time while 10% reported they have a bill they are unable to pay at all. Respondents in the bottom 40 percent household income bracket were more likely to report they currently have a bill they are paying off over time or a bill they are unable to pay at all.

In 2014, 57% of respondents reported they go on the Internet when they need health information or clarification while 38% reported they contact their doctor. Respondents who were younger, with more education, with higher household income or married were more likely to report they go online. Respondents who were older were more likely to report they go to their doctor. *From 2011 to 2014, there was a statistical decrease in the overall percent of respondents reporting their doctor as their source for health information. From 2011 to 2014, there was no statistical change in the overall percent of respondents reporting the Internet or family/friends as a source for health information or clarification.*

In 2014, 70% of respondents reported their primary place for health services was from a doctor's or nurse practitioner's office; respondents who were female, 35 to 44 years old, 65 and older, with a college education, in the top 40 percent household income bracket or married were more likely to report this. Nineteen percent of respondents reported it is very or somewhat difficult to understand everything that is explained verbally and in writing when they see their healthcare provider; respondents with a high school education or less or in the bottom 40 percent household income bracket were more likely to report this. Forty-two percent of respondents had an advance care plan; respondents 65 and older, with a college education, in the top 40 percent income bracket or married respondents were more likely to report an advance care plan. *From 2005 to 2014, there was a statistical decrease in the overall percent of respondents reporting their primary place for health services was from a doctor's or nurse practitioner's office. From 2011 to 2014, there was a statistical increase in the overall percent of respondents reporting it is very or somewhat difficult to understand everything that is explained verbally and in writing when they see their healthcare provider. From 2011 to 2014, there was no statistical change in the overall percent of respondents having an advance care plan.*

In 2014, 80% of respondents reported a routine medical checkup two years ago or less while 76% reported a cholesterol test four years ago or less. Sixty-six percent of respondents reported a visit to the dentist in the past year while 53% reported an eye exam in the past year. Respondents who were female, 65 and older, in the top 40 percent household income bracket or married were more likely to report a routine checkup two years ago or less. Respondents 65 and older, with a college education, in the top 40 percent household income bracket or married respondents were more likely to report a cholesterol test four years ago or less. Respondents who were 35 to 44 years old, in the top 60 percent household income bracket or married were more likely to report a dental checkup in the past year. Respondents who were male, 35 to 44 years old or in the top 60 percent household income bracket were more likely to report an eye exam in the past year. *From 2003 to 2014, there was no statistical change in the overall percent of respondents reporting a routine checkup two years ago or less or an eye exam in the past year. From 2003 to 2014, there was a statistical increase in the overall percent of respondents reporting a cholesterol test four years ago or less. From 2003 to 2014, there was a statistical decrease in the overall percent of respondents reporting a dental checkup in the past year.*

In 2014, 42% of respondents had a flu vaccination in the past year. Respondents who were 65 and older, with a college education, or married were more likely to report a flu vaccination. Seventy-four percent of respondents 65 and older had a pneumonia vaccination in their lifetime. *From 2003 to 2014, there was a statistical increase in the overall percent of respondents 18 and older who reported a flu vaccination in the past 12 months. From 2003 to 2014, there was no statistical change in the overall percent of respondents 65 and older who reported a flu vaccination. From 2003 to 2014, there was a statistical increase in the overall percent of respondents 65 and older who had a pneumonia vaccination.*

Health Risk Factors Key Findings

In 2014, out of six health conditions listed, the two most often mentioned in the past three years were high blood pressure or high blood cholesterol (28% and 27%, respectively). Respondents who were 65 and older, in the bottom 40 percent household income bracket, overweight or who did not meet the recommended amount of physical activity were more likely to report high blood pressure. Respondents who were 65 and older or overweight were more likely to report high blood cholesterol. Respondents who were 65 and older, in the bottom 40 percent household income bracket, overweight or nonsmokers were more likely to report heart disease/condition. Respondents who were female, 45 to 54 years old, in the bottom 40 percent household income bracket or unmarried were more likely to report a mental health condition. Respondents who were 65 and older, in the bottom 40 percent household income bracket, who were overweight or inactive were more likely to report diabetes. Respondents who were female or 45 and older were more likely to report current asthma. *From 2003 to 2014, there was a statistical increase in the overall percent of respondents who reported high blood pressure, high blood cholesterol, heart disease/condition, or diabetes. From 2003 to 2014, there was no statistical change in the overall percent of respondents who reported current asthma. From 2008 to 2014, there was no statistical change in the overall percent of respondents who reported a mental health condition.*

In 2014, 9% of respondents reported they always or nearly always felt sad, blue or depressed in the past 30 days; respondents who were 45 to 54 years old, with some post high school education or less or in the bottom 40 percent household income bracket were more likely to report this. Ten percent of respondents felt so overwhelmed they considered suicide in the past year; respondents who were 18 to 34 years old, 45 to 54 years old, with some post high school education or less, in the bottom 40 percent household income bracket or unmarried were more likely to report this. Seven percent of respondents reported they seldom or never find meaning and purpose in daily life; respondents 18 to 34 years old, 45 to 54 years old or with some post high school education or less were more likely to report this. *From 2003 to 2014, there was no statistical change in the overall percent of respondents who reported they always/nearly always felt sad, blue or depressed or they seldom/never find meaning and purpose in daily life. From 2003 to 2014, there was a statistical increase in the overall percent of respondents who reported they considered suicide in the past year.*

Behavioral Risk Factors Key Findings

In 2014, 43% of respondents did moderate physical activity five times a week for 30 minutes while 29% did vigorous activity three times a week for 20 minutes. Combined, 53% met the recommended amount of physical activity; respondents who were 18 to 34 years old, in the middle 20 percent household income bracket, or not overweight were more likely to report this. Sixty-seven percent of respondents were classified as overweight. Respondents who were 55 to 64 years old, in the top 40 percent household income bracket or who did an insufficient amount of physical activity were more likely to be classified as overweight. *From 2003 to 2014, there was a statistical increase in the overall percent of respondents who reported moderate physical activity five times a week for at least 30 minutes. From 2008 to 2014, there was no statistical change in the overall percent of*

respondents who reported vigorous physical activity three times a week for at least 20 minutes. From 2008 to 2014, there was a statistical increase in the overall percent of respondents who met the recommended amount of physical activity. From 2003 to 2014, there was a statistical increase in the overall percent of respondents being overweight.

In 2014, 59% of respondents reported two or more servings of fruit while 24% reported three or more servings of vegetables on an average day. Respondents who were female, in the middle 20 percent household income bracket, married or not overweight were more likely to report at least two servings of fruit. Respondents who were female, married or met the recommended amount of physical activity were more likely to report at least three servings of vegetables on an average day. *From 2003 to 2014, there was a statistical decrease in the overall percent of respondents who reported at least two servings of fruit on an average day. From 2003 to 2014, there was no statistical change in the overall percent of respondents who reported at least three servings of vegetables on an average day.*

In 2014, 76% of female respondents 50 and older reported a mammogram within the past two years. Eighty-four percent of female respondents 65 and older had a bone density scan. Eighty-two percent of female respondents 18 to 65 years old reported a pap smear within the past three years. Forty-four percent of respondents 18 to 65 years old reported an HPV test within the past five years. Eighty-four percent of respondents reported they received a cervical cancer test in the time frame recommended (18 to 29 years old: pap smear within past three years; 30 to 65 years old: pap smear and HPV test within past five years or pap smear only within past three years). *From 2003 to 2014, there was no statistical change in the overall percent of respondents 50 and older who reported having a mammogram within the past two years. From 2005 to 2014, there was a statistical increase in the overall percent of respondents 65 and older who reported a bone density scan. From 2003 to 2014, there was no statistical change in the overall percent of respondents 18 to 65 years old who reported having a pap smear within the past three years.*

In 2014, 10% of respondents 50 and older reported a blood stool test within the past year. Eight percent of respondents 50 and older reported a sigmoidoscopy within the past five years while 69% reported a colonoscopy within the past ten years. This results in 72% of respondents meeting the current colorectal cancer screening recommendation; respondents who married were more likely to meet the recommendation. *From 2003 to 2014, there was a statistical decrease in the overall percent of respondents who reported a blood stool test within the past year. From 2008 to 2014, there was no statistical change in the overall percent of respondents who reported a sigmoidoscopy within the past five years or a colonoscopy within the past ten years. From 2008 to 2014, there was a statistical increase in the overall percent of respondents who reported at least one of these tests in the recommended time frame.*

In 2014, 97% of respondents wore seat belts always or nearly always; female respondents were more likely to report this. Of respondents who rode a bike, skateboarded, used in-line skates or rode a scooter, 41% reported they always or nearly always wore a helmet; respondents with a college education or who were married were more likely to report this. *From 2003 to 2014, there was a statistical increase in the overall percent of respondents who reported they always/nearly always wore a seat belt or who reported they always/nearly always wore a helmet.*

In 2014, 23% of respondents were current tobacco cigarette smokers; respondents who were male, 18 to 44 years old, with a high school education or less, in the bottom 40 percent household income bracket or unmarried were more likely to be a smoker. In the past 12 months, 46% of current smokers quit smoking for one day or longer because they were trying to quit. Ninety percent of current smokers who saw a health professional in the past year reported the professional advised them to quit smoking. *From 2003 to 2014, there was no statistical change in the overall percent of respondents who were current tobacco cigarette smokers. From 2003 to 2014, there was no statistical change in the overall percent of current smokers who reported they quit smoking for one day or longer in the past 12 months because they were trying to quit. From 2005 to 2014, there was a statistical increase in the overall percent of current smokers who reported their health professional advised them to quit smoking.*

In 2014, 79% of respondents reported smoking is not allowed anywhere inside the home. Respondents who were in the top 40 percent household income bracket, married, nonsmokers or in households with children were more likely to report smoking is not allowed anywhere inside the home. Thirteen percent of nonsmoking respondents reported they were exposed to second-hand smoke in the past seven days; respondents 45 to 54 years old, with a high school education or less, in the bottom 40 percent household income bracket or unmarried respondents were more likely to report this. *From 2008 to 2014, there was a statistical increase in the overall percent of respondents who reported smoking is not allowed anywhere inside the home. From 2008 to 2014, there was a statistical decrease in the overall percent of nonsmoking respondents who reported they were exposed to second-hand smoke in the past seven days.*

In 2014, 7% of respondents used electronic cigarettes in the past month; respondents with a high school education or less were more likely to use electronic cigarettes. Five percent of respondents used smokeless tobacco in the past month; respondents who were male, 35 to 44 years old, with a high school education or less, or unmarried respondents were more likely to use this. Four percent of respondents used cigars, cigarillos or little cigars in the past month; respondents with a high school education or less or unmarried respondents were more likely to use cigars, cigarillos or little cigars.

In 2014, 70% of respondents had an alcoholic drink in the past 30 days. In the past month, 7% were heavy drinkers while 25% were binge drinkers. Respondents 45 to 54 years old or with a high school education or less were more likely to have been a heavy drinker in the past month. Respondents 18 to 34 years old were more likely to have binged. Three percent of respondents reported in the past month they had been a driver or a passenger when the driver perhaps had too much to drink. Two percent of respondents reported in the past year there was a household problem associated with drinking alcohol. *From 2003 to 2014, there was a statistical increase in the overall percent of respondents who reported binge drinking in the past month. From 2003 to 2014, there was no statistical change in the overall percent of respondents who reported heavy drinking or in the overall percent of respondents who reported they were a driver or passenger when the driver perhaps had too much to drink in the past month. From 2005 to 2014, there was no statistical change in the overall percent of respondents who reported a household problem associated with alcohol in the past year.*

In 2014, 2% of respondents reported in the past month they were a driver or passenger when the driver was under the influence of marijuana or other illicit drugs.

In 2014, 34% of households had a firearm in or around the home; respondents who were in the top 40 percent household income bracket or married were more likely to report this. Of all households, 17% had a handgun while 32% had a rifle or shotgun. Respondents who were in the top 40 percent household income bracket or married were more likely to report a rifle/shotgun. *From 2003 to 2014, there was no statistical change in the overall percent of respondents who reported having a firearm in or around their home. From 2008 to 2014, there was no statistical change in the overall percent of respondents who reported a handgun or rifle/shotgun in the household.*

In 2014, 9% of respondents reported someone made them afraid for their personal safety in the past year; respondents who were female or in the bottom 40 percent household income bracket were more likely to report this. Four percent of respondents reported they had been pushed, kicked, slapped or hit in the past year; respondents who were 18 to 34 years old, in the bottom 40 percent household income bracket or unmarried were more likely to report this. A total of 10% reported at least one of these two situations; respondents who were in the bottom 40 percent household income bracket were more likely to report this. *From 2003 to 2014, there was a statistical increase in the overall percent of respondents reporting in the past year they were afraid for their personal safety. From 2003 to 2014, there was no statistical change in the overall percent of respondents reporting they were pushed, kicked, slapped or hit. From 2003 to 2014, there was a statistical increase in the overall percent of respondents reporting at least one of the two personal safety issues.*

Air Quality Notices or Advisories

In 2014, 17% of respondents reported in the past 12 months they looked for information on air quality notices or advisories in order to take special precautions on those days; respondents who were female or married were more likely to report this. *From 2011 to 2014, there was a statistical increase in the overall percent of respondents reporting they looked for air quality notices or advisories, possibly the result of wording changes.*

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