



Community Health Needs Assessment

2014 - 2016



Advocate Good Shepherd Hospital



December 2016

Advocate Good Shepherd Hospital is pleased to present the 2014-2016 Community Health Needs Assessment. Over this past year, our community health staff have worked closely with the Good Shepherd Community Health Council to complete a comprehensive review of the health needs in Lake County. Advocate Good Shepherd Hospital has strong commitment as a faith-based community hospital to fulfill the mission of meeting the health needs of patients, families and the community.

This CHNA specifically demonstrates the strength of collaboration, as the hospital worked extensively with a broad array of community organizations—public, private and not-for-profit—to identify the primary health issues facing our community. Data has been gathered and analyzed to help identify specific areas of need. The Community Health Council selected and recommended that the hospital focus on mental health and obesity as the priority issues for the next three years. The Good Shepherd Hospital Governing Council then voted to approve these priorities. We are committed to continue to work in collaboration with community partners to develop programs to impact mental health and obesity in Lake and McHenry Counties.

We want to extend a special thank you to the members of the Community Health Council, the Lake County Health Department and Community Health Center (LCHD/CHC), the McHenry County Health Department and the Healthier Barrington Coalition for their assistance in this assessment process. The LCHD/CHC worked with the hospital to administer a community survey in Wauconda to identify community-specific health issues. The community needs assessments from all three entities were valuable sources used to inform the hospital's CHNA.

It is indeed a privilege to serve as your health care provider. We look forward to our working together to improve the health of our community.

Sincerely,

Karen Lambert
President
Advocate Good Shepherd Hospital

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I. Executive Summary

Advocate Good Shepherd Hospital has strong commitment as a faith-based community hospital to fulfill the mission of meeting the health needs of patients, families and the community. This work begins with a broad understanding of the assets, needs, challenges and social conditions facing the community. Good Shepherd Hospital has had a long history of working closely with community stakeholders through coalitions to accomplish this task. By building sustainable relationships and partnering with community organizations the hospital has gained a stronger understanding of the needs and created solutions that are comprehensive and inclusive. This CHNA report explains the process, data sources and strategy used to help bring improved health and vitality to the communities Good Shepherd Hospital is privileged to serve on a daily basis.

The hospital has had a Community Health Council (CHC) in place since 2008 and has a comprehensive annual community health plan in place from the 2011-2013 CHNA. For purposes of the 2014-2016 CHNA cycle, the CHC defined the community as the hospital's Total Service Area (TSA), which includes a Primary Service Area (PSA) and Secondary Serve Area (SSA). This geographical area includes parts of three counties; however the majority of the hospital's service area is split equally between Lake and McHenry counties. In order to be more comprehensive, the hospital was able to successfully leverage community partnerships through health coalitions established in Lake and McHenry Counties as well as through the Healthier Barrington Coalition, which the hospital helped create in 1995.

Through these partnerships, the hospital participated in three comprehensive community assessments: Live Well Lake County Community Health Assessment, 2015; McHenry County Healthy Community Study-2014; and the 2014 Healthier Barrington Needs Survey. Additionally, Advocate Good Shepherd Hospital and Condell Medical Center commissioned community surveys in Waukegan and Wauconda, and these survey results were used to more clearly understand the unique health needs in Lake County, particularly in communities of higher poverty.

A key source for secondary statistics was the Healthy Communities Institute (HCI), a centralized data platform purchased by Advocate Health Care. In early 2014 Advocate Health Care signed a three-year contract with HCI, now a Xerox Company, to provide an internet-based data resource for their eleven hospitals during the 2014-2016 CHNA cycle. Hospital-based data for specific health diagnoses was queried and combined with public health data to identify geographic areas with specific health needs.

In preparation for the selection of priorities, Good Shepherd Hospital Community Health staff presented a comprehensive summary of the demographics, five health issues and social determinant factors to the Community Health Council. Staff asked Council members to consider a defined list of criteria when making the priority selections.

The Community Health Council put significant time and thought into determining how to select priorities that were meaningful to the health of community members as well as having the potential to show measurable health improvements. Mental health and obesity were the main health priorities selected for focus. Once priorities were determined, specific tactics and measurable targeted outcomes will be established to address these health issues over the next three years.

The final CHNA document and recommended priorities were approved by the Good Shepherd Hospital Governing Council in October 2016. The Community Health Council will work in conjunction with the Community Health staff to develop a detailed three-year plan for 2017-2019. The Community Health Council will continue to meet quarterly to review the progress of the interventions and outcomes, and engage in annual discussions to determine any modifications that might be necessary. It is the hope of Advocate Good Shepherd Hospital that this report will prove valuable and will allow members of the Good Shepherd Hospital community to gain a greater understanding of the community's health needs.

II. Description of Advocate Health Care and Advocate Good Shepherd Hospital

Advocate Health Care

Advocate Good Shepherd Hospital is one of 11 hospitals in the Advocate Health Care (Advocate) system. Advocate is the largest health system in Illinois and one of the largest healthcare providers in the Midwest, operating more than 400 sites of care, including 11 acute care hospitals, the state's largest integrated children's network, five Level I trauma centers, two Level II trauma centers, the region's largest medical group and one of the region's largest home health care companies. The Advocate system trains more primary care physicians and residents at its four teaching hospitals than any other health system in the state.

Advocate is a faith-based, not-for-profit health system related to both the Evangelical Lutheran Church in America and the United Church of Christ. Advocate's mission is to serve the health needs of individuals, families and communities through a wholistic philosophy rooted in the fundamental understanding of human beings as created in the image of God. This wholistic approach provides quality care and service and treats each patient with dignity, respect and integrity. To guide its relationships and actions, Advocate embraces the five values of compassion, equality, excellence, partnership and stewardship. The mission, values and wholistic philosophy (MVP) permeate all areas of Advocate's healing ministry and are integrated into every aspect of the organization, building a cultural foundation. The MVP calls Advocate to extend its services into the community to address access to care issues and to improve the health and well-being of the people in the communities Advocate serves. As an Advocate Hospital, Good Shepherd Hospital embraces the Advocate system MVP.

Advocate Good Shepherd Hospital

Advocate Good Shepherd Hospital in Barrington is an acute care facility with more than 700 physicians representing 50 medical specialties. Highly skilled physicians and clinical professionals offer a comprehensive range of services. For more than 35 years, Good Shepherd Hospital has provided quality, compassionate health care to its patients and communities. It is a leader in delivering the most advanced technologies and services available in the northwest suburbs of Chicago. The hospital has 176 beds; comprehensive Advocate Heart Institute services through the Wayne and Patricia Kocourek Family Cardiac Center; a state-of-the-art Level II trauma center with a state Emergency Department approved for pediatrics treatment area; a fitness center that features occupational and physical therapy for youth to seniors; Outpatient Centers in Crystal Lake and Lake Zurich providing physician and imaging services; and an Immediate Care Center in Crystal Lake staffed by emergency medicine physicians.

To ensure that care delivery remains outstanding and attuned to the evolving needs of the community, the hospital embarked on a modernization project to improve the patient care experience and enhance privacy, offering the most advanced technology, including:

- Private patient rooms for enhanced privacy;
- Smart room technology – interactive monitors creating a seamless integration of medical devices and clinical operations;
- New operating rooms equipped with the latest medical equipment;
- New diagnostic testing and imaging center;
- New breast care center with easy access;
- Green roofs providing energy-conserving insulation.

Good Shepherd Hospital was one of the first in the area to offer Intraoperative Radiation Therapy (IORT), delivering targeted radiation treatment directly to the tumor site in surgery immediately following lumpectomy. This reduces seven weeks of radiation treatment to one outpatient procedure. The hospital achieved Magnet recognition for excellence in nursing services by the American Nurses Credentialing Center's (ANCC) Magnet Recognition Program. This is an accomplishment shared by only 393 hospitals nationally. Additionally, the hospital was the recipient of the 2015 Emergency Nurses Association Lantern Award. The award recognizes a select group of emergency departments that exemplify exceptional practice and innovative performance in the core areas of leadership, practice, education, advocacy and research. Successful applications demonstrate a variety of diverse initiatives throughout the application with quantifiable outcomes, sustained improvements and innovative processes. Good Shepherd Hospital's Emergency Department has now received the ENA Lantern Award two times; the first being in 2012.

Exhibit 1: Advocate Good Shepherd Hospital Statistics 2015

Category	Number
Inpatient Admissions and Observations	13,023
Births	1,408
Emergency Department Visits	35,020
Patients Served	269,797
Surgeries	9,783
Outpatient Services	255,974
Medical Staff Physicians	737

Source: Advocate Good Shepherd Hospital Public Affairs and Marketing Department, 2016.

III. Summary of the 2011-2013 Community Health Needs Assessment and Program Implementation

Community Definition

For purposes of the 2011-2013 Good Shepherd Hospital Community Health Needs Assessment (CHNA), the community was defined as the total service area (TSA) of the hospital. The TSA includes communities in McHenry County, Lake County and a small portion of Barrington, which lies in Cook County. The TSA is divided between the Primary Service Area (PSA) and the Secondary Service Area (SSA). Generally 75% of all patients served come from the PSA and 15% of all patients served come from the SSA. The remaining approximately 10% of the patients come from other zip codes.

The PSA population was 309,151. The median household income for the PSA was \$91,118; and \$70,933 for the SSA. The population of the PSA was 86% White, 4% Asian and 8% of the residents were of Hispanic ethnicity. Hispanics comprised 10% of Crystal Lake's population, 11% of the 60050 McHenry zip code population, 13% of Island Lake's population and 18% of Wauconda's population. For the SSA, 56% of the population was White, 3% African American, 4% Asian and 35% Hispanic. Carpentersville had the highest concentration of both Hispanics (49%) and African Americans (6%). Other diverse communities in the SSA included Round Lake for which 40% of the population was Hispanic and Mundelein with a 32% Hispanic and 10% Asian population.

Overall Process of the Assessment

For the 2011-13 Community Health Needs Assessment, Good Shepherd Hospital convened its long-standing Community Health Council to review a broad set of primary and secondary community data. The Community Health Council was chaired by a hospital Governing Council member. Data sources included the 2010 McHenry County Healthy Community Study, the 2009 Lake County Illinois Project for Local Assessment of Needs (IPLAN), the 2011 Healthier Barrington Needs Survey, 2010 Behavioral Risk Factor Surveillance System, 2010 Centers for Disease Control and Prevention (CDC) data and a wide array of 2010-2012 hospital discharge, registry and hospitalization data.

Needs Identified and Priorities Selected

The top three priorities selected by the Community Health Council for Good Shepherd Hospital to address were:

- Falls among seniors
- Obesity
- Cancer (prevention and early detection)

Although the Council was in agreement that the three priorities above would receive significant resources, the hospital continued existing programs and partnerships in the areas of mental health, heart disease (diabetes and cholesterol) and teen health.

Summary of Program Strategies and Outcomes to Meet Identified Priorities

The following is a brief summary of program strategies and outcomes for each priority selected.

Priority Area: Senior Falls

The senior falls intervention targeted seniors (age 65 and older) living in the hospital's TSA with the goal of reducing falls in that population. Good Shepherd Hospital expanded the Matter of Balance Program (MOB) to increase the number of classes offered within the community. MOB is an evidence based program designed to increase awareness of the participant's personal risk of falls, exercise commitment, and increased confidence to control their environment to reduce fall risk. Pre and post surveys were administered to determine the amount of change for each person in the areas listed above.

Performance Measures for the program included:

- Participants of the MOB Fall Prevention classes will show an increased awareness of their personal fall risk.
- Participants of the MOB Fall Prevention classes will increase their personal commitment to exercise regularly.
- Participants of the MOB Fall Prevention classes will show an increase in their confidence in controlling their environment to reduce fall risks.
- Reduction in the number of hospital trauma admissions due to falls among the 65+ age group.

In October 2012, three Good Shepherd employees became licensed master trainers under the Matter of Balance Lay Leader Model which utilizes community coaches to teach the eight-session classes. As a result, from 2015 through the end of August 2016, the hospital conducted 26 community classes reaching 240 individuals using the coaching model. Five additional classes are scheduled to be completed in 2016. The results from participants thus far show a 30.52% improvement in their ability to reduce fall risk factors in their lives.

Priority Area: Obesity

The goal of the obesity intervention was to reduce the rate of childhood obesity in the TSA and teach students the importance of a healthy diet and regular physical activity. The target population for the obesity interventions was kindergarten through fifth grade children living in the hospital's TSA. Good Shepherd hospital expanded partnerships with community schools to implement the Coordinated Approach to Child Health (CATCH), an evidence based program that targets elementary-aged, school children, with the goal to reduce the risk factors for obesity. The program creates behavior change through enabling physically activity and healthy food awareness. CATCH has actively engaged in over 25 years of research and experience, with over 10,000 schools and communities currently using CATCH—additionally, 32 states use CATCH in their YMCA's.

Performance measures for the program included:

- Increase the percentage of kids in the Healthy Zone by 5% as measured by FitnessGram.
- Increase the mean score of the Coordinated Approach to Childhood Health (CATCH) nutrition test by 2% (pre/post).
- Implement at least one environmental change at 50% of CATCH schools.
- Decrease the percentage of obese children in schools served by the CATCH program by 2%.

In the 2014-15 academic year, over 10,000 (K-12) students from 39 schools participated in Good Shepherd Hospital's school-based Childhood Obesity Prevention program known as CATCH. Students were tested for fitness levels in the fall and spring and the results were compared. Results indicated a 4% improvement in fitness levels in the sample of students tested across 39 schools. The hospital also supported an additional program, *Fruits and Veggies to the Rescue*, designed to educate children about the importance of trying and eating many types of fruits and vegetables. In 2015, the Fruits and Veggies to the Rescue Program was featured in five elementary schools and the Teacher's Program was featured in two elementary schools in the Good Shepherd TSA. In 2016, the program is tracking specific metrics to measure the impact of the education. The progress report will be completed in December.

Priority Area: Cancer Prevention and Early Detection

Good Shepherd Hospital developed targeted interventions for adults age 50 and older and teens age 13-17 with the goal of decreasing the cancer mortality rate in the primary service area.

Performance measures included:

- Provide smoking prevention education to at least 500 youths

Good Shepherd Hospital has a Cancer Committee in place that is dedicated to cancer prevention and early detection. In 2015, some of the tactics included connecting patients and families to 2-1-1 information and referral to social service resources, continuing to work with patient navigators to identify patient needs, and hosting community lectures on multiple types of cancer to encourage conversations with health care providers. Good Shepherd Hospital also had community outreach campaigns on Colon Cancer Awareness and Screening, Breast Cancer Awareness for underserved populations, and E-cigarettes in local schools. E-Cigarette prevention was addressed by partnering with area middle schools and high schools and/or attending community events where the target audience—youth—were present, not only providing prevention education but also to capture feedback related to educational materials.

Input From the Community

After the CHNA was completed, it was posted on the hospital's website for public comment. Subsequently, the CHNA's progress has been posted on the hospital's website each year for community information and comment. No comments have been received from the public regarding the 2011-2013 CHNA report or implementation plan.

Lessons Learned

Good Shepherd Hospital identified two key lessons learned from the previous CHNA cycle. First, the metrics used to track the impact of the program initiative were not as specific as they needed to be. In some cases, the program evaluation was focused primarily on the number of lives touched, and more thoughtful planning will need to be put into the development of the metrics in the next CHNA cycle. Secondly, there are more opportunities to share the results of the CHNA, both internally and in the community to promote collaboration/partnerships to address specific needs. Good Shepherd Hospital will develop a plan to disseminate and share the results more widely.

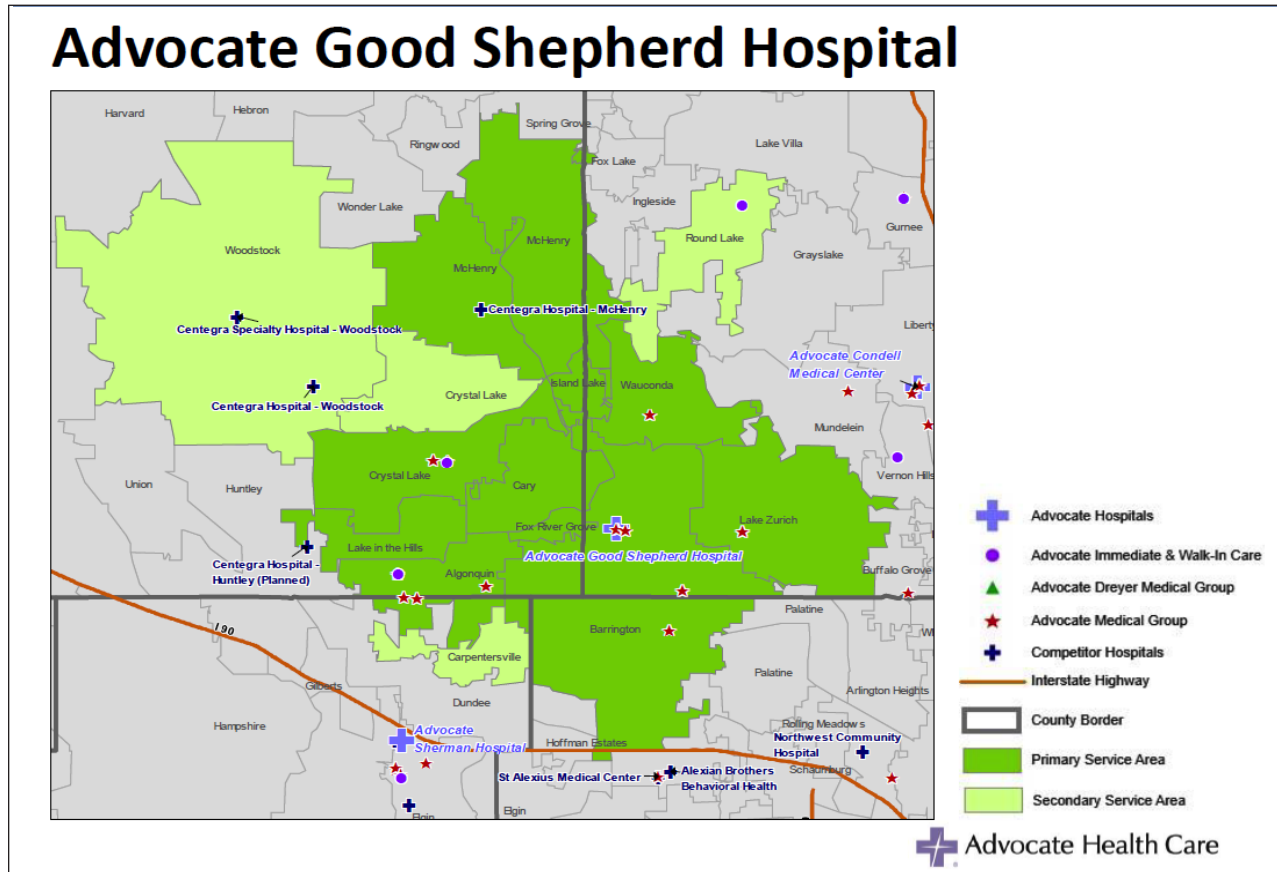
IV. 2014-2016 Community Health Needs Assessment

Community Definition and Sociodemographic Description

Service Area

For the purpose of this 2014-2016 CHNA, Good Shepherd Hospital defines the community as the hospital's total service area (TSA). The TSA is the hospital's primary and secondary service areas combined including communities in McHenry County and Lake County and a small portion of Barrington which lies in Cook County. The TSA includes the following villages and cities: Barrington, Crystal Lake, Lake Zurich, Mundelein, Cary, Round Lake, Fox River Grove, Woodstock, Crystal Lake, Carpentersville, Island Lake, Wauconda, McHenry, Palatine, Algonquin, and Lake in the Hills.

Exhibit 2: Advocate Good Shepherd Hospital Primary and Secondary Service Area Map



Source: Advocate Health Care Strategic Planning Department, 2016.

Population

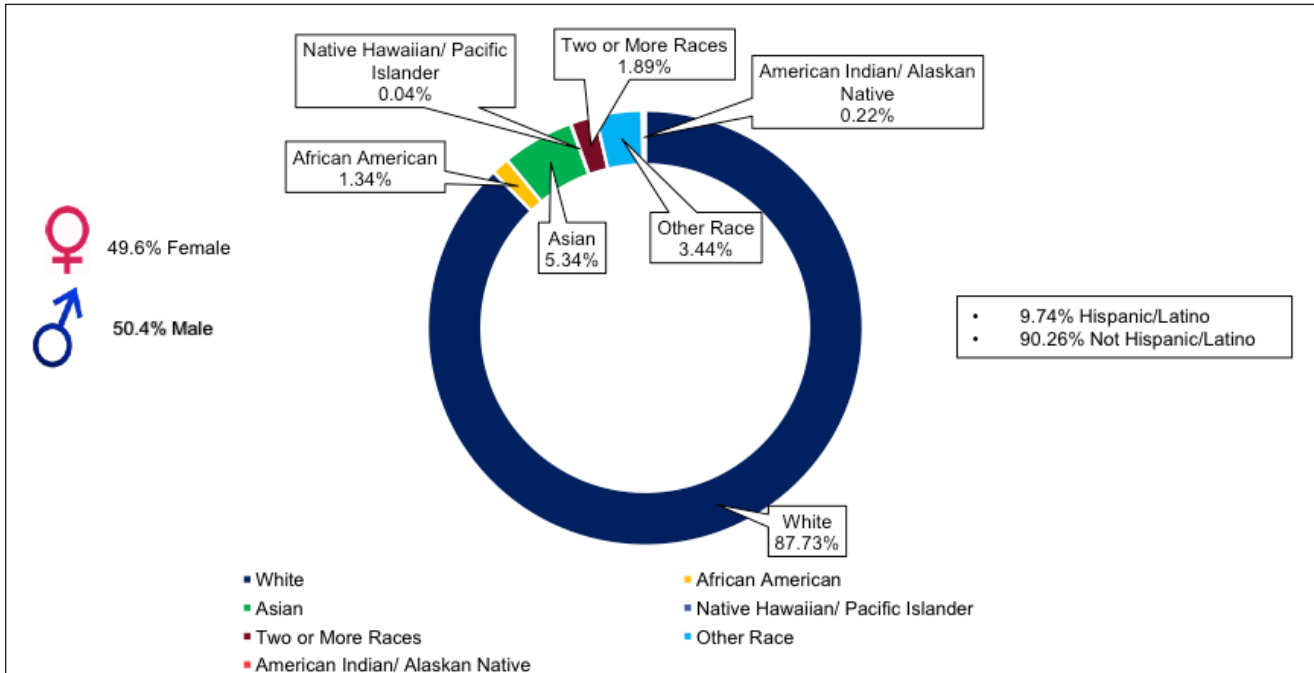
The TSA population is 489,512. The TSA is divided between the Primary Service Area (PSA) and the Secondary Service Area (SSA). Generally 75% of all patients served come from the PSA, and 15% of all patients served come from the SSA. The remaining 10% come from other zip codes. The population of the PSA is 308,906 and the SSA population is 180,606 (Healthy Communities Institute, Claritas, 2016). The growth rate of the PSA is quite slow, with only a 0.14% growth from 2010 to 2016. The growth rate of the SSA is higher, increasing 2.03% since 2010 (Truven Health, Nielsen, 2016).

Age, Gender, Race and Ethnicity

The population of the TSA is 489,512 people. The PSA has 308,906 residents and the SSA population is 180,606. Fifty percent of PSA residents are male and 50% female. The same gender percentages hold true for the SSA. The PSA median age is 40.98 and it is 35.42 for the SSA. The population of the PSA is 88% White, 1.3% African American and 5.35% Asian. Ninety percent of residents are Non-Hispanic and 9.7% are Hispanic. The PSA race and gender is shown in Exhibit 3.

The population for the SSA is 71.78% white, 4.07% African American and 6.21% Asian. Sixty-five percent of the population is Non-Hispanic and 35.23% is Hispanic.

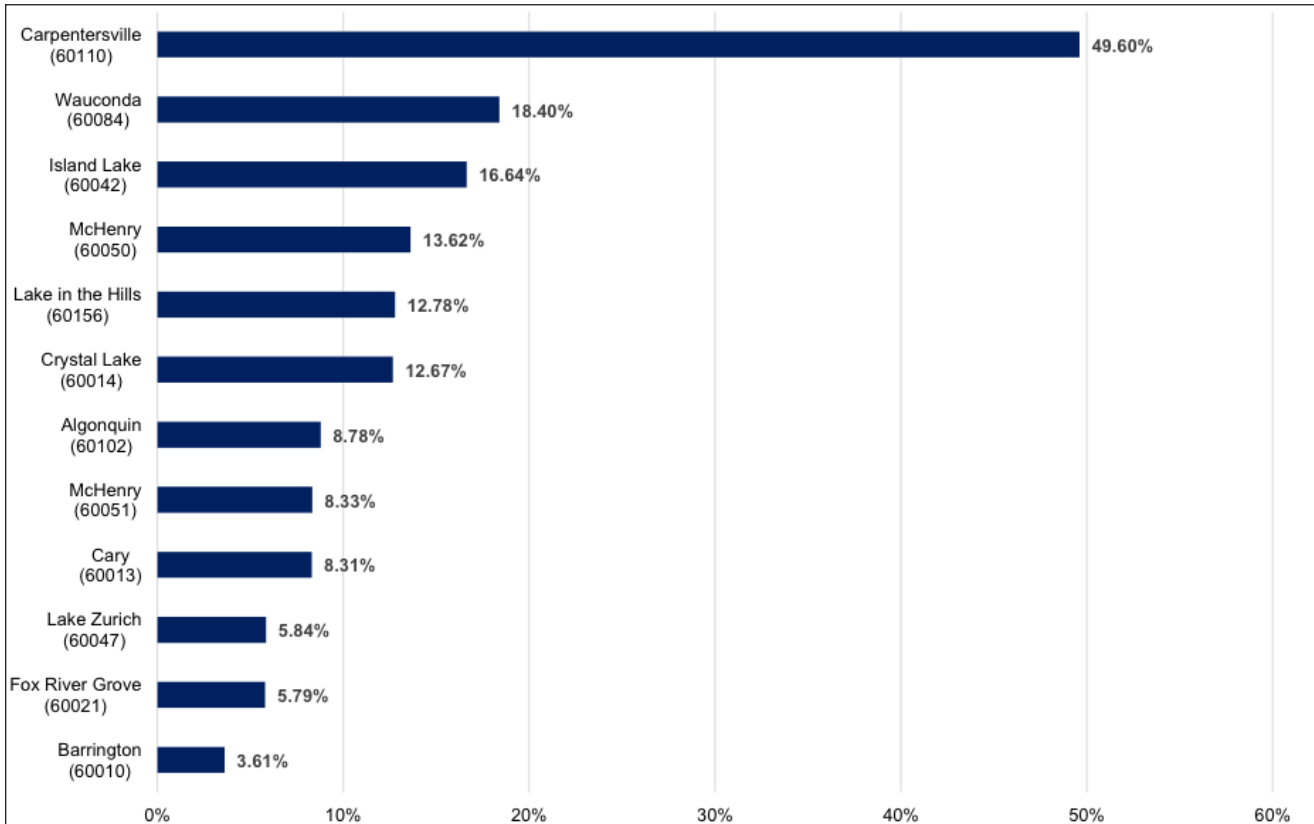
Exhibit 3: Race, Ethnicity and Gender of Primary Service Area Residents 2015



Source: US Census Bureau and US Census American Community Survey, 2008-2012.

Exhibit 4 shows the communities in the TSA with the largest Hispanic population – Carpentersville, Wauconda and Island Lake.

Exhibit 4: Percentage of Hispanic/Latino Residents within Selected Total Service Area Zip Codes 2015



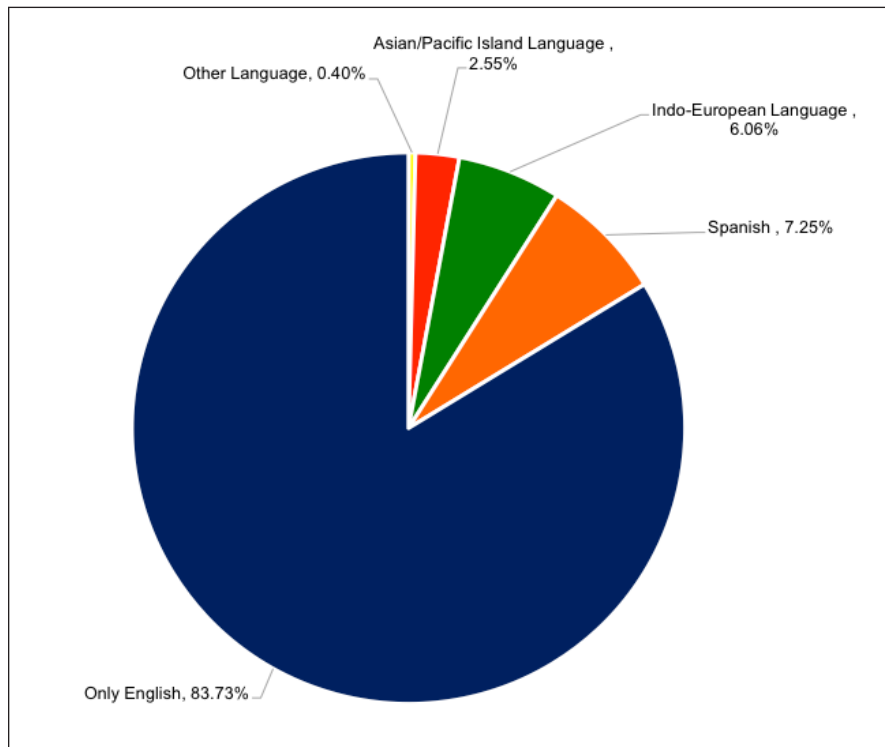
Source: Healthy Communities Institute, Claritas, 2016.

For the SSA, 71.8% of the residents are White, 4.1% African American, 6.2% Asian and 35.23% Hispanic. The communities in the SSA with the largest Hispanic population are Carpentersville, Round Lake and Mundelein (Healthy Communities Institute, Claritas, 2016).

Languages Spoken at Home

A total of 16.26% of PSA residents speak a language other than English at home, including Spanish, Indo-European languages, Asian/Pacific Island and other languages. Exhibit 5 displays the PSA breakdown.

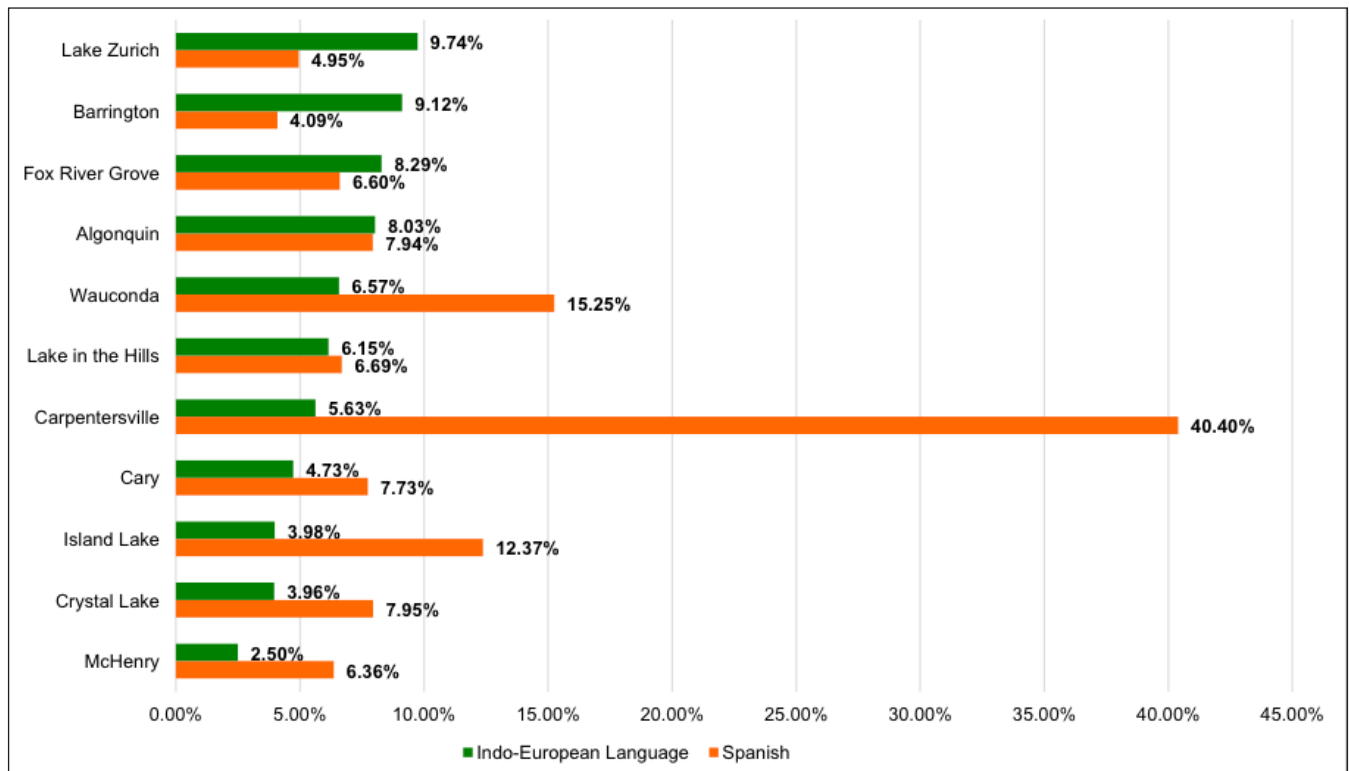
Exhibit 5: Languages Spoken at Home in Primary Service Area Households 2015



Source: Healthy Communities Institute, Nielsen Claritas, 2016.

In the SSA, 36.22% of the population speaks languages other than English at home. Spanish-speakers make up 28.45%, 2.50% speak Asian/Pacific Island languages, 4.94% speak Indo-European languages, and 0.32% speak other languages. The communities in the TSA with the highest percentage of Spanish speaking population are Carpentersville (40.4%), Wauconda (15.25%) and Island Lake (12.37%). The areas with the highest Indo-European speaking population are Lake Zurich (9.74%), Barrington (9.12%) and Fox River Grove (8.29%), as displayed in Exhibit 6.

Exhibit 6: Selected Total Service Area Percent of Spanish and Indo-European Languages Spoken by Zip Code 2015



Source: Healthy Communities Institute, Nielsen Claritas, 2016.

Economics

Income and Poverty Level

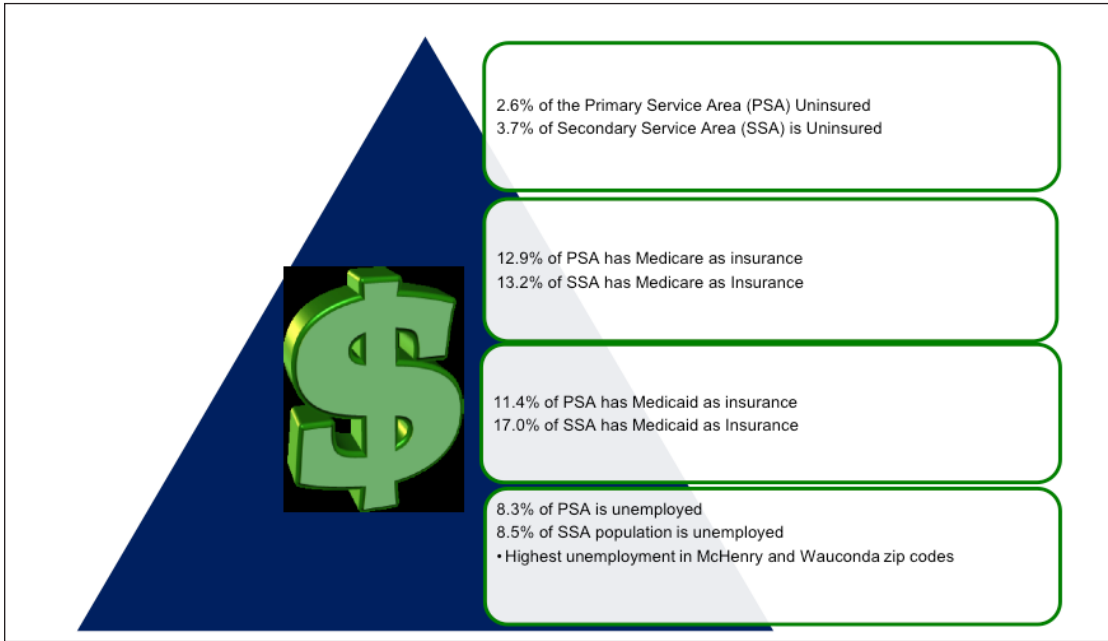
Exhibit 7 outlines some of the key economic indicators of the PSA and SSA. The PSA has a high overall socio-economic level with a median household income of \$91,500. In the PSA, only 4.4% of families are living below 100% of the Federal Poverty Level (FPL), which is \$24,300 for a family of four. The communities with the highest number of families living below 100% of the FPL are Island Lake (7.4%) and McHenry (zip code 60050) at 6% (Healthy Communities Institute, Claritas, 2016). In the PSA, 1.2% of households are receiving public assistance, such as Temporary Assistance to Needy Families (TANF). (Healthy Communities Institute, American Community Survey, 2010-2014.)

The SSA has an overall lower socio-economic status. The median household income for the SSA is \$70,162. A total of 9.5% of the families in the SSA are living below 100% of the FPL. The SSA communities with the highest number of families living below 100% of the FPL are Carpentersville (13.1%), Round Lake (11%), and Woodstock (9.7%). (Healthy Communities Institute, Nielsen Claritas, 2016.)

Insurance Status

Thirteen percent of PSA residents, and 13% of SSA residents are Medicare recipients. In the PSA, 4.4% of the residents age 65 and over are living below 100% of the FPL (Centers for Medicare and Medicaid Services, 2016). The Affordable Care Act has had a substantial impact upon the insurance status for low-income residents. As of 2016, the PSA population is 2.6% uninsured and 11.4% have Medicaid insurance. In 2012, 4.2% of the population was uninsured and 4.7% had Medicaid insurance (Truven Health, 2016). A total of 3.7% of the population in the SSA are uninsured and 17% have Medicaid, as compared to 6.7% uninsured and 8.6% with Medicaid in 2012.

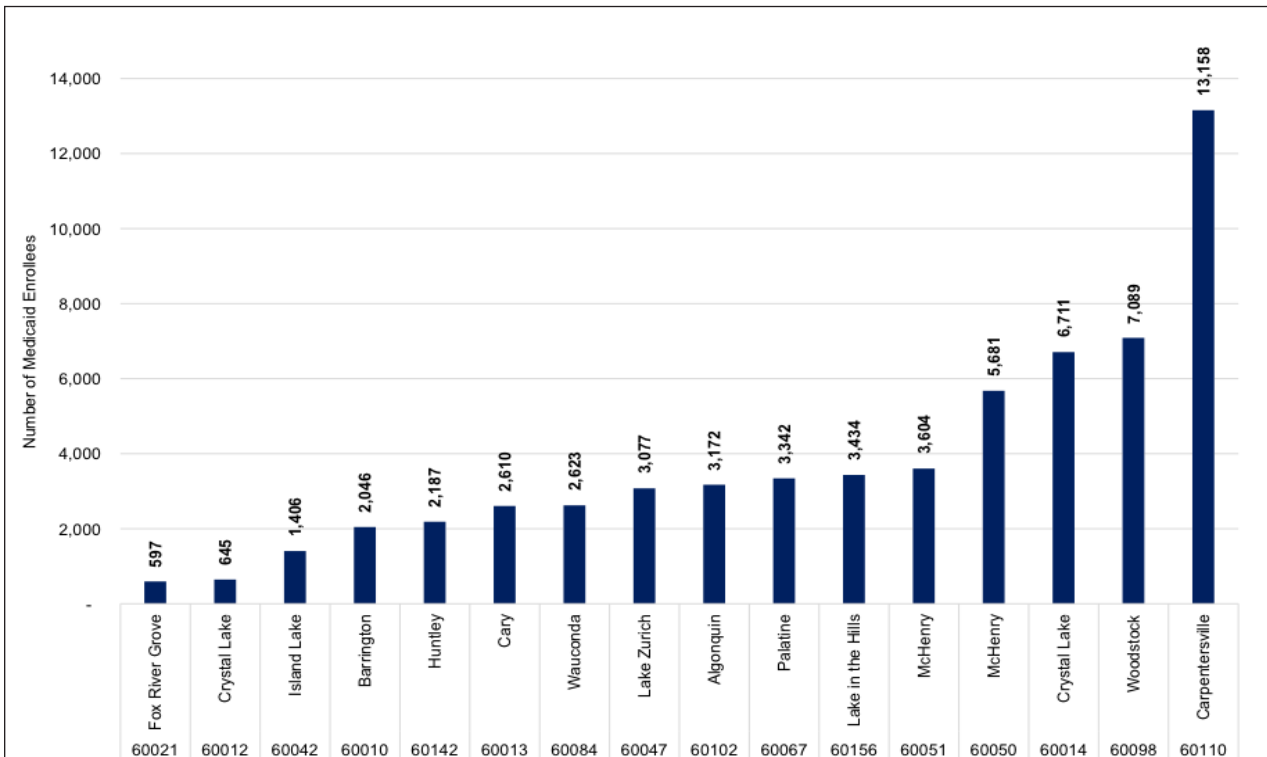
Exhibit 7: Primary and Secondary Service Area Insurance and Economic Status 2015



Source: Truven Health, 2016.

Exhibit 8 shows the communities in the TSA with the highest Medicaid enrollment – Carpentersville (13,158), Woodstock (7,089), and Crystal Lake (6,711).

Exhibit 8: Total Service Area Number of Medicaid Enrollees by Zip Code 2015



Source: Illinois Department of Healthcare and Family Services, 2015.

Employment

The unemployment rate for the PSA is 8.3%; it is slightly higher for the SSA at 8.5%. The highest unemployment rates in the PSA are in the communities of McHenry (11.27%) and Wauconda (10.1%). The highest unemployment rates in the SSA are in Carpentersville (10.8%) and Woodstock (10.6%).

Education

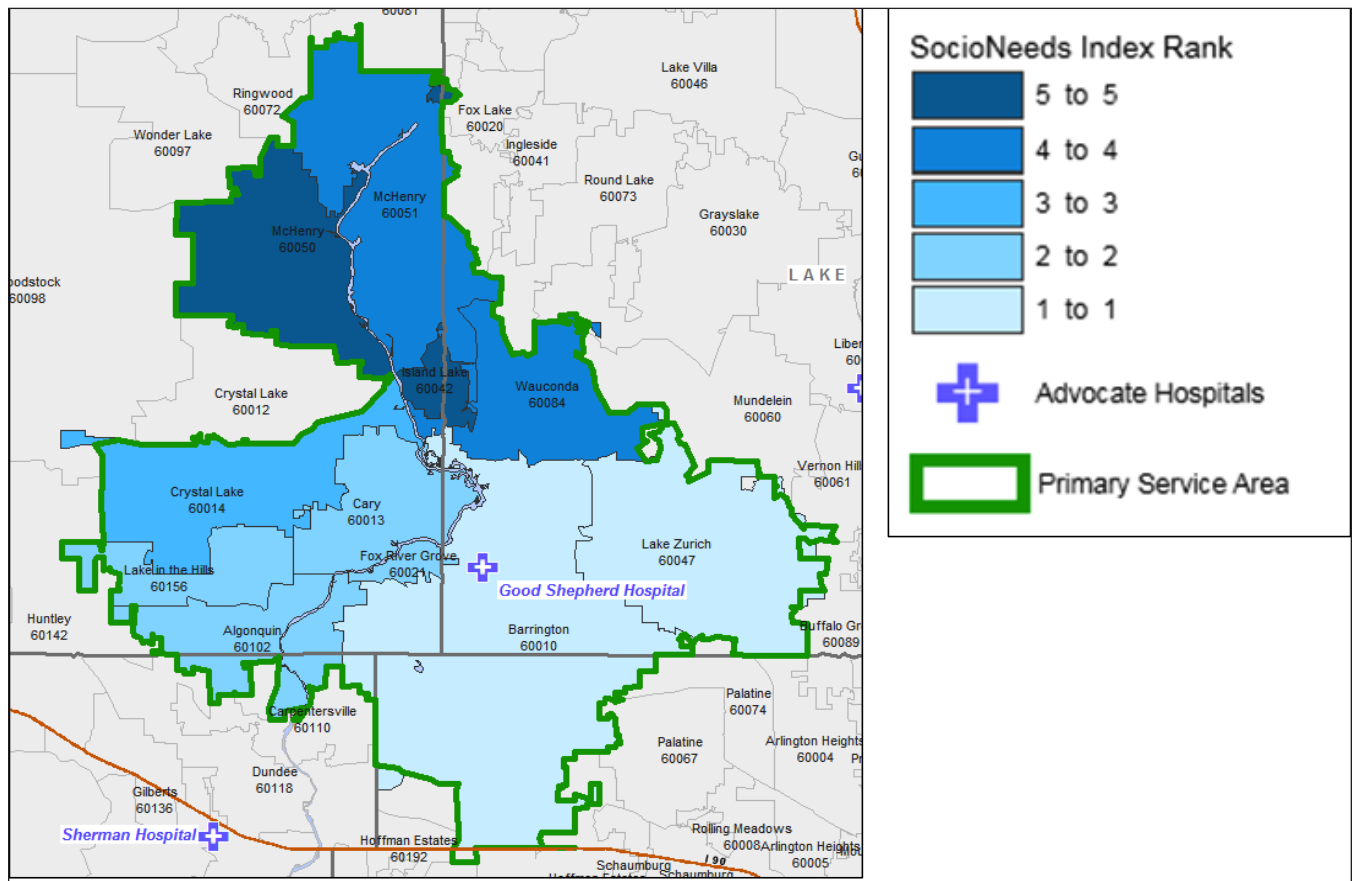
In the PSA, 93.9% of the population, age 25 or older has a high school degree or higher, but 3.7% of the population has no high school diploma, which is lower than Illinois at 6.75%. The communities with the highest percentage of their population without a high school diploma are Island Lake (6.5%), McHenry (60050) at 5.3%, and Wauconda (5.3%). Within the SSA, 7.5% of the population has no high school diploma. Carpentersville (11.4%) and Round Lake (8.6%) have the largest percentages of their population without a high school degree. Additionally, 13.2% of the Carpentersville population and 11.3% of the Round Lake population have less than a ninth grade education.

Social Determinants of Health: SocioNeeds Index

The SocioNeeds Index is an HCI indicator that is a measure of socioeconomic need, correlated with poor health outcomes. The index is calculated from six indicators, one each from the following topics: poverty, income, unemployment, occupation, education and language. The indicators are weighted to maximize the correlation of the index with premature death rates and preventable hospitalization rates. All zip codes, counties, and county equivalents in the United States (US) are given an Index Value from 0 (low need) to 100 (high need). To help identify the areas of highest need within a defined geographic area, the selected zip codes are ranked from 1 (low need) to 5 (high need) based on their Index Value. These values are sorted from low to high and divided into five ranks using natural breaks. These ranks are then used to color the zip codes with the highest SocioNeeds Indices with the darker colors.

The map in Exhibit 9 illustrates the zip codes and communities in the PSA by their SocioNeeds ranking, from 1 to 5, with 5 being the highest need. The communities with the ranking of 5 are McHenry (60050) and Island Lake, followed by McHenry (60051) and Wauconda with a ranking of 4 (Healthy Communities Institute, Nielsen Claritas, 2016).

Exhibit 9: Advocate Good Shepherd Hospital PSA SocioNeeds Index Map



Source: Healthy Communities Institute, Claritas, 2016.

In Exhibit 10, the communities with a ranking of 3 or higher in either the PSA or SSA are listed in order of greatest socioeconomic need to lowest socioeconomic need. The communities with the highest SocioNeeds Index Value in the TSA are Carpentersville (60110), followed by Round Lake (60073), McHenry (60050) and Island Lake (60042).

Exhibit 10: Good Shepherd Hospital (TSA) Communities by SocioNeeds Index Value and Ranking 2016

City	Zip Code	Index Value	Population	Area
Carpentersville	60110	71.4	39,541	SSA
Round Lake	60073	59.9	60,766	SSA
McHenry	60050	33.9	31,367	PSA
Island Lake	60042	31.7	8,378	PSA
McHenry	60051	23.6	24,458	PSA
Wauconda	60084	19.8	17,618	PSA
Crystal Lake	60014	11.3	47,434	PSA

Source: Healthy Communities Institute, Claritas, 2016.

Key Findings

- The population of the PSA is 88% White, 1.3% African American, 5.35% Asian and 9.7% of the residents are Hispanic. The communities in the PSA with the largest Hispanic population are Wauconda, Island Lake and McHenry.
- The SSA is more racially diverse; 71.8% of the residents are White, 4.1% African American, 6.2% Asian and 35.23% Hispanic. The communities in the SSA with the largest Hispanic residents are Carpentersville, Round Lake and Mundelein.
- A total of 16.26% of PSA residents speak a language other than English at home.
- The communities in the TSA with the highest percentage of Spanish speaking population are Carpentersville (40.4%), Wauconda (15.25%) and Island Lake (12.37%).
- In the PSA, only 4.4% of families are living below 100% of the Federal Poverty Level (FPL), and in the SSA 9.5% of families are below FPL.
- The highest unemployment rates in the TSA are the communities of McHenry (11.27%), Carpentersville (10.8%), Woodstock (10.6%), and Wauconda (10.1%).
- The communities in the TSA with the highest percentage of their population without a high school diploma are Carpentersville (11.4%), Round Lake (8.6%), Island Lake (6.5%), McHenry (60050) at 5.3% and Wauconda (5.3%).
- The communities with the highest SocioNeeds Index Values are Carpentersville, Round Lake, McHenry, and Island Lake.

Key Roles in the Assessment

System and Hospital Leadership

In 2014 Advocate Health Care began organizing resources to implement the 2014-2016 CHNA cycle. The system signed a three-year contract with the Healthy Communities Institute (HCI), now a Xerox Company, to provide an internet-based data resource for their eleven hospitals during the 2014-2016 CHNA cycle. This robust platform offered the hospitals 171 health and demographic indicators including thirty-one (31) hospitalization and emergency department (ED) visit indicators at the service area and zip code levels. In addition system leaders collaborated with the Strategic Planning Department to create sets of demographic, mortality and utilization data for each hospital site. This collaboration with Strategic Planning continued during the three-year cycle ensuring that each hospital site had detailed inpatient, outpatient and emergency department data for its site.

By the end of 2014, a new Department of Community Health was established under Mission and Spiritual Care, a vice-president named to lead the department, and a plan developed to ensure that each hospital in the system would have a community health expert to coordinate its community health work. Good Shepherd Hospital brought a long history of support for community health; key staff now include a masters prepared Regional Director for Community Health (Good Shepherd Hospital, Sherman Hospital and Condell Medical Center) and a full-time Community Health Coordinator dedicated to Good Shepherd Hospital.

Community Health Council

In alignment with Advocate Health Care's standardized approach, Good Shepherd Hospital convened its long-standing Community Health Council to review both primary and secondary health data for the CHNA. This Community Health Council is chaired by a community representative who also serves as a Governing Council member of the hospital. The Council is comprised of eleven community members, representing 50% of the total membership. Non-Advocate-affiliated members represent the McHenry County and Lake County Health Departments, a free clinic in McHenry County, faith-based organizations, area school districts, the American Cancer Society and social service agencies. Good Shepherd representatives include the executive team, mission and spiritual care, trauma, cardiac center and business development and strategy.

2016 Community Health Council Members

- Barrington School District, Superintendent
- Barrington Ventures, Owner & Good Shepherd Hospital Governing Council Member
- Citizens for Conservation, President
- Family Health Partnership Clinic, Executive Director
- Infinity Medical Partners Inc., Associate Director Project Management/ Operations
- JMS Marketing, President
- Lake County Health Department, Interim Executive Director
- Lake County Health Department Underage Drinking and Drug Prevention Task Force, Project Coordinator
- McHenry County Health Department, Community Health Coordinator
- Peace Lutheran Church, Pastor
- St. Paul's United Church of Christ, Pastor
- Wauconda School District 118, Superintendent
- Wauconda School District 118 Superintendent (retired); Good Shepherd Hospital Governing Council Chair
- Advocate Health Care, Northern Region Community Health Director
- Advocate Health Care, Planning and Marketing Manager
- Advocate Good Shepherd Hospital, Community Health Coordinator
- Advocate Good Shepherd Hospital, Dietician
- Advocate Good Shepherd Hospital, Oncology Health Navigator
- Advocate Good Shepherd Hospital, Supervisor Cardiac and Pulmonary Rehab
- Advocate Good Shepherd Hospital, Trauma Coordinator
- Advocate Good Shepherd Hospital, Vice President of Mission and Spiritual Care
- Advocate Good Shepherd Hospital, Vice President of Physician Strategy and Clinical Operations

In the first meeting of the year, a brief overview of Community Health was presented, along with a schedule of the meetings and work to be completed by the Council during 2016. The Council voted to ratify a formal charter, which outlines its authority, purpose, responsibility, scope of activities and annual goals.

Good Shepherd Hospital Community Health staff presented data in a series of three meetings over an eight-month period. In a fourth meeting, Council members voted to select two health priorities to focus on in the 2017-2019 implementation period. In the fifth meeting of the year, Council members reviewed the progress of 2016 initiatives and the approach for developing the 2017-2019 implementation plan. Evidence-based programs will be used as the basis for the development of key interventions around the selected health priority areas.

Governing Council

The Good Shepherd Governing Council is comprised of 18 members, representing a broad array of community sectors. Members come from the fields of education, manufacturing, philanthropy, faith communities, marketing, financial industry, primary care and subspecialty health care. Two members of the Governing Council also sit on the Community Health Council to ensure coordination of information. The Governing Council reviewed and approved the recommended health need priorities from the Community Health Council and the 2016 Community Health Needs Assessment Report on October 11, 2016.

Collaboration with Health Departments

Since the service area for Good Shepherd Hospital includes both McHenry County and Lake County, the hospital collaborated with both county health departments to conduct a comprehensive county health assessment.

McHenry County Health Department

The McHenry County Health Department conducted its most recent assessment in 2013-2014—the McHenry County Healthy Community Study and the McHenry County Community Analysis. Twelve partner organizations directed the study, including the following:

- Advocate Good Shepherd Hospital
- Advocate Sherman Hospital
- Centegra Health System
- Family Alliance Inc.
- McHenry County College
- McHenry County Community Foundation
- McHenry County Department of Health
- McHenry County Mental Health Board
- McHenry County Regional Office of Education
- Pioneer Center for Human Services
- Senior Services Associates Inc.
- United Way of Greater McHenry County

The assessment included three components—a community survey, key informant interviews of community leaders, and community analysis using secondary data sources. Through the assessments, the current health status of county residents is described along with demographic trends, social and economic indicators, health behaviors, and utilization of health services. The assessments also attempt to understand the perceptions of community strengths and weaknesses as well as answer questions about health and human services delivery, unmet needs, gaps, and barriers to care. Health Systems Research of the University of Illinois College of Medicine at Rockford was hired to guide the process, conduct the full assessment and prepare the summary report.

Questions in the survey covered:

- Community features;
- Financial issues;
- Health status – perception of health and prevalence of diseases and conditions (physical and mental);
- Access to care;
- Health insurance status;
- Abuse, suicide, care of other persons.

Key Informant interviews were conducted with 21 community leaders, agency directors, and other experts in their field based on professional expertise, knowledge of local human services or the healthcare system. Interview questions focused on community assets, challenges, target groups in need of services, and perception of strengths and weaknesses of health and human services delivery.

Good Shepherd Hospital Community Health staff served on the steering committee for the Healthy Community Study assessment. Additionally, the hospital helped design the survey questions, select key stakeholders to participate in the interviews and promote and distribute the survey throughout McHenry County. As an active member of the steering committee, Good Shepherd Hospital reviewed the assessment results with other members and helped to select priorities and develop strategies to address the identified needs in McHenry County.

Lake County Health Department and Community Health Center (LCHD/CHC)

Good Shepherd Hospital worked closely with the LCHD/CHC throughout the final stages of the hospital's CHNA process in 2016. The hospital received regular updates from the health department's ongoing community health improvement process and often consulted the LCHD/CHC Community Health Assessment staff for interpretation of data, as it was released. Additionally, Advocate Good Shepherd Hospital and Condell Medical Center commissioned the LCHD/CHC to conduct two targeted community surveys in Waukegan and Wauconda. Waukegan is within the SSA for Good Shepherd Hospital and

Wauconda is within the PSA. These communities were selected because both include a growing Hispanic population and areas of higher poverty. Additionally, Waukegan is a more densely populated community (69,644 for 60085 zip code) and Wauconda has a smaller population, and is more “rural” in its identity (17,618 for 60084 zip code).

The LCHD/CHC’s community health improvement process, named Live Well Lake County, was developed within the **M**obilizing for **A**ction through **P**lanning and **P**artnerships, or MAPP, framework. MAPP is a community-driven strategic planning framework utilized in community health improvement. This framework assists communities not only in the prioritization of public health issues, but in creating a platform to develop and implement efforts to address them, leading to action.

From early 2015 through spring 2016, the community health improvement process was guided by the Live Well Lake County Steering Committee, a diverse group of stakeholders from multiple sectors of Lake County that influence the health of the county residents. Advocate’s Director of Community Health for the northern region is an active member of this steering committee. Sectors represented include:

- Healthcare (all hospitals in Lake County);
- Federally Qualified Health Center (FQHC);
- Local philanthropic foundations;
- Social service agencies;
- Environmental advocacy agencies;
- Active lifestyle and fitness advocacy agencies;
- County housing authority;
- Mental health agencies;
- County government departments;
- Federal healthcare agency;
- Social service coalition;
- Medical school in Lake County;
- Regional office of education.

The Lake County community health improvement process yielded two distinct deliverables: the Community Health Assessment and the Community Health Improvement Plan. The Community Health Assessment uses quantitative and qualitative methods to collect and examine health status indicators and provide an understanding of health in a community. Risk factors, mortality, morbidity, forces of change, the capacity of the local public health system, quality of life, community assets, social determinants of health, and health inequity data were collected to identify the community’s key health issues. Ultimately, the Community Health Assessment guides the development and implementation of a Community Health Improvement Plan by justifying how and where resources should be allocated to best meet community needs (Live Well Lake County Community Health Assessment, Summer 2016).

Collaboration with Other Partners

Advocate Good Shepherd Hospital also consulted with a number of additional partner organizations on the CHNA. These include Healthier Barrington Coalition, the McHenry County Health Coalition, the Wauconda United Health Partnership, the Lake County Opioid Initiative Task Force and the McHenry County Substance Abuse Coalition. Each of the organizations have a focus on medically underserved, low-income, and minority populations. Hospital staff are actively engaged in the Wauconda Health Partnership, including the Cultural Diversity Subcommittee that meets monthly.

Methodology

Timeline

Good Shepherd gathered and analyzed a variety of primary and secondary data from 2014 through 2016. This data was presented to the Community Health Council over a period of several meetings and included demographic, economic, education, employment and health data.

Secondary Data

Secondary data was pulled from more than twenty sources to create a demographic profile of the total service area and specific community health profiles, which were presented to the Community Health Council. Incidence, mortality and prevalence data was included when available, and a detailed table comparing the incidence and mortality rates for McHenry and Lake County was presented to the Community Health Council on September 21, 2016, as a reference for the selection of priorities. Comparisons to national, state and Healthy People 2020 goals were also included in the health issue profiles. Finally, geographic areas or subpopulations of health disparity were noted for specific health indicators.

A key source for secondary statistics was the Healthy Communities Institute (HCI), a centralized data platform purchased by Advocate Health Care. In early 2014 Advocate Health Care signed a three-year contract with HCI, now a Xerox Company, to provide an internet-based data resource for their eleven hospitals during the 2014-2016 CHNA cycle. This robust platform offered the hospitals 171 health and demographic indicators including thirty-one (31) hospitalization and emergency department (ER) visit indicators at the service area and zip code levels. Utilizing the Illinois Hospital Association's COMPdata, HCI is able to summarize, age adjust and average the hospitalization and ER data for five time periods from 2009-2015. The HCI contract also provided a wealth of county and zip code data comparisons, a Socio Needs Index visualizing vulnerable populations within service areas and counties, a Healthy People 2020 tracker and a database of promising and evidence-based interventions. HCI provides a gauge that illustrates comparison of indicators between Lake County, McHenry County, other Illinois counties, Illinois as a state, and other counties in the US.

Green (Good):	When a high value is good, community value is equal to or higher than the 50th percentile (median), or, when a low value is good, community value is equal to or lower than the 50th percentile.
Yellow (Fair):	When a high value is good, community value is between the 50th and 25th percentile, or when a low value is good, the community value is between the 50th and 75th percentiles.
Red (Poor):	When a high value is good, the community value is less than the 25th percentile, or when a low value is good, the community value is greater than the 75th percentile.

Throughout the CHNA, indicators may be referred to as being in the HCI green, yellow or red zone, in reference to the above value ratings from HCI. A full list of the secondary data sources used for the CHNA is included in Appendix 2.

Primary Data

In order to garner community viewpoints and opinions on specific health issues, four sources of primary data were included in the CHNA. These are listed below. Executive summaries of these sources are available in Appendix 1.

- Healthier Barrington Coalition Survey, May 28, 2014;
- Community Survey of the 2014 McHenry County Healthy Community Study;
- Lake County Community Strengths Survey, 2015 (part of Live Well Lake County Community Health Assessment 2016-2021);
- Wauconda, Illinois Survey, 2015.

Healthier Barrington Coalition Survey

Good Shepherd Hospital sponsors and leads the Healthier Barrington Coalition which has conducted a household survey specific to the 60010 zip code area every three years since 1995. The 2014 household survey was comprised of questions relating to the perceptions of overall quality of life in the greater Barrington area as well as questions regarding specific health and social-emotional issues by household.

The mail questionnaire was an eight-page booklet consisting primarily of structured questions and one open-ended question asking for specific changes to improve the Barrington area quality of life. Responses were kept completely anonymous. A total of 4,000 questionnaires were mailed to households in zip code 60010. One reminder postcard was sent to all persons in the sample. Four hundred thirty-six (436) mail household surveys were returned, yielding a response rate of 11%. Additionally, all residents were given the opportunity to complete the entire survey online using Survey Monkey software and 249 households responded online. The URL address for the on-line survey was widely publicized throughout the community in magazine and newspaper advertisements, emails and social media promotions.

McHenry County Healthy Community Study

The 2014 McHenry County Healthy Community Study included three components: 1) a community survey to know the views of the residents themselves; 2) key informants for knowledge from community leaders; and 3) community analysis which contains descriptors using secondary data sources. The community survey was conducted online, supplemented by a paper version disseminated at numerous events and locations. Survey respondents numbered 744 with a 60/40 split between online and paper respondents. Questions in the survey covered:

- Community features;
- Financial issues;
- Health status – perception of health and prevalence of diseases and conditions (physical and mental);
- Access to care;
- Health insurance status;
- Abuse, suicide, care of other persons.

Lake County Community Strengths Survey

The Community Strengths Survey was conducted to understand the opinions and perceptions of Lake County residents regarding the quality of life and health in their community. The survey was developed through a workgroup that consisted of members of the Live Well Lake County Steering Committee and Lake County Health Department staff. A total of 14 survey questions were developed that focused on demographics, quality of life, health, and strengths in the community. The survey was distributed online and through paper copies, and was available in English and Spanish. The online survey link was distributed to community partners and organizations throughout Lake County email list-serves, website posts, newsletters, flyers and social media messages. A total of 2,370 Lake County residents over the age of 18 years responded to the survey.

Wauconda Community Survey

In order to better understand the needs and strengths within a community and effectively plan for the future, Advocate Health Care and the Lake County Health Department and Community Health Center (LCHD/CHC) collaborated to collect data on high priority communities of need within the Good Shepherd Hospital service areas. Utilizing a survey tool generated for the Lake County Community Health Status Assessment, individuals in the target community were invited to share their health status and contribute to an assessment of the strengths and needs unique to their neighborhoods. The survey questions were adapted from national tools designed to collect data for improving understanding of health conditions and challenges and drew heavily from the Behavioral Risk Factors Surveillance System (BRFSS) survey used by the Centers for Disease Control and Prevention (CDC) in order to describe health burdens by state. Additional questions were added to assess the prevalence of behavioral health and chronic disease conditions. New questions were subjected to three rounds of review prior to being approved for use in the survey tool. Surveys were administered in English and Spanish.

The community survey in Wauconda is most relevant to the Good Shepherd Hospital CHNA. Five thousand randomly-selected households in the Wauconda community were contacted by mail in mid-September 2015 and invited to participate in an anonymous online or call-in survey offered in English and Spanish. Respondents had a window of ten weeks to participate in the survey. Of the initial 5,000 invitations, 158 were returned as undeliverable. From the invitations sent, the survey received 598 contacts for a contact rate of 12.4% of delivered invitations. A total of 558 respondents moved past the screening questions that verified a respondent's age and home ZIP code. Because only the screening questions were mandatory, the total responses per individual question varied throughout the survey. Responses were collected and weighted for different demographic features including age and sex of the respondents unique to the geography sampled. The source of age and sex estimates were based on the US Census' American Community Survey 5-Year Estimates for years 2010-2014. With this weighting strategy, the Lake County survey was found to produce rates comparable to the I-BRFSS Round 5 estimates (Wauconda Community Survey Findings, July 2016).

Input from the Community and Vulnerable Populations

Input from Wauconda residents was very important, because with 18.4% of all Wauconda residents identifying as Hispanic, it also has the largest Hispanic community in the PSA. Fifteen percent of all Wauconda residents speak Spanish at home. Many residents of Wauconda are vulnerable, when compared to the other communities in the TSA. This community has one of the highest percentages of population with no high school degree.

In the surveys, residents were asked to describe their individual health status. Questions were designed to determine if persons with "very good" or "excellent" health might be realizing benefits from their community environment, while persons in poorer health might not have access to the same resources or be afflicted at higher rates with certain conditions. Both surveys were conducted in English and Spanish to ensure that language was not a barrier to providing input on key community and health issues. Additionally, as part of the Local Public Health Assessment for Lake County, the Live Well Lake County Steering Committee invited public health system partners from public, private, and voluntary sectors to participate. The participants were selected with careful consideration to ensure that diverse perspectives of vulnerable populations were shared in each breakout group as well as balanced participation across sectors and agencies. Forty-eight individuals participated, including representatives from homeless shelters, community coalitions, housing, Latino services, workforce development and youth services.

Summary of Results

Upon thorough review of the primary and secondary source data, Good Shepherd Hospital Community Health staff presented to the Community Health Council a comprehensive demographic profile of the TSA and detailed health profiles of the top health needs identified through three assessments:

- The 2016-2021 Lake County Health Department Community Health Improvement Plan;
- The 2014 McHenry County Community Health Study;
- The 2014 Barrington Area Survey.

Lake County Health Department Community Health Improvement Plan

The Lake County Health Department CHIP identified four community health priorities:

- Cardiovascular Disease and Hypertension;
- Behavioral Health;
- Obesity;
- Diabetes.

While the health improvement priorities were selected based on the most recent data available, the conditions have emerged as driving factors in the health of Lake County residents over longer time periods. Lake County has experienced upward trends in the prevalence of these key chronic conditions.

McHenry County Healthy Community Study

The priorities in the McHenry County Healthy Community Study were selected based on their prominence as community needs. The five health priorities identified in the 2014 McHenry County Healthy Communities Study were:

- Substance Abuse;
- Obesity;
- Depression, Anxiety and Suicide;
- Behavioral Health/Mental Health;
- Diabetes.

Healthier Barrington Coalition – Barrington Area Survey

Finally, The Barrington Area Survey was conducted in conjunction with a comprehensive community health analysis, commissioned by the Healthier Barrington Coalition. The coalition identified mental health as its primary health priority. Many of the survey responses to questions about mental health indicated the need for more provider capacity, and the common theme from parents that their children are experiencing increasing stress and anxiety.

Summary of Good Shepherd Hospital Total Service Area Health Needs

Key criteria for selection of the specific health issues selected as a result of this CHNA were the incidence, prevalence and mortality rates within Lake and McHenry Counties and the TSA, coupled with community opinion and perspective from various surveys. Good Shepherd Hospital Community Health staff analyzed the results from the three assessments, supplemented by statistics from a number of additional secondary data sources. These results were coupled with key hospitalization and emergency department rates, to create specific health profiles. A profile of cancer was provided to the Community Health Council as well. However, because cancer is already being addressed as a priority health need through the hospital's internal Cancer Committee in order to meet the accreditation requirements of the Commission on Cancer, it was not profiled as a health need of focus for the 2017-2019 implementation plan period. A copy of the cancer presentation provided to the CHC is contained in Appendix 3. The five health issues profiled in detail were:

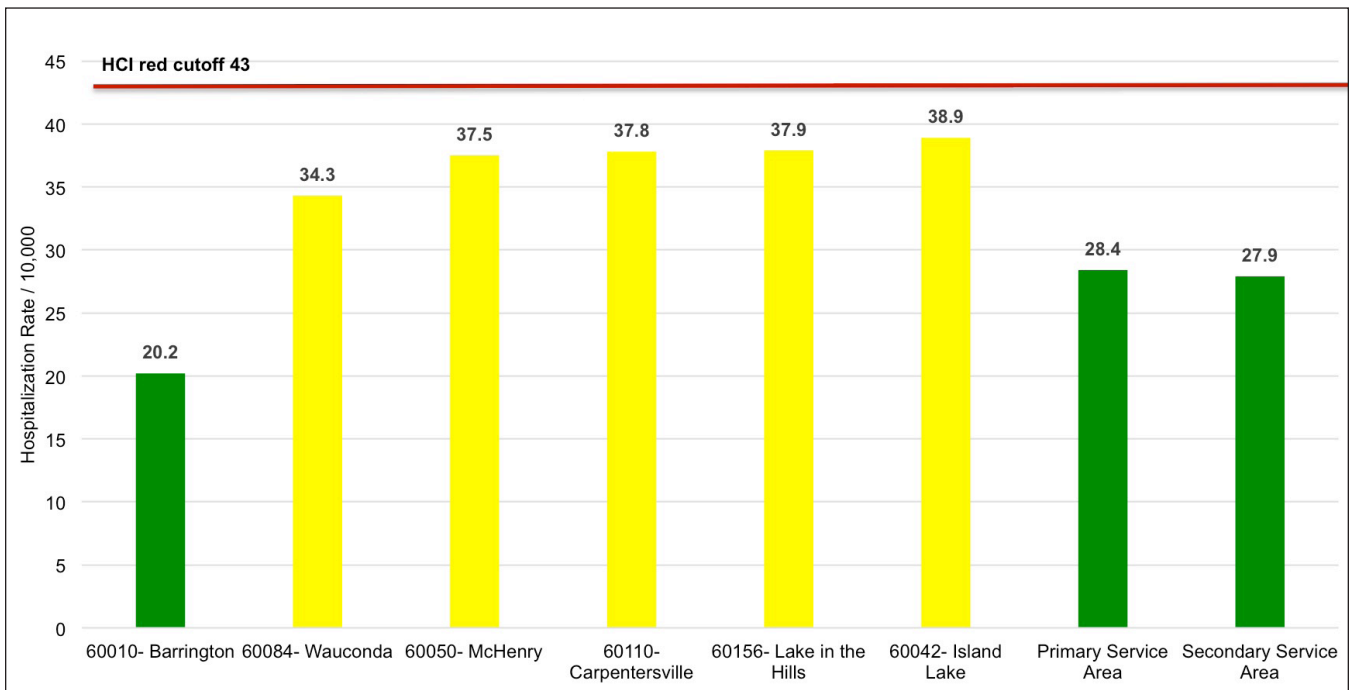
- Cardiovascular Disease;
- Diabetes;
- Obesity;
- Mental Health;
- Substance Abuse.

Cardiovascular Disease

Hypertension (high blood pressure) is a common, yet serious condition in which the force of the blood in a person's arteries is too high. This damages artery walls and the heart and when uncontrolled, can increase the risk of heart attack and stroke. Lifestyle risk factors for cardiovascular disease and hypertension include physical inactivity, being overweight or obese, eating too much salt, drinking too much alcohol, and using tobacco. Results from the Lake County 2015 Community Health Status Survey showed that cardiovascular diseases, in particular hypertension, affect over a third of adults in Lake County. The prevalence of hypertension in Lake County adults has dramatically increased over time, from 18% to 35% (Live Well Lake County Community Health Improvement Plan, 2016-2021).

The age-adjusted death rate from heart disease for Lake County is 155.4 per 100,000 population (CDC National Vital Statistics System, 2009-2013). In McHenry County, there has been a decrease in mortality rates for heart disease and stroke. Over the past decade, McHenry County's heart disease death rate has dropped by 19%, while the stroke death rate has fallen by 25% (2014 McHenry County Healthy Community Study). As shown in Exhibit 11, the prevalence rate of heart disease is slightly higher in McHenry County (2.9%) than Lake County (2.8%). However, the mortality rate from heart disease is higher in Lake County

Exhibit 12: Total Service Area Highest Age-Adjusted Hospitalization Rate due to Heart Failure by Zip Code per 10,000 Population Age 18+ 2012-2014



Source: Healthy Communities Institute, Illinois Hospital Association, COMPdata, 2015.

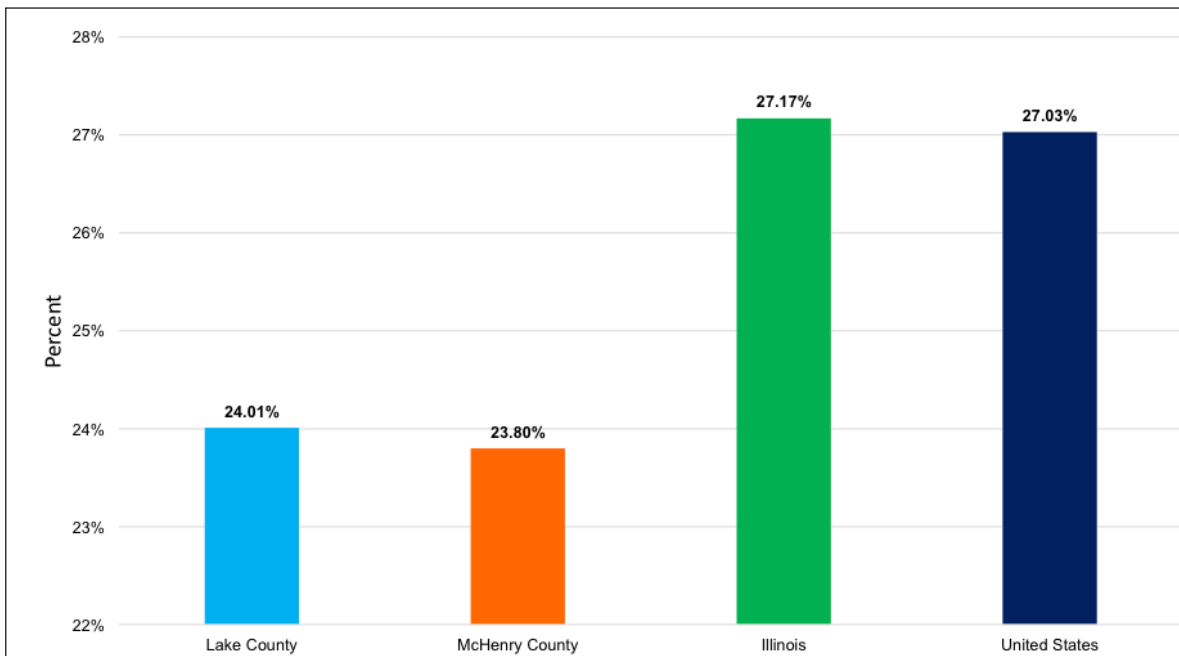
Key Findings: Cardiovascular Disease

- The prevalence of hypertension in Lake County adults has been consistently increasing from 18% in 1998 to 35% in 2015.
- The prevalence of heart disease is slightly higher in McHenry County (2.9%) than in Lake County (2.9%).
- The McHenry County heart disease death rate and stroke death rate have declined over the past decade.
- The mortality rate from heart disease is higher in Lake County (155.4/100,000) than McHenry County (141.5/100,000).
- The mortality rates and prevalence for both counties are lower than the rates for Illinois (177.4/100,000 mortality/3.8% prevalence) and the US (175/100,000 mortality/4.4% prevalence).
- Heart disease is the second leading cause of death in both Lake County and McHenry County.
- The age-adjusted ER rate for adults due to hypertension in the Good Shepherd Hospital PSA and SSA have shown an increase from 2009-2011 to 2012-2014 (PSA 8.5 to 15.3 ER visits/10,000) and SSA (10.8 to 20.6 ER visits/10,000). The ER rates for hypertension increase with age and are higher for minority groups.
- The communities of Island Lake, Lake in the Hills, Carpentersville and McHenry have the highest rates of hospitalization for heart failure in the TSA.

Diabetes

In the United States, nearly 30 million people have diabetes and 86 million are estimated to have prediabetes (American Diabetes Association, 2013). In Lake County, as of 2013, 8.4% of adults age 20 and older have been diagnosed with diabetes. This is a slight decrease from the 2012 rate of 9%. In McHenry County, 10.1% of adults are diagnosed with diabetes, which is actually an increase from the 2012 rate of 9.5% (Centers for Disease Control and Prevention, 2013.) As Exhibit 13 shows, 24% of the Medicare beneficiaries in both Lake and McHenry Counties are diagnosed with diabetes. Both county Medicare rates for diabetes are lower than Illinois (27.17%) and the US (27.03%). (Centers for Medicaid and Medicare Services, 2012.)

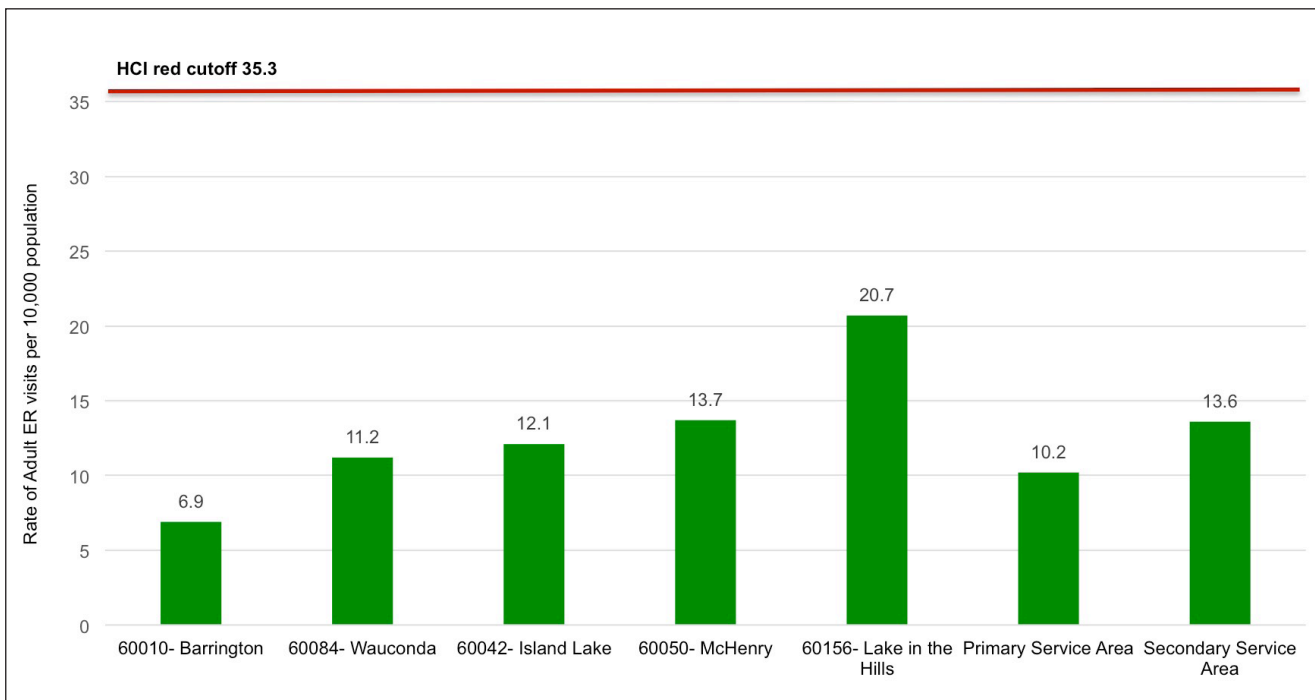
Exhibit 13: Lake County and McHenry County Comparison of Percent of Medicare Beneficiaries with Diagnosed Diabetes 2012



Source: Centers for Medicare and Medicaid Services, 2012.

Age-adjusted ER rates due to diabetes for the Good Shepherd PSA is 10.2 ER visits/10,000 population and for the SSA is 13.6/10,000. The ER rates are highest for Lake in the Hills and McHenry, at 20.7/10,000 and 13.7/10,000, respectively, but both are below the rate for the HCI red zone as shown in Exhibit 14.

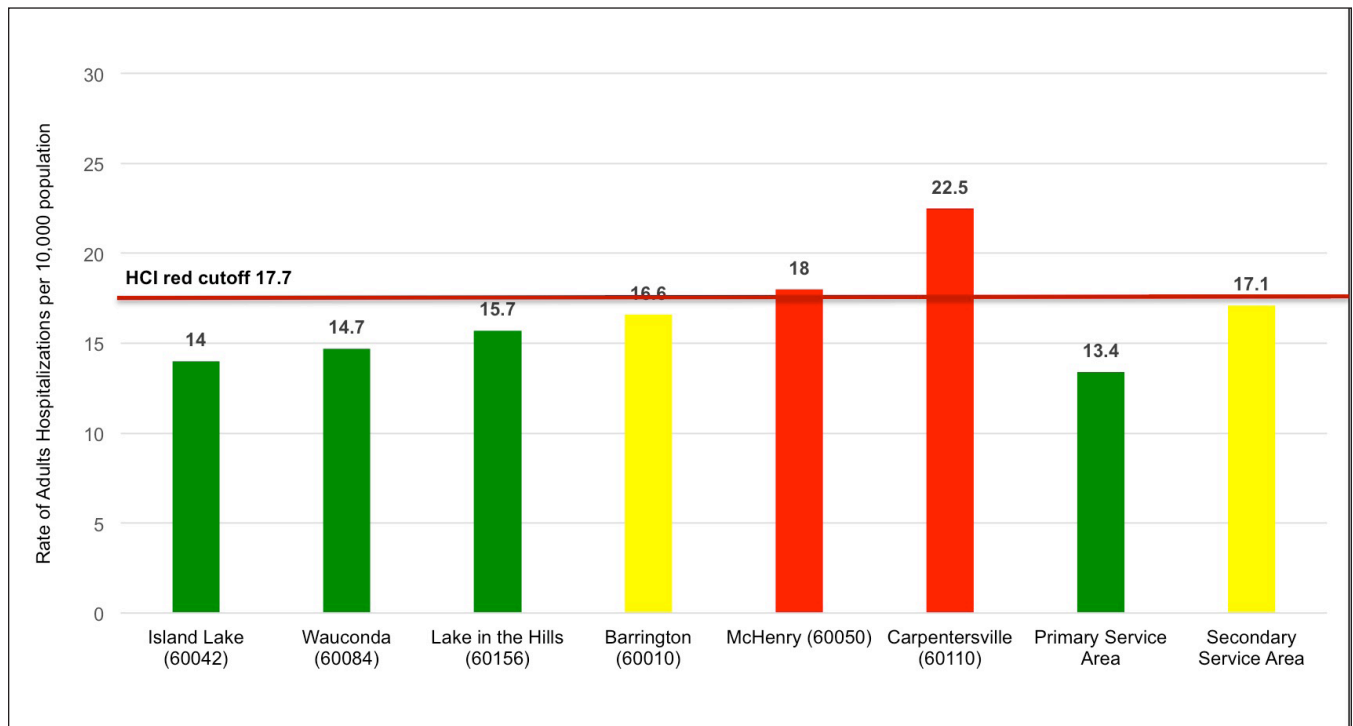
Exhibit 14: Total Service Area Highest Age-Adjusted Emergency Room Visit Rates Due to Diabetes by Zip Code/10,000 Population Age 18+ 2012-2014



Source: Healthy Communities Institute, Illinois Hospital Association, COMPdata, 2015.

Carpentersville and McHenry have the highest hospitalization rates due to diabetes, along with Barrington and Lake in the Hills, as displayed in Exhibit 15.

Exhibit 15: Total Service Area Highest Age-Adjusted Hospitalization Rate Due to Diabetes by Zip Code/10,000 Population Age 18+ 2012-2014



Source: Healthy Communities Institute, Illinois Hospital Association, COMPdata, 2015.

One final indicator to examine for the impact of diabetes on the TSA population is the age-adjusted hospitalization rate due to long-term complications of diabetes. Long-term complications may include heart disease, stroke, blindness, amputations, kidney disease and nerve damage. The 2012-2014 hospitalization rate due to long-term complications of diabetes for the PSA is 6.8 hospitalizations/10,000 population, which is in the HCl green zone. However, the rate for the SSA (10.1 hospitalizations/10,000) is in the HCl red zone. Other communities with rates in the HCl red zone are Wauconda and McHenry, both 9.8/10,000, Island Lake (11.8/10,000) and Carpentersville at 13.4/10,000 population. (Healthy Communities Institute, Illinois Hospital Association, COMPdata, 2015.)

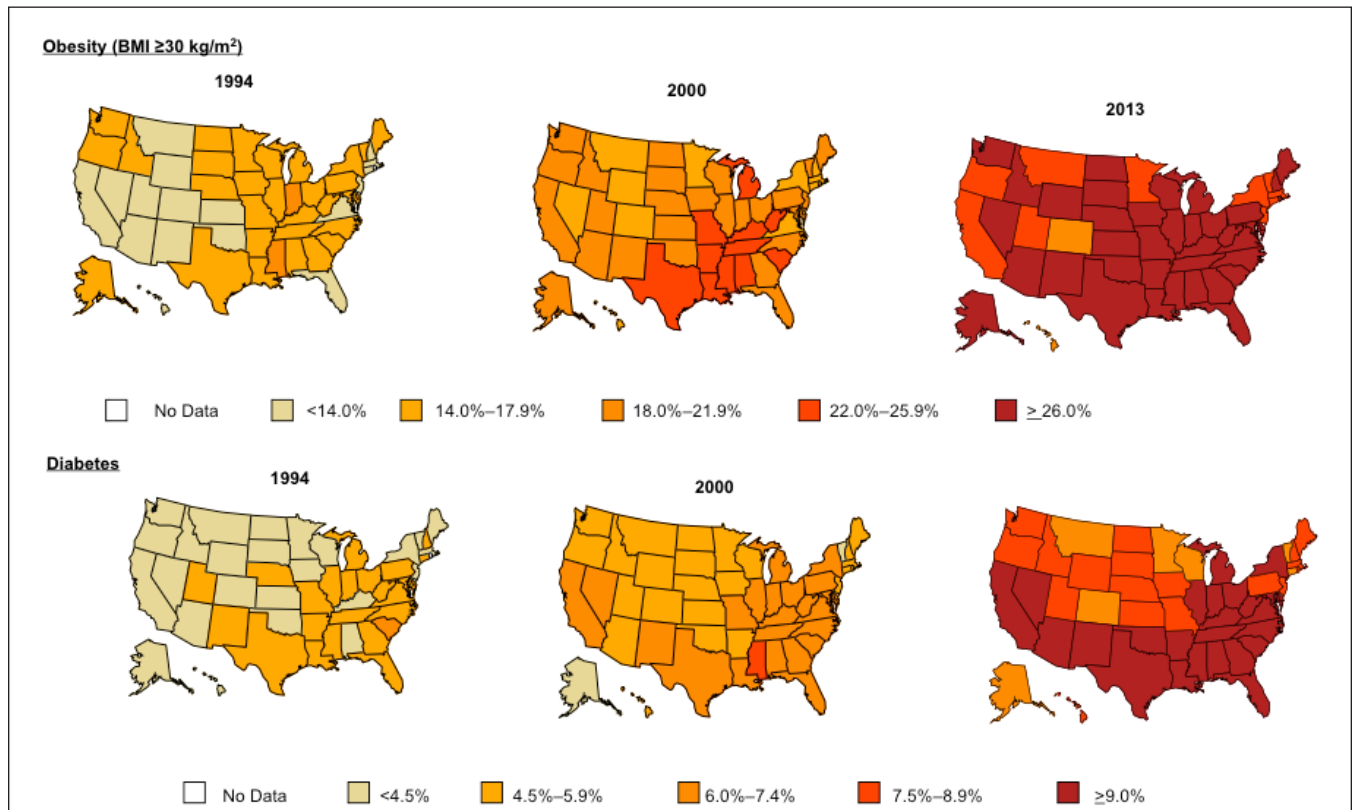
Key Findings: Diabetes

- Prevalence: 8.4% of adults in Lake County have diabetes (2014). This is a slight decrease from the 2012 rate of 9%.
- Prevalence: 10.1% of McHenry County adults have diabetes (2014). This is an increase from the 2012 rate of 9.5%.
- Prevalence: 24% of Medicare beneficiaries in both McHenry County and Lake County have been diagnosed with diabetes. These rates for Medicare beneficiaries are lower than Illinois (27.2%) and the US (27.0%).
- ER rates due to diabetes are highest for Lake in the Hills (20.7/10,000) and McHenry (zip code 60050) (13.7/10,000).
- Carpentersville (22.5/10,000) and McHenry (18/10,000) have the highest hospitalization rates due to diabetes.
- Carpentersville (13.4/10,000), Island Lake (11.8/10,000), McHenry (9.8/10,000) and Wauconda (9.8/10,000) have the highest hospitalization rates due to long-term complications of diabetes. The rates for these communities are all in the red zone.

Obesity

Obesity contributes to an individual’s risk of chronic conditions and other health issues that disrupt quality of life (Live Well Lake County, 2017-2021). There has been a significant increase in obesity rates in the US over the last 20 years. For purposes of tracking overweight and obese levels, the measurement used is Body Mass Index (BMI). Adults with a BMI greater than or equal to 30 (BMI ≥ 30 kg/m²) are considered obese. A level of BMI ≥ 25 is considered overweight. The percentage of obesity among US adults is 36%. The series of maps in Exhibit 15 visually portrays the increasing rate of obesity from 1994 to 2013, and the related increase in diabetes rates in the US. The darker red shade indicates BMI rates of 26% or more in the state. Illinois is shaded dark red; thirty-six percent of adults in Illinois are overweight and 27% are obese. See Exhibit 16.

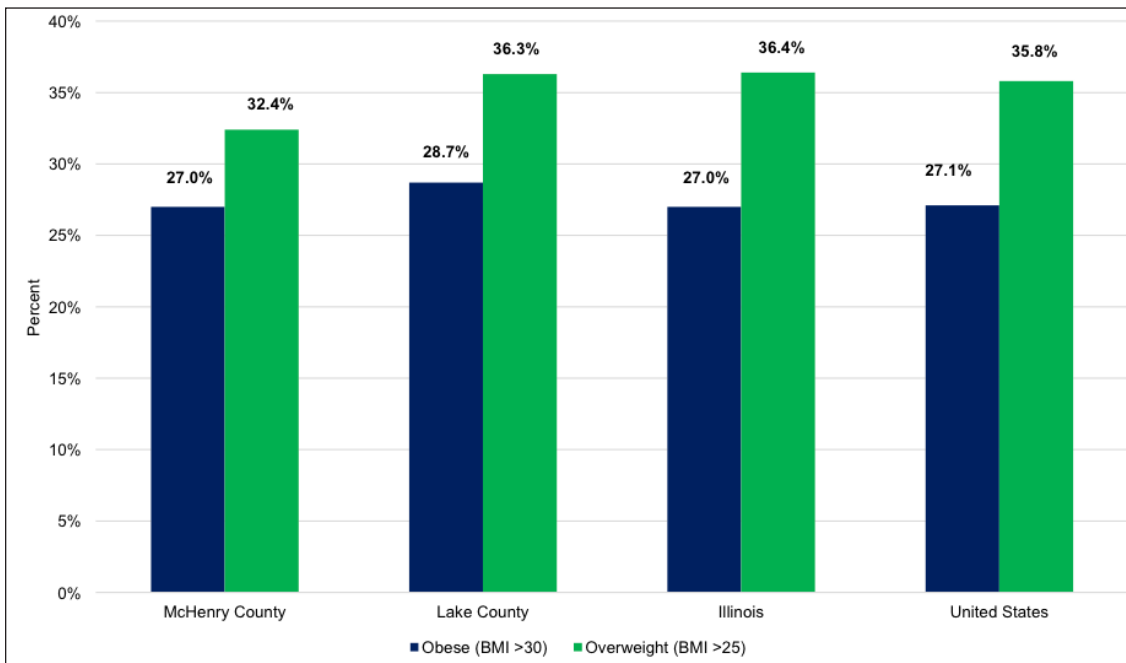
Exhibit 16: Age-Adjusted Prevalence of Obesity and Diagnosed Diabetes Among US Adults 1994-2013



Source: Centers for Disease Control and Prevention, Division of Diabetes Translation, National Diabetes Surveillance System, 2015.

The percentage of adults in McHenry County with a BMI over 25 (overweight) is 32.4%; the percentage with a BMI over 30 (obese) is 27%. In Lake County, the rates are slightly higher with 36.3% of adults who are overweight and 28.7% who are obese. The percentage of Lake County obese adults is slightly higher than the state rate. The rate of McHenry County overweight adults is four percentage points lower than the Illinois rate. See Exhibit 17.

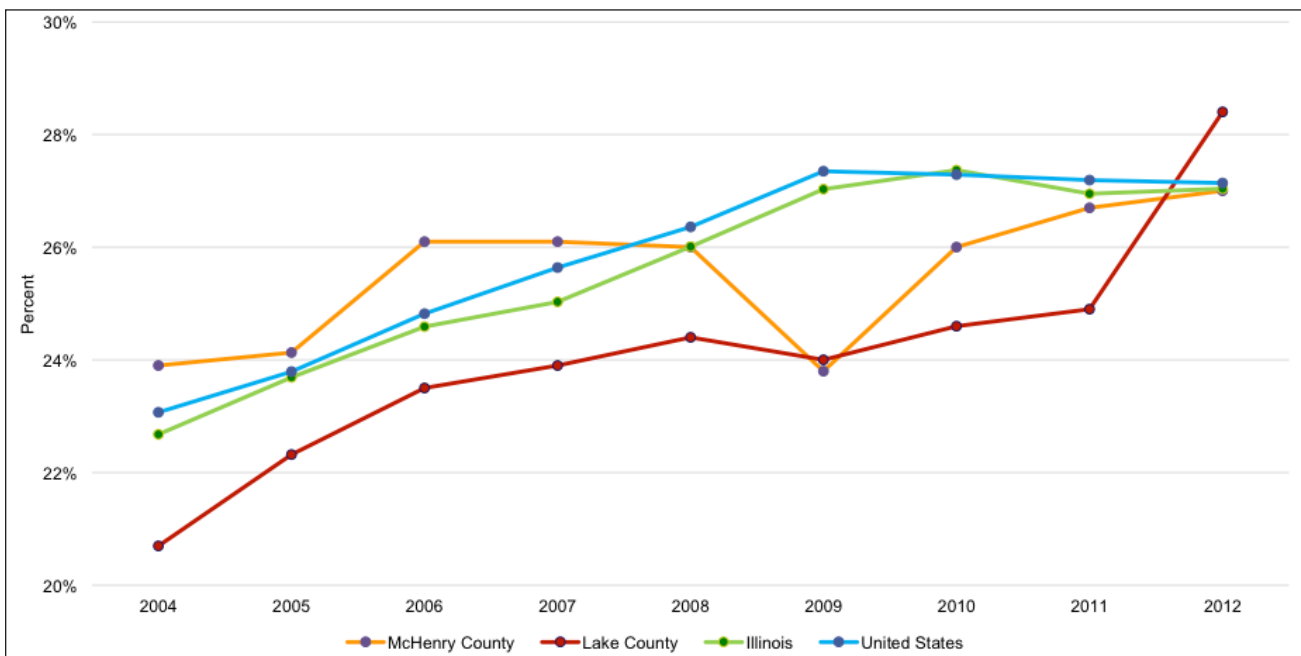
Exhibit 17: Lake and McHenry County Comparison of Percentage of Adults Overweight (BMI over 25) or Obese (BMI over 30) 2012



Source: Community Commons, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, 2015.

In the eight year period from 2008 to 2012, the obesity rate in Lake and McHenry counties has fluctuated some, but generally the rate has been on an upward trend. Both counties experienced decreases in 2009. In fact, the rate for McHenry County dropped two percentage points from 26% in 2008 to 24% in 2009. But both county rates have continued to climb since 2009, with Lake County’s obesity rate increasing from 25% in 2011 to 28.7% in 2012, as shown below in Exhibit 18 (Community Commons, Centers for Disease Control and Prevention, 2012).

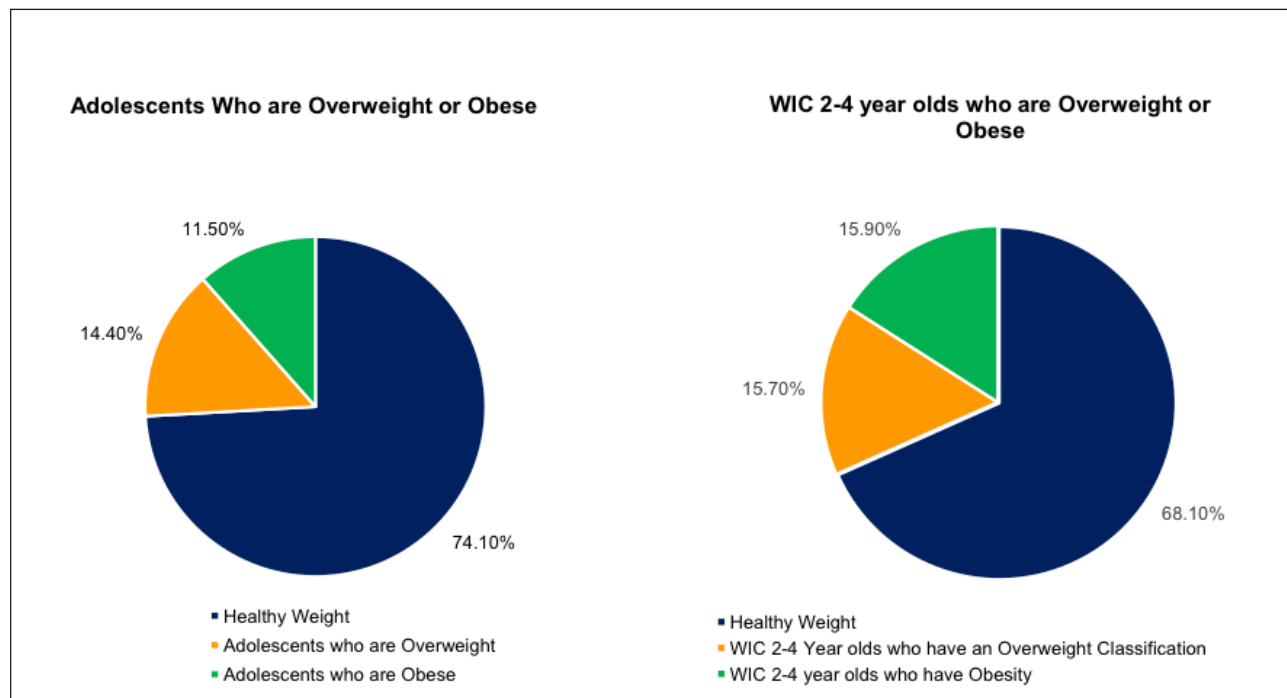
Exhibit 18: Lake and McHenry County Comparison Percent Adults Obese (BMI>30.0) by Year 2004-2012



Source: Community Commons, Centers for Disease Control and Prevention, Diabetes Data & Trends: Methods and References for County-Level Estimates and Ranks, 2015.

Illinois rates for overweight or obesity for adolescents and young children also reflect the growing epidemic. In Illinois, 14% of adolescents are overweight and 12% are obese (Youth Risk Behavior Surveillance System, 2013). The Special Supplemental Nutrition Program for Women Infants and Children (WIC) provides federal grants to states for supplemental foods, health care referrals, and nutrition education for low-income pregnant, breastfeeding and non-breastfeeding postpartum women, and to infants and children up to age five who are found to be at nutritional risk (US Department of Agriculture, Food and Nutrition Service, 2016). Illinois WIC program data indicates 16% of Illinois WIC recipients, ages two to four have an overweight classification, and 16% are obese (Illinois WIC Program, 2012).

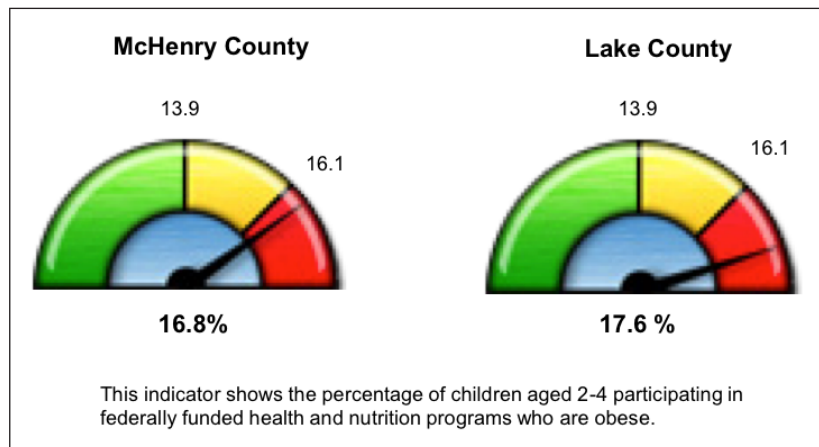
Exhibit 19: Childhood Overweight and Obesity Percentages in Illinois 2012-2013



Source: Illinois State Nutrition, Physical Activity and Obesity Profile, National Center for Chronic Disease Prevention and Health Promotion, 2016.

The percentage of children ages 2-4 participating in federally funded health and nutrition programs in both counties is in the HCI red zone, with 17% of McHenry County and 18% of Lake County low-income pre-school children classified as obese (Healthy Communities Institute, US Department of Agriculture–Food Environment Atlas, 2009-2011). See Exhibit 20.

Exhibit 20: Lake and McHenry County Comparison Low-Income Preschool Obesity 2009-2011



Source: Healthy Communities Institute, US Department of Agriculture, Food Environment Atlas, 2012.

Key Findings: Obesity

- The prevalence of obesity in the US has steadily increased. Prevalence rates as of 2013 show that 40 of the 50 states have $\geq 26\%$ of the population with BMI measurements in the obese range.
- As of 2014, prevalence rates for Illinois remain between 25% and 30%. The 2012-2014 rates are even higher for Illinois Hispanic adults ($>30\%$ to $<35\%$) and non-Hispanic African American adults ($\geq 35\%$).
- More than 11% of Illinois adolescents are obese and 14% are overweight.
- Sixteen percent of Illinois WIC preschoolers (age two to four) are overweight and 16% are obese.
- In Lake County, 29% of adults are obese and 36% are overweight.
- In McHenry County, 27% of adults are obese and 32% are overweight.
- 18% percent of Lake County preschool children are obese and 17% of McHenry County preschool children are obese.

Mental Health

Mental Health in Adults

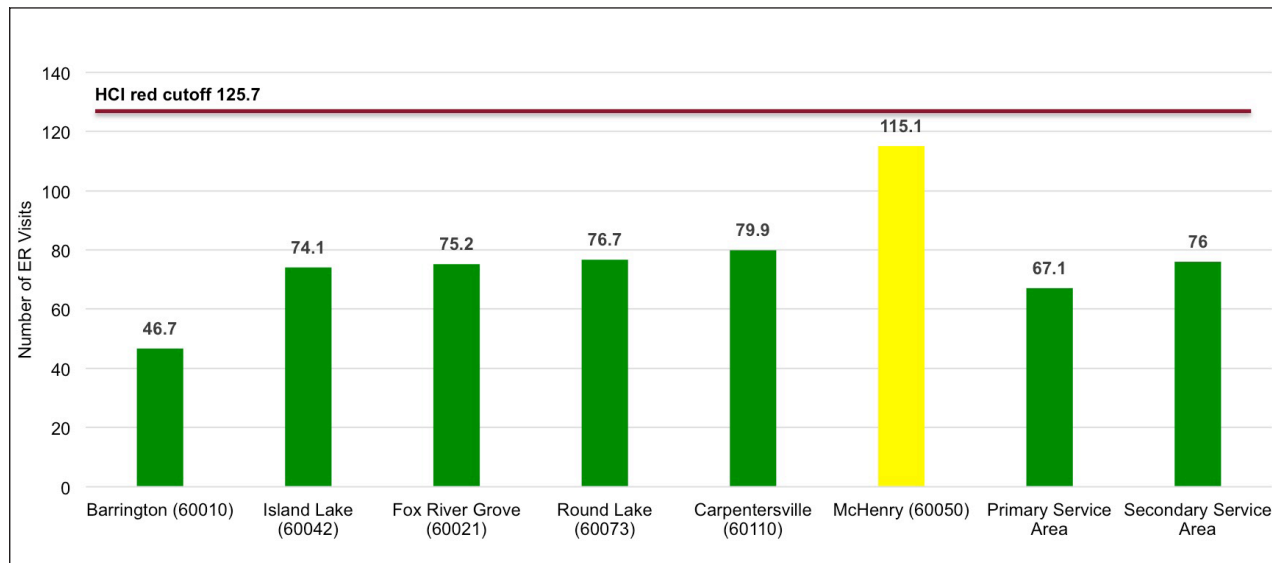
Mental health is a burden on an individual's quality of life. Both the Lake County and McHenry County Health Departments selected mental health or behavioral health as one of their health priorities in their respective community health improvement plans (CHIP). The Lake County Forces of Change Assessment (FoCA) identified potential forces that may affect the local public health system's capacity to implement the CHIP. While all identified forces should be considered, the six top ranked as having the most impact on the county should be given priority when identifying and building system capacity to address strategic issues. Mental health was ranked the highest of the forces identified (Lake County Community Health Improvement Plan, 2017-2021).

The July 2014 Assessment of Behavioral Health Needs in Northern Lake County report indicates more than 17 percent of adults report mental illness in the past year, while more than four percent report serious mental illness. Among adults age 18-25 years, well over a quarter report mental illness in the past year, with more than seven percent reporting serious mental illness.

In the 2014 McHenry County Healthy Community Study, key informant surveys identified the target populations needing community attention were mentally ill persons and those with substance abuse issues. Mental health and substance abuse services were regarded as the weakest part of the local health care delivery system. Those interviewed indicated that there is no local inpatient facility for mental health care or substance abuse treatment for adolescents and children. As a result, some people experiencing mental illness or those with substance use issues end up in the hospital emergency department or the judicial system—neither situation suitable for effective care.

In the 2014 Healthier Barrington study, 28% of survey respondents indicated that they had thought about seeking professional behavioral health help; this is an increase from 18% in the 2001 survey. However, only one in seven actually sought help. Women and those age 45-64 were most likely to consider help. About four percent of those surveyed said that they or another household member had seriously considered or made plans for suicide in the past three years. The rate of ER visits for the PSA adults due to mental health (67.1 visits/10,000 population) is lower than the rate for the SSA (76.0/10,000). The top three zip codes with the highest ER rates for mental health in the TSA were Round Lake, Carpentersville, and McHenry with the highest rate of 115.1/10,000, as displayed in Exhibit 21.

Exhibit 21: Total Service Area Highest Age Adjusted Emergency Room Visit Rates due to Mental Health by Zip Code per 10,000 Population Age 18+ 2012-2014

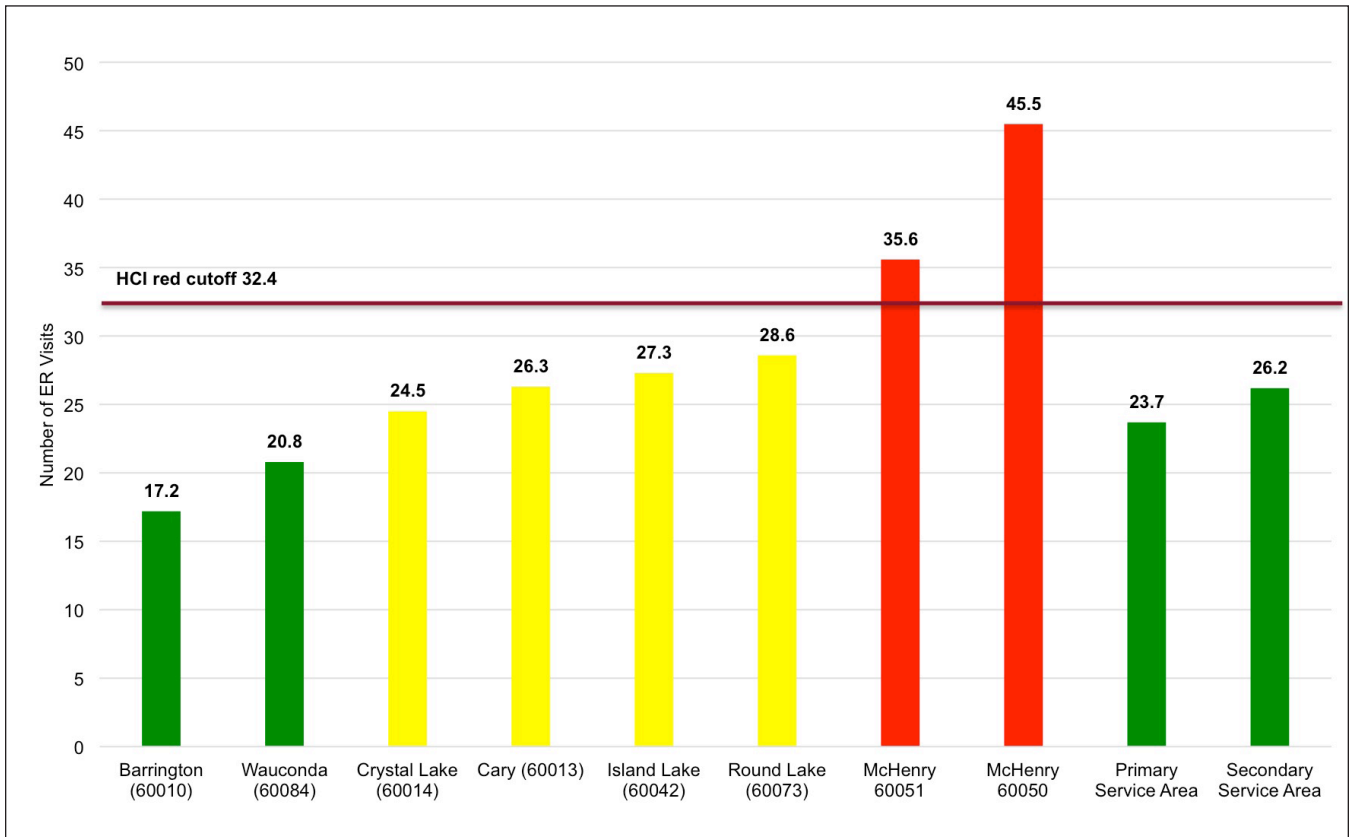


Source: Healthy Communities Institute, Illinois Hospital Association, COMPdata, 2015.

The 2012-2014 age-adjusted ER rate due to suicide and intentional self-injury for adults is also higher for McHenry County (30.9/10,000) adults than Lake County (18.9/10,000). Men had more emergency room visits for suicide and intentional self-injury than women in both counties. The rate for the SSA (26.2/10,000) is higher than the PSA rate (23.7/10,000). (HCI, Illinois Hospital Association, COMPdata, 2015.)

The zip codes in the TSA with the highest ER rates for mental health were Round Lake, Island Lake and McHenry. The rates for the two McHenry zip codes (60050 and 60051) are both in the red zone at 45.5/10,000 and 35.6/10,000 respectively. See Exhibit 22.

Exhibit 22: Total Service Area Highest Age-Adjusted Emergency Room Visit Rates due to Suicide and Intentional Self-Inflicted Injury by Zip Code Per 10,000 Population Age 18+ 2012-2014



Source: Healthy Communities Institute, Illinois Hospital Association, COMPdata, 2015.

Finally, the age-adjusted death rate due to suicide is higher in McHenry County (11.6 deaths/100,000 population) than in Lake County (9.4/100,000), as shown in Exhibit 23. Men have more than three times the number of deaths due to suicide than women, in both Lake and McHenry County.

Exhibit 23: Lake and McHenry County Comparison Age-Adjusted Death Rate due to Suicide Deaths/100,000 Population 2012-2014



Source: Healthy Communities Institute, 2015.

Medicare-age adults also experience mental health issues. The Centers for Medicare and Medicaid Services estimates that depression in older adults occurs in 25 percent of those with other illnesses, including: arthritis, cancer, cardiovascular disease, chronic lung disease, and stroke (Healthy Communities Institute, February 2016). As of September 2015, 14.4% of McHenry County Medicare recipients were diagnosed with depression (an estimated 6,576 individuals). In Lake County, an estimated 12.7% of the Medicare recipients were diagnosed with depression (10,972 individuals) (Healthy Communities Institute, September 2015).

Mental Health in Children and Adolescents

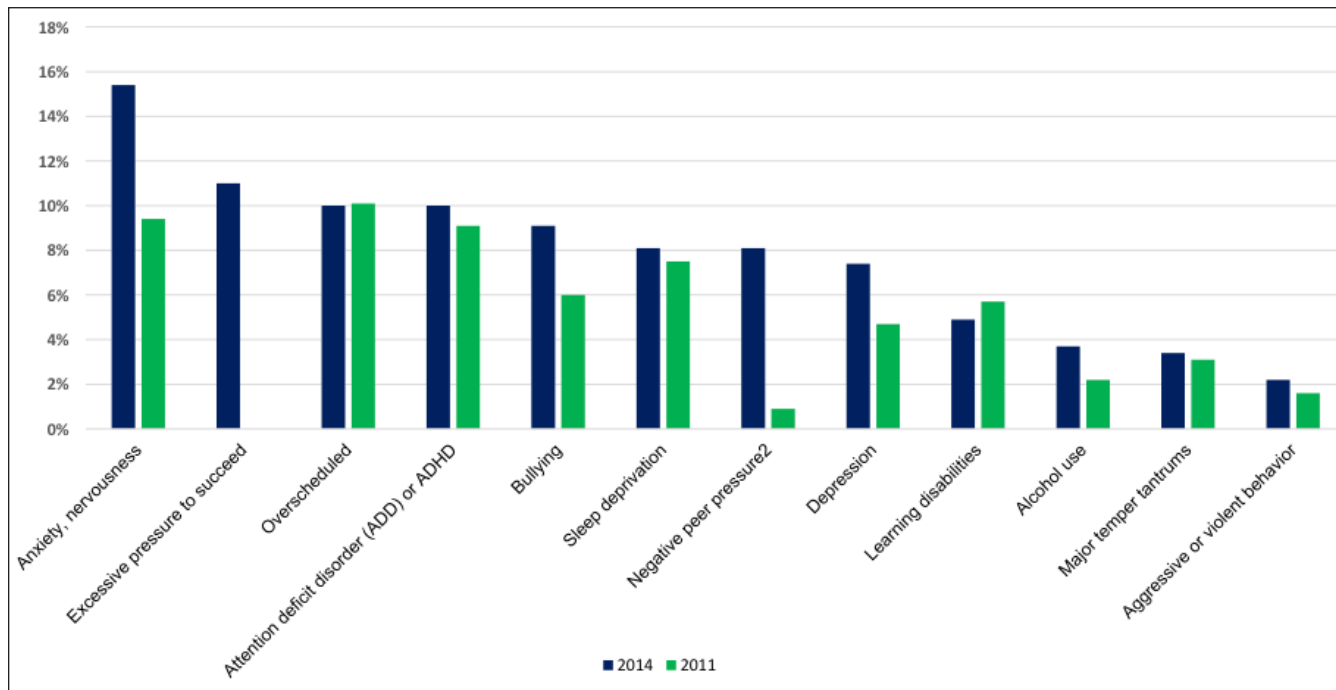
Half of children that need mental health services don't receive them. Seventy-five percent of chronic mental illness begins by age 24, 50% by age 14. Adolescents usually struggle for years before getting help. Seventy percent of youth in state and local juvenile justice systems have a mental illness. Suicide is the leading cause of death in kids in the US. Ninety percent of those who died by suicide had an underlying mental illness (National Alliance on Mental Illness, 2014).

Mental health presents unique, acute challenges for adolescents in Lake County. Over one in four of the students surveyed in the 2014 Illinois Youth Survey reported having a depressive episode within the past twelve months—27% of eighth, 28% of tenth, and 26% of twelfth graders. Nearly one in six tenth graders (16%) and one in seven twelfth graders (13%) had seriously considered suicide within the past twelve months. Social stresses weigh heavily on adolescents. Almost half of middle school students (42% of sixth graders and 46% of eighth graders) have experienced some type of bullying in the past year. In high school, one in three tenth graders (32%) and one in four twelfth graders (25%) experienced some type of bullying. When asked about their social support systems, 12% of sixth, 19% of eighth, 19% of tenth, and 14% of twelfth graders reported that they did not have a non-parent adult that they could talk to about important things (Live Well Lake County Community Health Assessment, 2017-2021).

In the 2014 Healthier Barrington Coalition survey, 15.4% of parents indicated anxiety and nervousness was the most common issue reported by their children, as shown in Exhibit 24. In the 2014 McHenry County Healthy Community Study, a quarter (25.0%) of McHenry County children between 0-17 years had a diagnosis of ADD/ADHD, an additional 10.8% had a diagnosis of depression and 10.3% were diagnosed with anxiety or panic disorders. Twelve percent of survey respondents rated behavioral/mental health services in McHenry County as excellent, 27% as good, 20% as fair and 17% as poor. The remaining respondents indicated they did not know or had no answer. Comments related to adolescent mental health included:

- “Need more mental health and substance abuse services, no adolescent inpatient beds in this county, only 1 choice for IOP.”
- “McHenry County is in dire need of an adolescent psychiatric facility. Not having this facility in McHenry County puts the kids in this county at a disadvantage in regards to getting the help they need.”
- “More psychiatrists, mental health, and substance abuse services for adolescents.”

Exhibit 24: 2014 Healthier Barrington Studies Results: Child & Teen Issues as Reported by Parents 2014

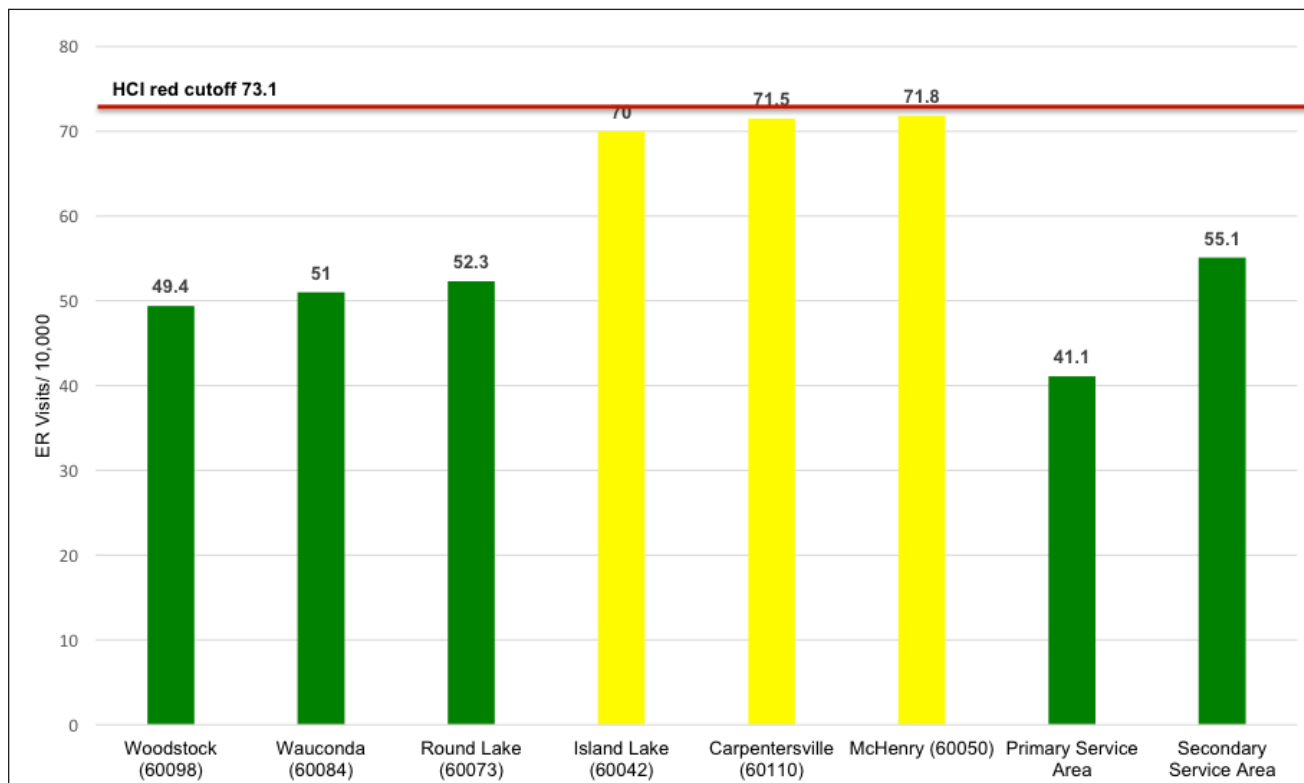


Source: Healthier Barrington Survey, 2014.

Data on the capacity of mental health providers indicates that the mental health care provider rate per 100,000 population for McHenry County (157.5/100,000) is below rates for Lake County (232.8/100,000), Illinois (180.2/100,000) and the US (202.8/100,000). (University of Wisconsin Population Health Institute, County Health Rankings, 2016.) Even though the mental health care provider rate is higher for Lake County, the 2014 Assessment of Behavioral Health Needs in Northern Lake County identified that there is limited capacity in Lake County. The report indicated that the non-profit sector is essentially at capacity and the for-profit sector is unable to provide charity care and does not generally accept Medicaid. Additionally, only about a dozen psychiatrists in Northern Lake County accept Medicaid, and some accept very few Medicaid patients. Assessment findings indicate there is a serious need for more behavioral health professionals accessible to the population. Far more psychiatrists are needed and other key services such as general counseling, case management and supportive housing are inadequate in Northern Lake County.

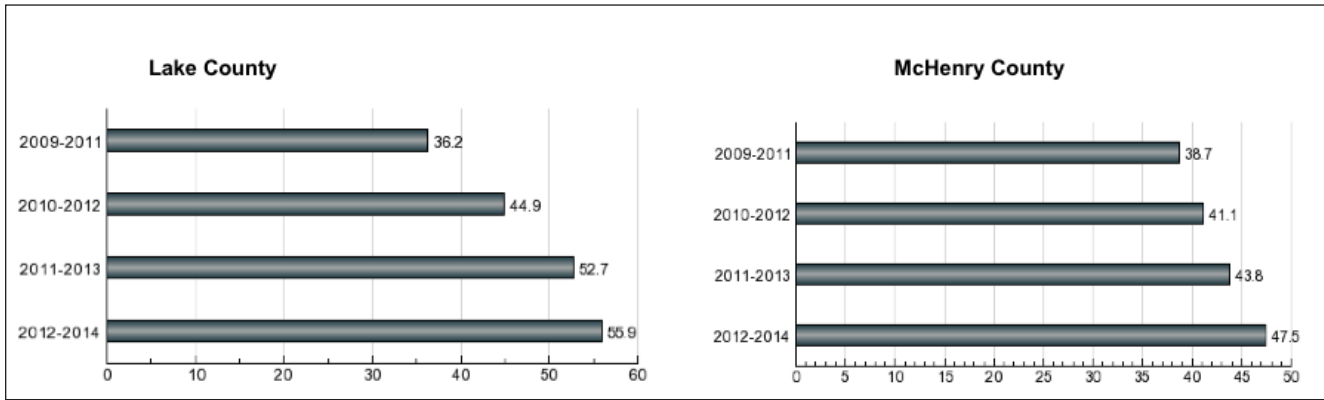
The age-adjusted ER rate for pediatric mental health for the PSA is 41.1 emergency room visits/10,000 population and is 55.1/10,000 visits for the SSA. The communities with the highest rates are McHenry, followed by Carpentersville and Island Lake as shown in Exhibit 25. The age-adjusted ER rate due to pediatric mental health in Lake County is 55.9/10,000, and the rate for McHenry County is lower at 47.5/10,000. In both counties, the rate is higher for girls than boys, and the largest percentage of the visits are from those ages 15-17. The rate for both counties has been consistently increasing over time, from the 2009-2011 to the 2012-2014 period, as shown in Exhibit 26.

Exhibit 25: Total Service Area Highest Age Adjusted ER Visit Rates due to Pediatric Mental Health by Zip Code/10,000 Population 2012-2014



Source: Healthy Communities Institute, Illinois Hospital Association, COMPdata, 2015.

Exhibit 26: Lake and McHenry County Comparison Age-Adjusted ER Visit Rates due to Pediatric Mental Health – Time Series ER Visits/10,000 Population under 18 years 2012-2014



Source: Healthy Communities Institute, Illinois Hospital Association, COMPdata, 2015.

Also related to adolescent mental health, the ER rate due to adolescent suicide and intentional self-inflicted injury in Lake County is 28.1/10,000. The rate in McHenry County is 33.9/10,000. The ER rate for females is much higher than the ER rate for males in both counties. In Lake County, young persons are overrepresented in hospital emergency departments for behavioral health. Persons 15-24 years old are 14 percent of the population but 30 percent of emergency visits (An Assessment of Behavioral Health Needs in Northern Lake County, July 2014).

Key Findings: Mental Health

- Data on mental health provider capacity indicates that the ratio of McHenry County providers is lower than the ratio capacity for Lake County. However, the Northern Lake County 2014 Behavioral Health Needs Assessment identified that there is limited capacity in Lake County.
- Both counties have had steady increases over the past four years in emergency room rates due to mental health for both pediatrics and adults.
- The rate of ER visits for McHenry County adults due to mental health (83.7/10,000) is higher than the rate for Lake County (68.6/10,000).
- The top three TSA zip codes with the highest ER rates due to mental health for adults are McHenry (60050) (115.1/10,000), Carpentersville (79.9/10,000) and Round Lake (76.7/10,000).
- The top three TSA zip codes with the highest ER rates due to pediatric mental health are McHenry (60050) (71.8/10,000), Carpentersville (71.5/10,000) and Island Lake (70/10,000).
- The emergency room rate due to adolescent suicide and intentional self-injury is much higher in McHenry County (33.9/10,000) than Lake County (28.1/10,000).
- Mental health is a current priority of the Healthier Barrington Coalition, and both the Lake and McHenry County Health Departments selected behavioral health as one of their health priorities for their community health improvement plans.

Substance Abuse

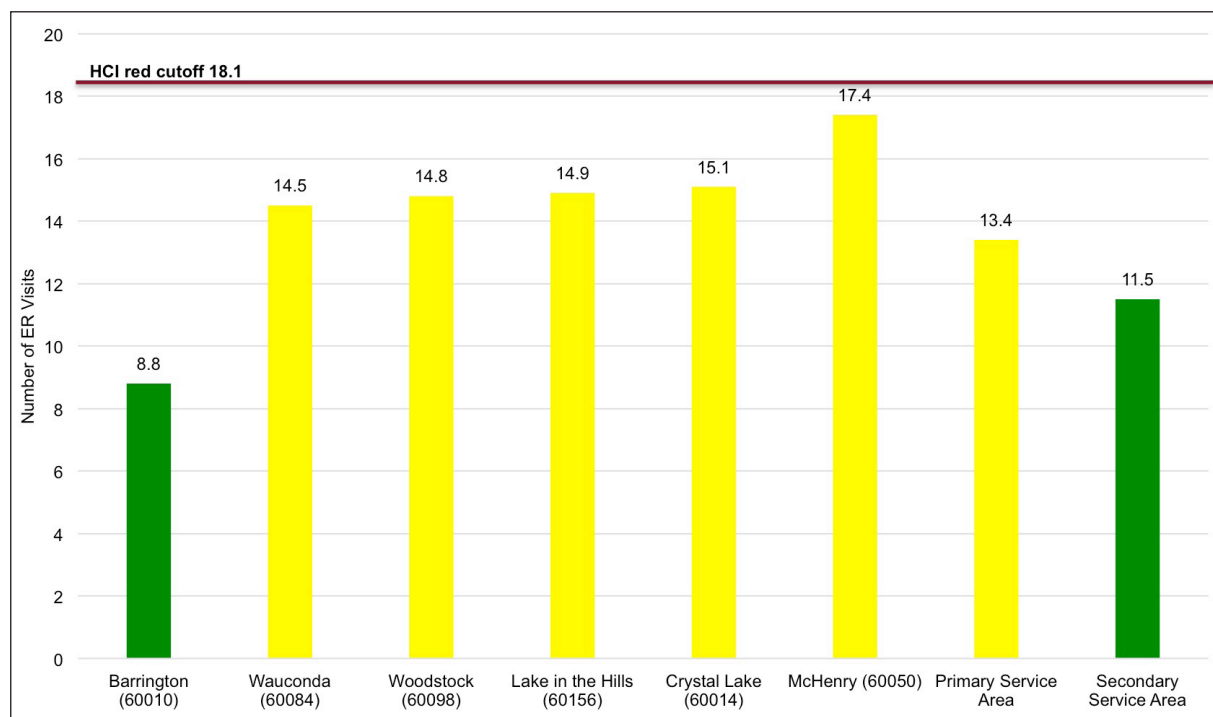
Preventing initiation of substance use is an important strategy for preventing abuse. Those who are mentally ill are more likely to abuse drugs or alcohol. The two issues often co-occur. According to SAMHSA, 26.7% of people with mental health issues abused illicit drugs in 2012. In the general public, only 13.2% of people abused drugs. According to the National Institute on Drug Abuse (NIDA), those who suffer from mental illness may attempt to self-medicate their symptoms via drug use. www.drugabuse.com

The McHenry County Health Department identified substance abuse as one of its health priorities in the 2014 Healthy Community Study. Drug and alcohol abuse among youth was identified as a community problem by key informants. They also mentioned the growing use of heroin locally. Those interviewed stated that there are too few providers to help people with addictions and no inpatient substance use treatment center is located within McHenry County.

The Lake County 2016-2021 Community Health Improvement Plan (CHIP) found that depression, binge drinking, and illicit drug use are prevalent in Lake County. The Lake County Health Department and Community Health Center and other non-profit sector providers are at capacity and cannot keep up with demand for behavioral health services – both mental health and substance abuse services. In the 2014 Healthier Barrington Coalition Household Survey, 25% of the respondents indicated youth substance abuse was an issue needing greater attention. Thirty-seven percent of respondents rated the existing behavioral health services as excellent or good. The coalition did select mental health as an area of focus for the next three year period, and a subcommittee was formed to develop programs.

The 2014 Illinois Youth Survey data shows that 65% of 12th graders in both Lake and McHenry County have used some substance (alcohol, cigarettes, inhalants or marijuana) in the past year. Additionally, 13% of Lake County 6th graders and 17% of McHenry County 6th graders have used some substance in the past year. The ER rate due to substance abuse for the Good Shepherd Hospital PSA is 13.4 visits per 10,000 population. McHenry, Crystal Lake and Lake in the Hills have the highest ER rates for substance abuse, all above the PSA rate but below the cutoff for the HCI red zone of 18.1/10,000, as shown in Exhibit 27 (Healthy Communities Institute, Illinois Hospital Association, COMPdata, 2015).

Exhibit 27: Total Service Area Highest Age-Adjusted ER Visit Rates due to Substance Abuse by Zip Code/10,000 population Age 18+ 2012-2014



Source: Healthy Communities Institute, Illinois Hospital Association, COMPdata, 2015.

Smoking

The number of teens who smoke in Lake County (8%) and McHenry County (11%) has gone down since 2010. Although also declining, the adult smoking rates for Lake County (13.8%) and McHenry County (15.9%) are both still above the Healthy People 2020 target of less than 12% of adults smoking (Healthy Communities Institute, County Health Rankings, April 2016).

Marijuana

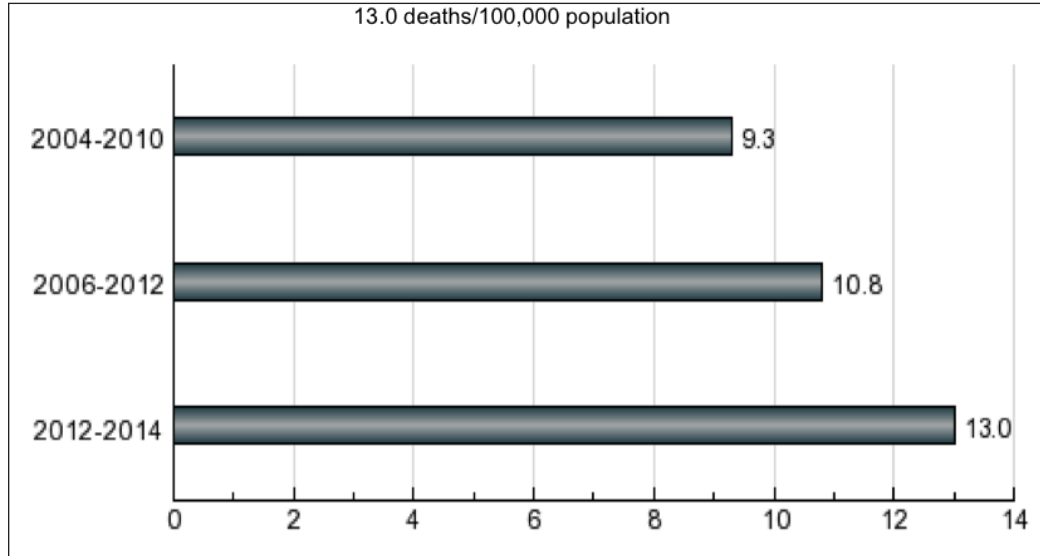
Marijuana is the most commonly used illicit drug abused in the US. Lake and McHenry County 12th graders have the highest percentage of individuals who have used marijuana in the past 12 months when compared to other grade levels (37% and 36% respectively). According to the Illinois Youth Survey, 24% of Lake County and one-quarter of McHenry County high school seniors had used marijuana in the last 30 days. Nine percent of Lake County and 11% of McHenry County 12th grade students indicated that they had driven or been in a vehicle six or more times when they had been using marijuana. (Illinois Youth Survey, 2014).

Heroin and Opioids

In 2015, Lake County had more deaths from heroin (42) than McHenry County (20) (Lake County Coroner, McHenry County Coroner, 2015). While the use of heroin is spreading throughout the United States, the death rates for both Lake (9.9 deaths/100,000) and McHenry Counties (10.7/100,000) are below the state (12.2/100,000) and national rates (13.2/100,000). (Lake County Underage Drinking and Drug Prevention Task Force, 2015.) The percentage of Lake County 10th and 12th grade students who have used heroin in the past year is higher than the national and Illinois rates, but is still only 1% (Illinois Youth Survey, 2014; National Institute on Drug Abuse, 2015). Heroin is not the drug used the most by teens. Ecstasy, followed by hallucinogens/LSD and crack cocaine are the most popular (Illinois Youth Survey, 2014).

Drug overdose deaths are the leading cause of injury death in the US, with over 100 drug overdose deaths occurring every day. The US death rate due to drug overdose has been increasing over the last two decades. In 2010, 60% of drug overdose deaths were related to pharmaceuticals, the majority of which were prescription painkillers. Drug overdose deaths may be accidental, intentional, or of undetermined intent (Healthy Communities Institute, April 2016). The death rate due to drug poisoning for McHenry County has shown a steady increase over time, from 2010 to 2014, from 9.3 to 13 deaths/100,000 population, shown in Exhibit 27. The 2012-2014 death rate for Lake County has actually seen a decrease since 2006-2012, from 11.8 to 11.1 deaths/100,000 population (Healthy Communities Institute, County Health Rankings, 2016).

Exhibit 28: McHenry County Age-Adjusted Death Rate due to Drug Poisoning



Source: Healthy Communities Institute, County Health Rankings, 2016.

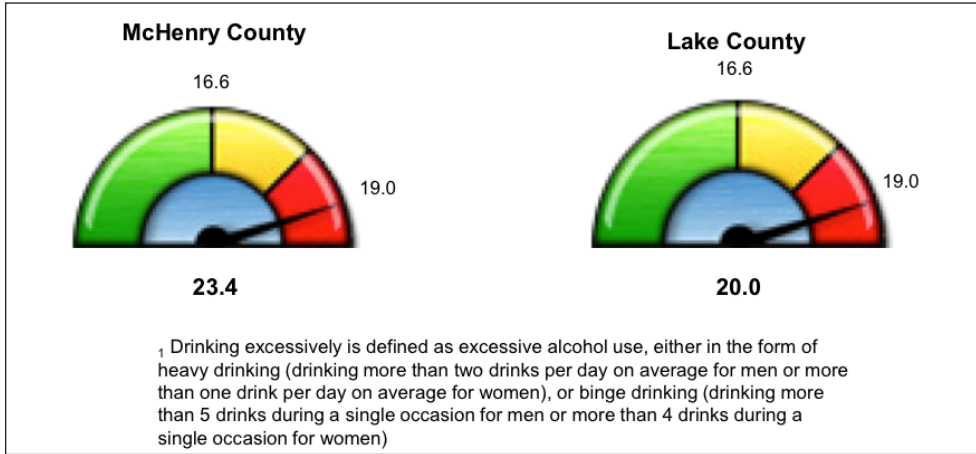
Alcohol

Alcohol abuse is a significant concern in both Lake and McHenry County. Alcohol is the most popular drug among adolescents in Lake County, used more frequently across all grade levels than either cigarettes or marijuana. (Live Well Lake County CHIP, 2017-2021.) The 2014 Assessment of Behavioral Health Needs in Northern Lake County report indicated 80,000 residents likely engaged in binge drinking in the last month, and that almost 10,000 residents have had alcohol dependence in the past year.

Though the percentage of teens who drink alcohol in both counties has decreased from 2010 to 2014, 45% of Lake County teens and 44% of McHenry County teens use alcohol (Healthy Communities Institute, Illinois Youth Survey, 2015). According to the Illinois Youth Survey, 24% of Lake County high school seniors and 25% of McHenry County high school seniors engaged in binge drinking in the past two weeks. Exposure to alcohol and experimentation is starting early. In McHenry County, the age that people take one sip of alcohol was 14.9 years old and in Lake County, the age was 15 years old. In both counties, the average age of drinking alcohol regularly is 16 years old (Illinois Youth Survey, 2014).

According to the CDC, excessive alcohol use is defined as either heavy drinking (drinking more than two drinks per day on average for men or more than one drink per day on average for women), or binge drinking (drinking more than five drinks during a single occasion for men or more than four drinks during a single occasion for women). Twenty-three percent of adults in McHenry County and 20% of adults in Lake County drink excessively, compared to 21.4% of adults in Illinois that drink excessively. (See Exhibit 29.)

Exhibit 29: Lake County and McHenry County Comparison of Adults Who Drink Excessively 2014

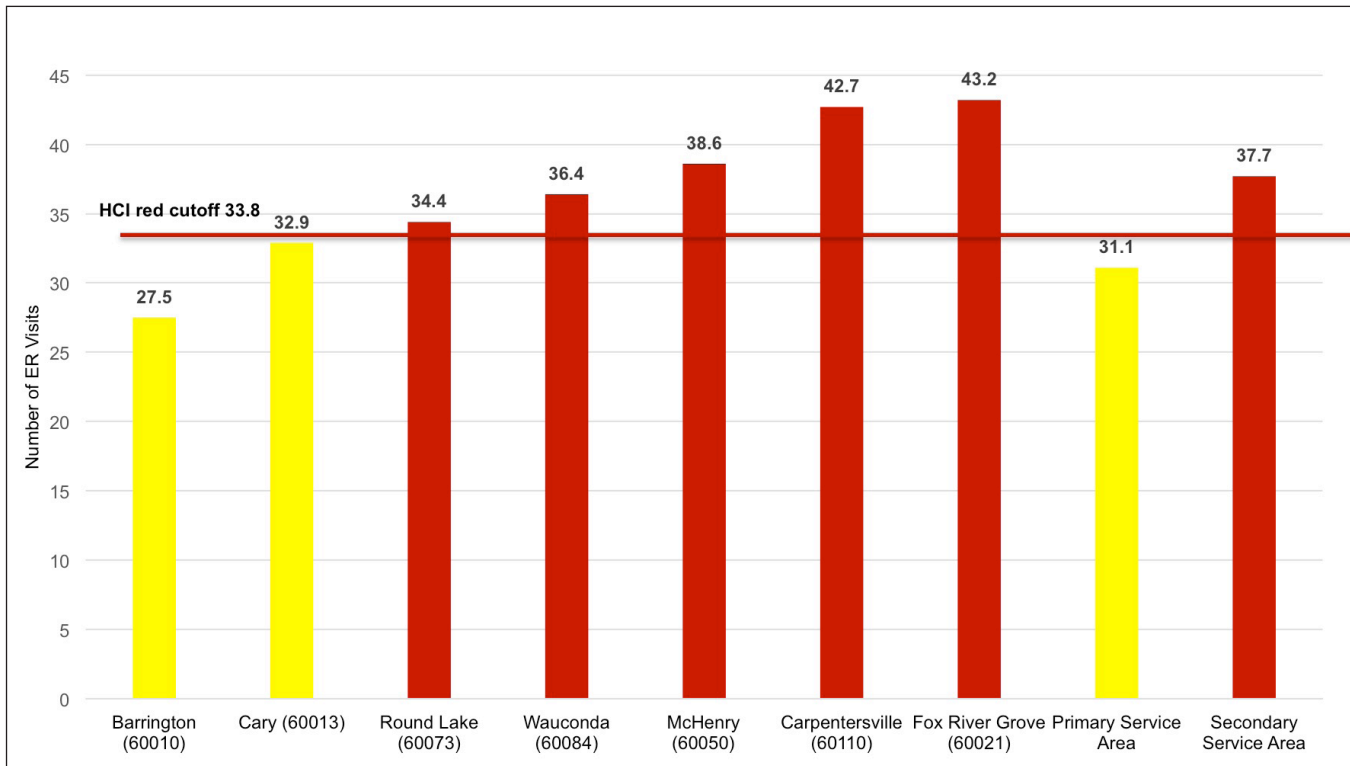


Source: County Health Rankings, 2016.

The 2012-2014 ER rate due to alcohol abuse in the Good Shepherd SSA (37.7 ER visits/10,000 population) is in the red zone. Communities within the TSA with the most alcohol related ER visits are Fox River Grove, Carpentersville, McHenry and Wauconda, displayed in Exhibit 30. The hospitalization rate for the PSA and SSA are both in the HCI red zone, above 11.6 hospitalizations/10,000 population. Some of the same communities with high ER rates are also in the HCI red zone for hospitalizations – McHenry, Wauconda, Fox River Grove, Crystal Lake, Cary and Barrington, shown in Exhibit 31.

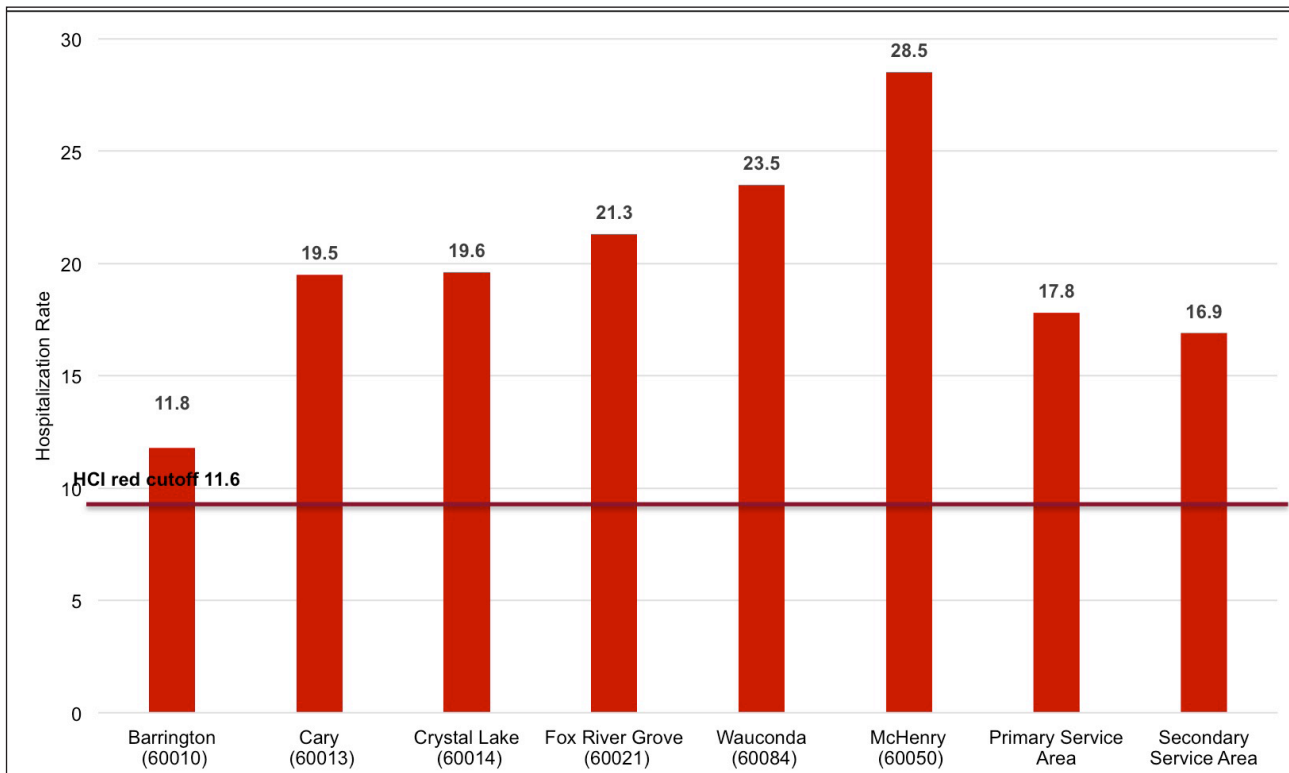
Between 2012 and 2014, 38.9% of all motor vehicle crash deaths in McHenry County involved alcohol. This rate has increased more than six percentage points since the 2008-2012 period. The alcohol-impaired driving death rate for Lake County has actually declined slightly in the same period, but the 2012-2014 rate is higher than the rate for McHenry County, at 43.6% (Healthy Communities Institute, County Health Rankings, 2016).

Exhibit 30: Total Service Area Age-Adjusted Emergency Room Visit Rates due to Alcohol Abuse/10,000 Population Age 18+ 2012-2014



Source: Healthy Communities Institute, Illinois Hospital Association, COMPdata, 2015.

Exhibit 31: Total Service Area Age-Adjusted Hospitalization Rate due to Alcohol Abuse/10,000 Population Age 18+ 2012-2014



Source: Healthy Communities Institute, Illinois Hospital Association, COMPdata, 2015.

Key Findings: Substance Abuse

- 65% of 12th graders in both Lake County and McHenry County have used some substance (alcohol, cigarettes, inhalants or marijuana) in the past year.
- The communities of McHenry, (17.4/10,000), Crystal Lake (15.1/10,000) and Lake in the Hills (14.9/10,000) have the highest ER rates for substance abuse.
- The number of teens who smoke in Lake County (8%) and McHenry County (11%) has gone down since 2010.
- Adult smoking rates for Lake County (13.8%) and McHenry County (15.9%) have not met the Healthy People 2020 target of less than 12%.
- 37% of Lake County high school seniors and 36% of McHenry county seniors have used marijuana in the past 12 months; 24% of Lake County seniors and 25% of McHenry County seniors had used marijuana in the past 30 days.
- While the use of heroin is spreading throughout the United States, both Lake and McHenry Counties are below the state and national averages for deaths.
- The US death rate due to drug overdose has been increasing over the last two decades.
- The death rate due to drug poisoning for McHenry County has shown a steady increase from 2010 to 2014, from 9.3 deaths/100,000 to 13 deaths/100,000.
- The death rate due to drug poisoning for Lake County has actually seen a decrease since 2010 from 11.8/100,000 to 11.1/100,000.
- Though the percentage of teens who drink alcohol in both counties has decreased from 2010 to 2014, 45% of Lake County teens and 44% of McHenry County teens use alcohol.
- 24% of Lake County 12th graders and 25% of McHenry County 12th graders have engaged in binge drinking in the past 30 days.
- Illinois has the highest percentage of adults who drink excessively in the Midwest (21.4%); 23% of adults in McHenry County and 20% of adults in Lake County drink excessively.
- The communities in the TSA with the most alcohol-related ER visits are Fox River Grove (43.2/10,000), Carpentersville (42.7/10,000), McHenry (38.6/10,000) and Wauconda (36.4/10,000)—all in the HCI red zone.
- The communities in the TSA with the highest rates of hospitalization for adults due to alcohol abuse are McHenry (60050) (28.5/10,000), Wauconda (23.5/10,000) and Fox River Grove (21.3/10,000).

V. Identifying Priorities

Priority Setting Process

In preparation for the selection of priorities, Good Shepherd Hospital Community Health staff presented a comprehensive summary of the demographics, five health issues and social determinant factors to the Community Health Council on September 21, 2016. A copy of the Health Issues Review handout is contained in Appendix 4. The five health issues are listed below:

- Obesity
- Diabetes
- Cardiovascular Disease
- Mental Health
- Substance Abuse

Staff asked Council members to consider the following criteria when making the priority selections.

Criteria

- *Is the health issue clearly identified as a need through data?*

Staff noted to consider if any of the indicators examined had been trending up over time.

- *Is the health issue in alignment with other goals and objectives?*

Staff provided handouts of the Lake County Health Department CHIP goals and strategies, along with the thirteen strategies for behavioral health that were developed as part of the 2016-2020 Behavioral Health Action Plan. These were to inform Council members on priorities that are already being worked on in the community. Opportunities may exist for collective impact. Collective impact refers to the commitment of a group of important actors from different sectors to a common agenda for solving a specific social problem at scale. The approach engages multiple players in working together to solve complex social problems (The Community Tool Box, University of Kansas Workgroup for Community Health and Development, 2016).

- *Does our involvement as a hospital make a difference in the outcome?*

Council members were asked to consider if it is important to have a hospital system at the table as a stakeholder to make an impact on the health issue.

- *Can we demonstrate measurable results with interventions for this health issue?*

Community Health staff reiterated that interventions will be designed around best practice models or evidence-based programs. Special emphasis will be placed on developing metrics to measure the impact of the programs and interventions that will be developed.

- *By focusing on this issue, can there be a positive influence on other health issues?*

Members were asked to consider if work to affect change in one particular health issue may have an influence on other health issues.

- *Are there existing coalitions or partnerships working on this health issue?*

Lake County Health Department action teams are already established around the selected health priorities from the recently completed CHIP. Additionally, mental health and substance abuse coalitions are actively working in both Lake County and McHenry County.

- *Does Advocate Good Shepherd Hospital have the resources/capacity to commit to interventions around this health issue?*

Financial and human resources will be developed during the next three years to assist in programming to address the selected priorities. Staff also shared that grant funding can be pursued to support initiatives.

Priorities Selected

Cumulative Voting Process

Upon conclusion of the summary and criteria presentation, each member was given two sticky-dots and was asked to vote using the cumulative voting method. Using the criteria as a guide, Council members were instructed to use their sticky-dots to vote for the two health issues they identified as the highest priorities for the next three years. The health issues with the highest votes were:

- Mental Health
- Obesity

Mental Health

The Lake County Forces of Change Assessment (FoCA), conducted as part of the MAPP process, identified potential forces that may have the most impact on the county when identifying and building system capacity to address strategic issues. Mental health was ranked the highest of the forces identified (Lake County CHIP, 2017-2021). Data on mental health provider capacity indicates that the ratio of providers to support the population of McHenry County is lower than the ratio capacity for Lake County. However, the 2014 Northern Lake County Behavioral Health Needs Assessment identified that there is limited capacity in Lake County. Both counties have had steady increases over the past four years in emergency room rates due to mental health for pediatrics and adults. The community of McHenry has the highest adult and adolescent ER rate due to suicide and intentional self-inflicted injury and the highest ER rate (for adults and pediatrics) due to mental health. Mental health is a current priority of the Healthier Barrington Coalition, and both the Lake and McHenry County Health Departments selected behavioral health as one of their health priorities for their community health improvement plans.

Obesity

The prevalence of obesity in the United States has steadily increased. Prevalence rates as of 2013 show that 40 of the 50 states have $\geq 26\%$ of the population with BMI measurements in the obese range. Illinois is one of these states, and as of 2014, prevalence rates for Illinois remain between 25% and 30%. The rates are even higher for Illinois Hispanic adults and non-Hispanic African American adults (Prevalence of Self-Reported Obesity Among US Adults by Race/Ethnicity, State and Territory, BRFSS, 2012-2014). More than eleven percent of Illinois adolescents are obese and 14% are overweight. Sixteen percent of Illinois WIC preschoolers, age two to four, are overweight and 16% are obese. In Lake County, 29% of adults are obese and 36% are overweight. In McHenry County, 27% are obese and 32% are overweight. Eighteen percent of Lake County preschool children are obese and 17% McHenry County preschool children are obese. Prevalence for diabetes is also increasing in the United States and locally, demonstrating a relationship between obesity and diabetes. Both Lake County and McHenry County Health Departments have identified obesity as one of the priorities in their community health improvement plans.

Needs Not Selected

Diabetes

Diabetes was identified as one of the key health needs for the Good Shepherd Hospital TSA. Diabetes prevalence is increasing over time both nationally and locally. Emergency room utilization and hospitalization rates for diabetes have also continued to increase over time. Though a significant need, the Community Health Council made the decision to focus on obesity as a priority, given its impact on the risk for prediabetes and diabetes.

Cardiovascular Disease

In McHenry County, there has been a decline in mortality rates for heart disease and stroke. Over the past decade, McHenry County's heart disease death rate has dropped by 19%, while the stroke death rate has fallen by 25%. The prevalence rate of heart disease is slightly higher in McHenry County than Lake County; however, the mortality rate from heart disease is higher in Lake County than McHenry County. The diabetes mortality rates and prevalence for both counties are lower than the rates for Illinois and the US. The hospital is committed to decreasing the rate of heart disease through many of the Advocate Heart Institute programs. The Community Health Council decided it was more beneficial to prioritize obesity because of its impact on the risk for heart disease.

Substance Abuse

Substance abuse was identified as a need within the Good Shepherd Hospital TSA. Particular health behaviors identified included excessive alcohol use in adults and the percentage of teens using marijuana. Those who are mentally ill are more likely to abuse drugs or alcohol. According to Substance Abuse and Mental Health Services Administration, 27% of people with mental health issues abused illicit drugs in 2012. Because of the underlying mental health issues affecting the use of substances, the Community Health Council decided to select mental health as the first priority.

Approval of CHNA by Governing Council

The Community Health Director for the Advocate North Region and the Good Shepherd Hospital Community Health Coordinator provided a copy of the Community Health Needs Assessment to each Governing Council member in advance of the October Governing Council meeting in preparation for approval. The Chairperson of the Community Health Council, who is also a Governing Council member, and the Good Shepherd Hospital Vice President of Physician Strategy and Clinical Operations presented the CHNA document and recommended the health priorities of obesity and mental health to the Governing Council. On October 11, 2016, the Good Shepherd Hospital Governing Council approved the CHNA and selected priorities.

VI. 2016 Implementation Planning

The Advocate North Region Community Health Director and Good Shepherd Hospital Community Health Coordinator will lead the development of the CHNA 2017-2019 Implementation Plan. The plan will outline goals, strategies and metrics to measure the impact of specific interventions. Progress will be monitored and reported annually. Community Health staff will identify best practice models and evidence-based programs to use as the basis for program planning to address the priorities of obesity and mental health. Additionally, in the implementation planning, Good Shepherd Hospital will consider developing a balanced portfolio of interventions including actions addressing socioeconomic factors, the physical environment, health behaviors and clinical care (CDC Community Health Improvement Navigator, Office of the Associate Director for Policy, 2016).

Obesity

Lake County Health Department and McHenry County Health Department

Because obesity and mental health are also health priorities of the Lake County and McHenry County Health Departments, Good Shepherd Hospital will work collaboratively with both agencies in the planning and development of interventions for both priorities. For obesity, the hospital will continue its commitment to the CATCH program in the existing schools. The CATCH program may be expanded to additional school districts, but with any new programs, the hospital will focus on high need communities – those with the higher SocioNeeds Index ranking and higher rates of related health indicators. Other programs that promote healthy lifestyle, good nutrition and fitness will also be explored. Efforts will be made to develop interventions that are coordinated or aligned with existing strategies through the two health departments.

Mental Health

McHenry County Mental Health Board

The McHenry County Mental Health Board is required by Illinois statute to construct, repair, operate, maintain and regulate community mental health facilities that it funds in McHenry County. The Mental Health Board has established goals and strategies to address issues of mental health capacity, infrastructure, prevention and treatment. Community Health staff will work with the Mental Health Board to look for opportunities for alignment when developing the hospital's implementation plan.

Lake County Health Department Behavioral Health Action Teams

The Lake County Health Department formed action teams as a result of the 2014 Behavioral Health Assessment and the 2016 Behavioral Health Action Plan. The Lake County Health Department also identified behavioral health capacity and infrastructure as a priority in its recently completed 2016-2021 CHIP, and additional sub-action teams are being developed as a result of this community health assessment. The action teams are developing strategies to increase provider capacity, expand telemedicine options for psychiatry, reduce mental

health stigma, and integrate mental health into the primary care clinical environment. The Advocate North Region Director of Community Health is a member of the telemedicine action team and the Good Shepherd Community Health Coordinator is a member of the reducing mental health stigma action team. As Good Shepherd Hospital develops its implementation plan, Community Health staff will try to align strategies to make the most positive impact on mental health.

VII. Community Feedback and Sharing Results

Community Feedback

Advocate Good Shepherd Hospital welcomes all feedback regarding the 2016 Community Health Needs Assessment. Any member of the community wishing to comment on this report, can click on the link below to complete a CHNA feedback form. Questions will be addressed within thirty days. Comments will also be considered during the next CHNA cycle.

<http://www.advocatehealth.com/chnareportsfeedback>

If any issues occur with the link to the feedback form or any other questions, please click below to send an email: AHC-CHNAReportCmtFeedback@advocatehealth.com

This report can be viewed online at Advocate Health Care's CHNA Report webpage via the following link:

<http://www.advocatehealth.com/chnareports>

A paper copy of this report may also be requested by contacting the hospital's Community Health Department at 847.842.4088.

Sharing Results

In addition to the opportunity to provide feedback through the means described above, Good Shepherd Hospital Community Health staff will proactively present the results of the 2016 CHNA to hospital leadership, clinical service line staff, community partners and coalitions. Feedback from the community will be collected verbally and electronically through the comments and questions portion of the presentation. Additional presentations will be scheduled as requested.

VIII. Appendices

Appendix 1: County Community Health Improvement Plans, Surveys and Other Reports

Live Well Lake County Community Health Assessment 2016-2021

INTRODUCTION

MOBILIZING FOR ACTION THROUGH PLANNING AND PARTNERSHIPS (MAPP)

The Lake County community health improvement process was developed within the Mobilizing for Action through Planning and Partnerships, or MAPP, framework.

MAPP follows seven guiding principles:

1. Systems Thinking
2. Dialogue
3. Shared Vision
4. Data
5. Partnerships and Collaboration
6. Strategic Thinking
7. Celebration of Successes



The National Association of County and City Health Officials (NACCHO) and the Centers for Disease Control and Prevention (CDC) created the MAPP framework as a strategic approach for community health improvement that creates a healthy community and better way of life, increases the visibility of public health within the community, anticipates and manages change, creates a stronger public health infrastructure, and engages the community and creates community ownership for public health issues. Since its completion in 2000, MAPP has become the leading tool that health departments and their partners use to guide public health planning processes. To begin Lake County's planning process, LCHD/CHC supported community efforts by conducting the four MAPP Assessments:

- Local Public Health System Assessment – Conducted on June 18, 2015, this assessment utilized the National Public Health Standards Program assessment of the components, activities, competencies and capacities of the local public health system and analyzed how well the Essential Public Health Services are delivered.
- Forces of Change Assessment – Conducted on October 23, 2015, the assessment identified the forces that affect or will be affecting the community and public health system, as well as the threats or opportunities that result.
- Community Themes and Strengths Assessment – Conducted from September to December of 2015, the assessment identified the community's interests, perceptions about quality of life in Lake County, and community assets.
- Community Health Status Assessment – Throughout 2015, primary and secondary data were gathered to describe the health status, quality of life, demographics, and behavioral risk factors in the community.^{3,4}

³ <http://archived.naccho.org/topics/infrastructure/mapp/framework/upload/MAPP-Brochure-2.pdf>

⁴ <http://www.naccho.org/programs/public-health-infrastructure/mapp>

SELECTED COMMUNITY HEALTH PRIORITIES

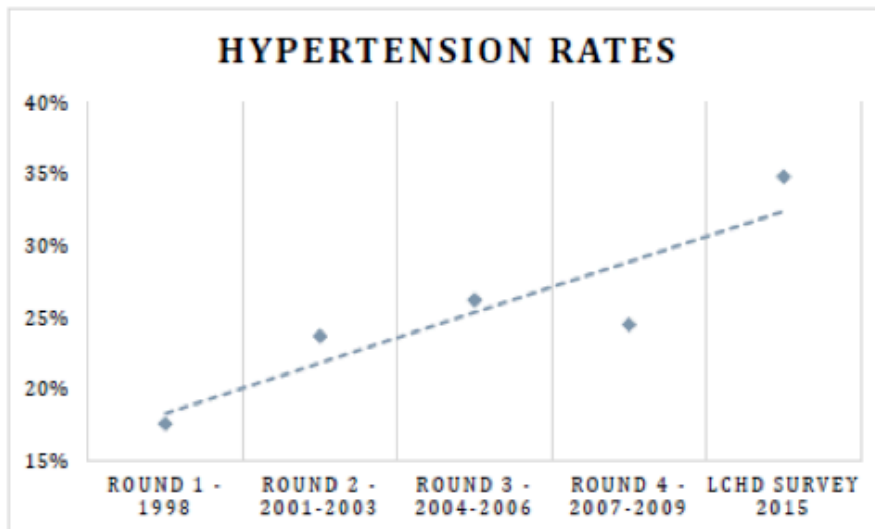
Selected Community Health Priorities

FOUR COMMUNITY HEALTH PRIORITIES

1. Cardiovascular disease and hypertension
2. Behavioral health
3. Obesity
4. Diabetes

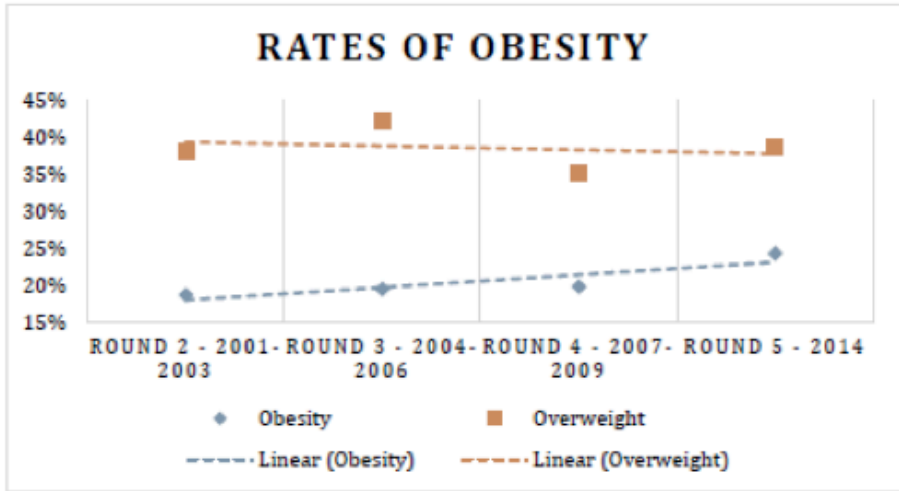
While the health improvement priorities were selected based on the most recent data available, the conditions have emerged as driving factors in resident health over longer time horizons. Lake County has experienced upward trends in the prevalence of these key chronic conditions. Historical data supports the growing magnitude of these health issues.

HISTORIC TRENDS

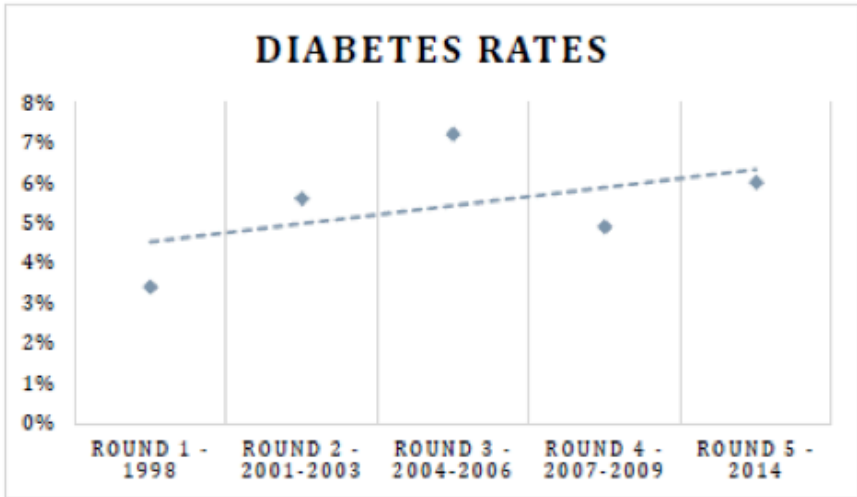


Hypertension rates have increased dramatically. Between the first round of the I-BRFSS in 1998 and the Lake County Community Health Survey in 2015, the percentage of adults reporting that they have hypertension has increased from 18% to 35%, nearly doubling over the interval. While some demographic shifts such as an aging population can help to explain some of the increase in disease, the burden of the condition is ultimately much higher now than in the past.

SELECTED COMMUNITY HEALTH PRIORITIES



Obesity contributes to an individual’s risk of chronic conditions, osteoarthritis, and other health issues that disrupt quality of life. While obesity rates in the county remain slightly lower than the state, obesity has increased by 5% in the past 12 years. The percentage of adults who are overweight has remained relatively stable. 62% of adults in Lake County are overweight or obese. While complete or historical data sets do not exist in Lake County for children, childhood obesity is an emerging national and state priority.



Diabetes in adults has increased over time from 3.4% to 6%. An additional 14% have been diagnosed with prediabetes and are at greater risk of developing the disease.

Appendix 1: County Community Health Improvement Plans, Surveys and Other Reports (cont'd)

Live Well Lake County Community Health Improvement Plan 2016-2021

EXECUTIVE SUMMARY

Residents of Lake County,

The following document outlines Lake County's Community Health Improvement Plan (CHIP), our long-term, systematic effort to address public health issues. This plan is based on the results of community health assessment activities and the community health improvement process with the vision of "Achieving the highest level of health and wellness for all in Lake County." The strategies outlined in this plan are critical in providing guidance to the community on improving health through identification of key priorities, engaging and empowering partners, defining necessary efforts, and targeting actions.



The purpose of this Community Health Improvement Plan is to:

- Identify our community health priorities;
- Focus our attention and resources on strategies to affect positive health outcomes;
- Monitor our progress in achieving these outcomes; and
- Improve our community's health.

Our community health improvement process was led by the Live Well Lake County Steering Committee with guidance from the Lake County Health Department and Community Health Center. The process utilized data from community health assessments completed in 2015 to identify four key priority health issues. Objectives were created and then strategies for action were developed to ensure measurable and actionable health improvement. Implementation efforts are ongoing and will occur over the course of the next five years and into the future.

Lake County's CHIP is a call to action. The success of the community health improvement process relies on our engaged community members, partners, and stakeholders. All our community members and organizations can play a role in the process, whether it is through the understanding of the community priorities and spreading awareness or joining action teams to implement strategies. The community health improvement process looks outside the performance of individual organizations serving specific segments of our community to the way in which the activities of many organizations or community members contribute to the overall improvement of our health. The Lake County Health Department and Community Health Center can provide facilitative guidance as you incorporate this CHIP into your own work plans. Contact us at healthassessment@lakecountyil.gov.

Mark Pfister, MSES, LEHP
Interim Executive Director
Lake County Health Department and Community Health Center

LIVE WELL LAKE COUNTY

Community Health Improvement Plan 2016-2021

Vision

ACHIEVING THE **highest** LEVEL OF **health & wellness** FOR ALL IN **Lake County**

Priorities

- Cardiovascular Disease and Hypertension
- Obesity
- Behavioral Health Capacity and Infrastructure
- Diabetes

Strategies

- Improve Policies, Systems, and Environments to Promote Healthy Lifestyles
- Increase Physical Activity in Adults and Youth
- Improve and Promote Nutritional Opportunities in the Food Environment
- Improve Clinical Interventions for Chronic Disease
- Improve Behavioral Health Capacity and Infrastructure in Lake County

Voice of the Community

Community Priorities

- Poor Diet and Inactivity
- Chronic Disease
- Substance Use (tobacco, alcohol, and drug use)
- Safe Affordable Housing
- Older Adult Health

Health System Needs

- Improve Surveillance and Data Sharing
- Increase Health Equity Education
- Increase Public Health Awareness
- Assure Linkages to Healthcare
- Create Research Infrastructure

Emerging Trends

- Mental Health
- Healthcare Access
- Electronic Health Records & the Health Information Exchange
- Health in All Policies Approach
- Economic Inequities

Community Health Data

Obesity



23% of Lake County adults are obese

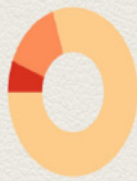
34% of Lake County adults are Overweight

Hypertension and Cardiovascular Disease



35% of Lake County adults have been diagnosed with hypertension

Diabetes



6% of Lake County adults have been diagnosed with diabetes

14% of Lake County adults have been diagnosed with pre-diabetes

Lake County Health Department, Assessment Team, Obesity in Lake County 2015 Status Report | Lake County Health Department Community Health Status Assessment Survey, 2015

Goals

Hypertension

- Reduce prevalence of Lake County adults who have been diagnosed with hypertension by 10% by 2031
- Reduce the number of annual emergency room visits due to hypertension by 10% by 2021

Obesity

- Reduce prevalence of Lake County adults who are obese by 10% by 2031
- Reduce prevalence of Lake County adults who are overweight by 10% by 2031

Behavioral Health Capacity and Infrastructure

- Reduce the percent of youth who report feeling so sad or hopeless almost every day for two weeks or more in a row that stopped them from doing some usual activities by 10% by 2021
- Reduce the average annual count of all emergency room visits due to mental health diagnoses by 10% by 2021
- Reduce the proportion of adults who report having a day or more in the past month where their mental health status prevented them from carrying on usual activities by 10% by 2021

Diabetes

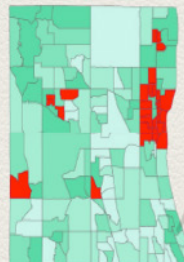
- Reduce prevalence of Lake County adults who have been diagnosed with diabetes by 10% by 2031
- Reduce the average annual count of emergency room visits due to diabetes by 10% by 2021

Health Equity

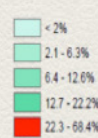
Health Equity is where every person has the opportunity to achieve their full capabilities and potential for health and well-being (NACCHO).

Social determinants of health are conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks (Healthy People 2020).

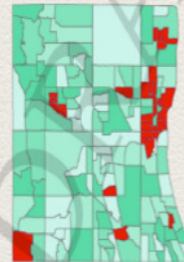
Childhood Poverty



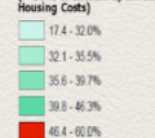
Percent of Children in Poverty



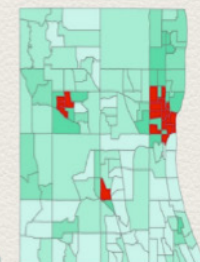
Housing Stress



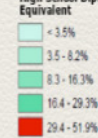
Rates of Housing Stress (> 30% of Income Spent on Housing Costs)



Educational Attainment



Percent of Adults with Less than High School Diploma or Equivalent



U.S. Census Bureau, 2010 - 2014 American Community Survey 5-Year Estimates

Get Involved:

What to be part of the movement to improve community health? For more information on the Live Well Lake County Community Health Improvement Plan, visit:

LiveWellLakeCounty.org



Summer 2016

2014 MCHENRY COUNTY HEALTHY COMMUNITY STUDY

EXECUTIVE SUMMARY

Priorities and Key Findings



Prepared for
McHenry County Healthy Community Partners

Prepared by
Health Systems Research
Division of Health Policy and Social Science Research
University of Illinois College of Medicine at Rockford
1601 Parkview Avenue
Rockford, IL 61107

INTRODUCTION AND METHODOLOGY

Purpose

A "healthy community" encompasses a broad range of community characteristics that define what it means to be a healthy place to live. Ever since the mid-2000s, McHenry County Healthy Community has sought to understand and address the county's most pressing needs, involving partners from numerous community organizations. Twelve partners participated in the Healthy Community 2013-2014 study.

Similar to 2006 and 2010, the current endeavor began with a thorough understanding of the county's "health" as measured using three assessments, each from a different perspective. The assessments include 1) community survey to know the views of the residents themselves, 2) key informants for knowledge from community leaders, and 3) community analysis which contains descriptors using secondary data sources. The 2013-2014 study omitted focus groups as used in 2006 and 2010, attempting to obtain information about populations in need by targeting at-risk groups to complete the survey.

Through the assessments, the current health status of county residents is described along with demographic trends, social and economic indicators, health behaviors, and utilization of health services. The assessments also attempt to understand the perceptions of community strengths and weaknesses as well as answer questions about health and human services delivery, unmet needs, gaps, and barriers to care.

Health Systems Research of the University of Illinois College of Medicine at Rockford was hired to guide the process and conduct the needs assessment components as well as prepare this summary report. Health Systems Research, which specializes in community needs assessments for health and human service organizations, has assisted the McHenry County Department of Health and other local organizations on numerous projects over the past decade.

Partners and other service providers will use this document to determine what should be done and implement strategies and actions to address health, human services, and other pertinent problems.

Partner Organizations

McHenry County Healthy Communities 2013-2014 was directed by 12 partner organizations. Those organizations and their representatives are:

Advocate Good Shepherd Hospital	Julie Mayer
Advocate Sherman Hospital	Tina Link
Centegra Health System	Hadley Streng
Family Alliance Inc.	Phil Versten
McHenry County College	Lena Kalemba
McHenry County Community Foundation	Meg LaMonica
McHenry County Department of Health	Debra Quackenbush and Patrick McNulty
McHenry County Mental Health Board	Carolyn Frasor
McHenry County Regional Office of Education	Laura Crain
Pioneer Center for Human Services	Kemberly Dailey Johnson
Senior Services Associates Inc.	Leslie Edstrom
United Way of Greater McHenry County	Steve Otten

Appendix 1: County Community Health Improvement Plans, Surveys and Other Reports (cont'd)

Barrington Area Community Analysis, A Compilation of Demographic, Social, Health and Economic Data for 60010, May 28, 2014

BARRINGTON AREA COMMUNITY ANALYSIS

**A Compilation of Demographic, Social, Health
and Economic Data for 60010**

May 28, 2014

HEALTHIER BARRINGTON COALITION

Chapter 1 INTRODUCTION

The Barrington Area Community Analysis presents a comprehensive overview of 60010, describing residents and resources through secondary sources of information.

Topics include population size, age, race/ethnicity, gender, family structure, income and poverty, education, employment, housing, births, deaths, health status including morbidity, health behaviors, disability, health resources, health care utilization, social indicators, and crime and violence.

The major sources of information for the Community Analysis are the *2010 Census of Population and Housing*, *2008-2012 American Community Survey*, other U.S. Census updates, vital statistics collected by the Illinois Department of Public Health, Behavioral Risk Factor Survey, and social and economic indicators primarily from state and regional agencies.

The Barrington Area Community Analysis relies quite heavily upon recent data from the American Community Survey (ACS). Historically, the Census Bureau has collected detailed demographic, housing, social and economic data every ten years, selecting a sample of one in six households to complete the detailed "long form." Desiring more timely information, the Census Bureau has replaced the decennial "long form" used in 2000 with the ACS, which collects the same type of data every year. Three million households across the nation are surveyed annually, using a multi-stage sampling technique and a varying percentage of households depending on an area's size. Because the sample is limited, years are combined for greater reliability. This report primarily relies on 2008-2012 data for 60010 so as to reflect the most recent data.

This report was prepared for the Healthier Barrington Coalition, a partnership of 25 Barrington area organizations working together to improve the quality of life for residents of the Barrington area.

The Coalition has regularly conducted assessments of needs. Seven household surveys have been sent to area residents and analyzed every three years since 1996 for resident needs, followed by actions to improve the quality of life. This is the first community analysis, adding further depth to an understanding of the community.

This report was produced by Joel Cowen, MA, and Karen Lytwyn, MPH, retirees from Health Systems Research at the University of Illinois College of Medicine at Rockford, which conducted the first six household surveys.

Appendix 1: County Community Health Improvement Plans, Surveys & Other Reports (cont'd)

Wauconda Community Survey Findings 2016

Introduction

Data that can help inform communities on their health status is not always available in a timely or understandable manner. Health and social indicators are reported at much larger, less relevant scales. Health information tends to be most well documented at the state and national level. Even these data are difficult to use, as they tend to only become available several years after the information is collected. Consequently, local health and social challenges are more difficult to define. Focused interventions are more difficult to implement.

In order to better understand the needs and strengths within a community and effectively plan for the future, Advocate Health Care and the Lake County Health Department and Community Health Center (LCHD/CHC) have partnered to collect, interpret, and share essential data that can help communities make informed decisions about proposed priorities, plans, and projects.

Background

With the advent of the Affordable Care Act, not-for-profit hospitals are responsible for developing and implementing comprehensive plans to support the broader health of the communities they serve. The first step of the three year cycle is to create a Community Health Needs Assessment (CHNA). Effective plans require accurate, timely data to foment action that delivers meaningful results. To support the development of a data-driven CHNA, Advocate Health Care and LCHD/CHC collaborated to collect data on high priority communities within the Good Shepherd service area. Utilizing a survey tool generated for the Lake County Community Health Status Assessment, individuals in the target community were invited to share their health status and contribute to an assessment of the strengths and needs unique to their neighborhoods.

Wauconda

The Village of Wauconda is located in southeast Lake County. The Village is home to 13,189 residents.¹ About 26.4% of residents are under the age of 18. 18.2% of residents identify as Hispanic or Latino. 73.1% identify as non-Hispanic White. 0.6% identify as non-Hispanic Black. 6.0% identify as Asian. 15.5% of residents were born outside of the United States. 25.0% of residents speak a language other than English at home; of these residents, 37.9% speak English less than "very well." 42.4% of households who rent and 37.9% of households who own their homes spend greater than 30% of their household income on housing costs. The most common language spoken at home (by about 15% of all residents) is Spanish or a Spanish Creole. 5.8% of all residents and 4.2% of children under 18 years old fall below the federal poverty level. 19.4% of working residents are in Educational services, health care, and social assistance industries. Another 15.2% are employed in manufacturing. 13.2% work in retail trade.

Methods

The survey questions were adapted from national tools designed to collect data for improving understanding of health conditions and challenges and drew heavily from the Behavioral Risk Factors Surveillance System survey used by the Centers for Disease Control and Prevention in order to describe health burdens by state. Additional questions were added to assess the prevalence of behavioral health




¹ 2010-2014 American Community Survey 5-Year Average

and chronic disease conditions. New questions were subjected to three rounds of review prior to being approved for use in the survey tool. Surveys were developed in English and Spanish.

Five thousand randomly-selected households in the Wauconda community were contacted by mail in mid-September and invited to participate in an anonymous online or call-in survey offered in English and Spanish. Two reminder postcards were delivered two and six weeks after the initial mailing. Respondents had a window of ten weeks to participate in the survey. Of the initial 5000 invitations, 158 were returned as undeliverable.

From the invitations sent, the survey received 598 contacts for a contact rate of 12.4% of delivered invitations. A total of 558 respondents moved past the screening questions that verified a respondent's age and home ZIP code. Because only the screening questions were mandatory, the total responses per individual question varied throughout the survey. Responses were collected and weighted for different demographic features including age and sex of the respondents unique to the geography sampled. The source of age and sex estimates were based on the U.S. Census's American Community Survey 5-Year Estimates for years 2010-2014. With this weighting strategy, the Lake County survey was found to produce rates comparable to the I-BRFSS Round 5 estimates.

For ease of interpretation, a symbol indicates whether, for the value for the question asked is performing better than, equal to, or worse than Lake County. An indicator that is a better value than Lake County overall is symbolized as a green circle with a white "+" enclosed. Equivalent values are symbolized with a yellow circle with a white "=" enclosed. Values that are worse than Lake County are represented by a red circle with a white "-" enclosed. Examples of the three symbols are as follows:

Better	Equal	Worse
		

Further Information

Questions and comments can be directed to Seth Kidder, Assessment and Planning Coordinator at the Lake County Health Department. He can be reached by phone at 847.984.5014 or by email at skidder@lakecountyil.gov.

Appendix 1: County Community Health Improvement Plans, Surveys & Other Reports (cont'd)

An Assessment of Behavioral Health Needs, Service Capacities and Projected Trends in Northern Lake County, July 2014

Behavioral Health Needs in Northern Lake County

Executive Summary

This report describes behavioral health in terms of needs, service capacities and projections for the future in Northern Lake County, especially as they relate to lower-income populations. The information presented here is the culmination of a nine-month, in-depth process that sought to capture the complexities of needs, providers, services and other aspects of behavioral health. The tools used to gather data included a survey of 250 behavioral health specialists, nineteen individual interviews, four focus groups and analysis of quantitative data. Northern Lake County is defined as the portion of Lake County, Illinois that lies north of Route 137, extending from Lake Michigan on the east to McHenry County on the west.

Key findings of this process include the following:

Findings on Need

The Need Is Enormous. For example, almost 80,000 Northern Lake County residents likely engaged in binge drinking in the last month. Almost 4,000 residents had dependence on illicit drugs in the last year. Some 10,000 residents had serious thoughts of suicide in the last year, and 17,000 had one or more major depressive episodes. (page 7)

Large Numbers of Young Adults Are Using Alcohol and Tobacco. Almost half of young adults aged 18-25 have used a tobacco product in the last month. Two-thirds report binge drinking. One in eight 12-17 year olds has used a tobacco product in the past month and one in ten 12-17 year olds has engaged in binge drinking in the past month. (page 6)

Young Persons are overrepresented in hospital emergency departments for behavioral health. Persons 15-24 years old are 14 percent of the population but 30 percent of emergency department visits. Persons aged 25-34 years are also overrepresented in the emergency department data in numerous diagnostic categories. (page 10)

The Need Is Highly Concentrated In Some Areas. Local areas in the environs of Waukegan and North Chicago have deep need for behavioral health services. Some zip code areas have residents visiting the emergency room with behavioral health crises at ten times the rate of persons in zip codes just a few miles away. Other zip codes in the western portion of Northern Lake County also have notably high use of emergency department services for behavioral health. (page 8)

Specific Populations Are Underserved in Different Ways. Latinos, who are a fifth of the area's population, are dramatically underrepresented in data on hospital use. African Americans meanwhile are overrepresented among persons requiring emergency services. (page 9)

Critical Services Are Lacking. There is a serious need for more behavioral health professionals in Northern Lake County, especially when compared to the numbers of professionals in Southern Lake County. Far more psychiatrists are needed, but also key services such as general counseling, case management and housing. (page 34)

Findings on Capacity

There Is Limited Capacity. The numbers served by Lake County Health Department are small in comparison to the demand. The non-profit sector is essentially at capacity. The for-profit sector is not a major player because it cannot provide charity care and it largely does not accept Medicaid. (Section III)

More Medicaid Providers Are Needed. Medicaid is the only health insurance available to most persons of low income, yet few providers are available. Only about a dozen psychiatrists in Northern Lake County accept Medicaid, and some of them take on very few patients. (page 26)

The Lake County Health Department Has Experienced Shifts in Its Service Capacity, with Some Decline of Services in Recent Years. The County's behavioral health caseloads have fallen in some areas such as Outpatient Counseling, while Child and Adolescent Behavioral Services have risen. Overall, most programs have had their most recent service peaks three or four years ago due to declines in state funding. (page 25)

Projections

The Affordable Care Act Will Dramatically Improve Access, but Will Strain Already Limited Behavioral Health Capacity for Low-Income Persons. Some 39,000 Northern Lake County residents will gain access to health insurance via the ACA. If even a modest portion of these persons seek behavioral health services for the first time, it will strain a system that is already largely at capacity. (page 38)

12,000 Persons Newly Eligible for Medicaid Represent a Diverse Population. About 38 percent of the population newly eligible for Medicaid is White, Non-Latino, 37 percent is Latino, and 20 percent is African American. (page 38)

County Government Needs a Market Orientation Toward the Newly Insured. A large number of about 12,000 persons newly insured by the ACA will fall under the "Medicaid Expansion" category. Many have been getting treated at county facilities, yet they will have the ability to seek care elsewhere. The county will need to compete to retain these newly insured (i.e., paying) customers. (page 38)

A "Catch-Up" Strategy toward Growth and Diversity Is Insufficient. For the foreseeable future, population growth and diversification – and the particular requirements they imply for

behavioral health services -- will be the norm. In as much as the population growth may continue to be driven by immigration, good clinical interventions will require culturally informed and ethnically diverse clinicians attuned to the culture of the person in treatment. This will require investment in linguistically and culturally appropriate services. The community needs more behavioral health providers who speak languages other than English. *(page 41 and map on page 15).*

Appendix 1: County Community Health Improvement Plans, Surveys & Other Reports (cont'd)

Community Action Plan for Behavioral Health in Lake County, Illinois, 2016-2020, November 2015

Community Action Plan for Behavioral Health in Lake County, Illinois
For the Five Years 2016 – 2020

Executive Summary

This report provides a recommended five-year action plan to address the unmet behavioral health needs in Lake County, IL. These needs were identified in a July 2014 report entitled “An Assessment of Behavioral Health Needs, Service Capacities, and Projected Trends in Northern Lake County” (Assessment). The action plan presented here is a result of a ten month project involving collaboration from behavioral health and social service providers and stakeholders from Northern Lake County, led by Leading Healthy Futures (LHF), and funded by the Healthcare Foundation of Northern Lake County.

Based on the tremendous behavioral needs identified, stakeholders in Lake County prioritized four population groups whose behavioral health needs would need to be addressed in any successful action plan: low income adults and youth who have non-severe mental health conditions; individuals who have substance abuse disorders and are not severely mentally ill; individuals who are severely mentally ill, do not require residential treatment, and are not homeless; and individuals who are severely mentally ill, and require residential treatment and/or are homeless. In addition to the four population groups, four main underlying issue areas to address were identified: provider workforce; coordination/continuum of care; awareness; and access. For all of these population groups and underlying issues, the need for improved linguistic, cultural, racial and ethnic competencies was held as a constant.

This report presents detailed discussions of 13 unique strategies, grouped according to the underlying four issue areas, which have great potential to meet the needs of these population groups over the next five years. Each strategy was researched by LHF and discussed in detail by groups of Northern Lake County stakeholders. The results of these conversations and research are presented here, including summaries of the strategies and more detailed considerations around scale, potential partners, expected outcomes, revenue potential, and cost assumptions.

The report outlines recommendations for successful implementation of the action plan. LHF's recommendation is to leverage the existing structure of *Live Well, Lake County* to serve as the convener for implementation. A Behavioral Health Action Team, with interdisciplinary representation, would be created under this existing structure, meeting for the first time between February and April of 2016. The Behavioral Health Action Team would guide decisions around which strategies to pursue in which order, with the recommendation of initially choosing one strategy per issue area to pursue in Year 1, and choosing additional strategies in Year 2 and beyond.

Pursuit of the strategies recommended and expounded upon in this report is expected to have a substantial impact on unmet behavioral health needs in Northern Lake County. Successful implementation of this action plan would create:

- Greater awareness of behavioral and mental health issues in the community;
- More effective referrals and care coordination between social service, health, and behavioral health agencies in the county;
- Greater access to services throughout the county; and
- Expansion of the provider work force and capacity to serve patients and clients in the county.

With careful and strategic implementation of these strategies, Northern Lake County has the potential to reduce the unmet behavioral health needs of its population, and become a model for other counties, communities, and collaboratives seeking to do the same.

Appendix 2: Sources for 2014-2016 CHNA

(All data and website links were verified as of the date of Governing Council approval.)

Primary Sources

An Assessment of Behavioral Health Needs, Service Capacities and Projected Trends in Northern Lake County, Lake County Health Department and Community Health Center, Behavioral Health Services, Rob Paral and Associates, July 2014.

Barrington Area Community Analysis, A Compilation of Demographic, Social, Health and Economic Data for 60010, Healthier Barrington Coalition, May 28, 2014.

Community Action Plan for Behavioral Health in Lake County, Illinois, 2016-2020, Lake County Health Department and Community Health Center, November 2015.

2016-2021 Live Well Lake County Community Health Assessment, Live Well Lake County Steering Committee, Lake County Health Department, August 24, 2016.

2016-2021 Live Well Lake County Community Health Improvement Plan, Live Well Lake County Steering Committee, Lake County Health Department, August 24, 2016.

McHenry County Healthy Community Study-Community Analysis, McHenry County Healthy Community Partners, 2014.

Wauconda Community Survey Findings, Lake County Health Department and Community Center, Assessment and Planning, July 2016.

Secondary Sources

Healthy Communities Institute (HCI), A Xerox Company, 2016, accessed via a contract with Advocate Health Care. Website unavailable to the public. The following data sources were accessed through the HCI portal:

Centers for Disease Control and Prevention, 2015.

Claritas, 2015, 2016.

County Health Rankings, 2014, 2015.

Illinois Department of Public Health, 2011-2013, 2013.

Illinois Hospital Association, COMPdata, 2015, 2016.

US Census, American Community Survey, 2008-2012, 2010-14, 2015.

Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2016.

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

Centers for Disease Control and Prevention, Diabetes Data and Statistics, 2012.

<http://www.cdc.gov/diabetes/atlas/countydata/atlas.html>

Center for Medicare and Medicaid, Medicare Enrollment Dashboard, 2016.

<https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Dashboard/Medicare-Enrollment/Enrollment%20Dashboard.html>

Community Commons, 2016. www.communitycommons.org

County Health Rankings, 2016. www.countyhealthrankings.org

Illinois Behavioral Risk Survey, 2015. <http://app.idph.state.il.us/brfss/>

Illinois Department of Public Health, Data and Statistics, 2016. <http://www.dph.illinois.gov/data-statistics>

Illinois Healthcare and Family Services, Facts and Figures (Medicaid Enrollment Data), 2016.

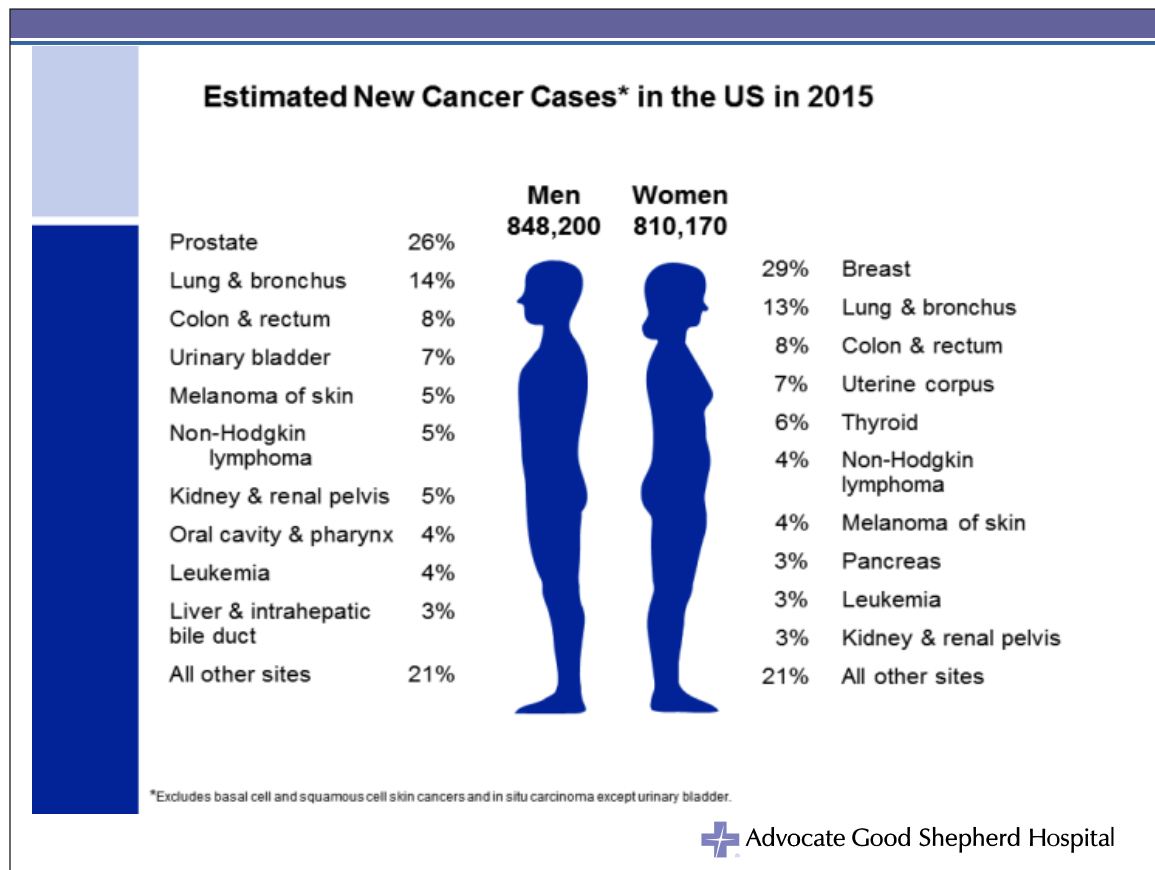
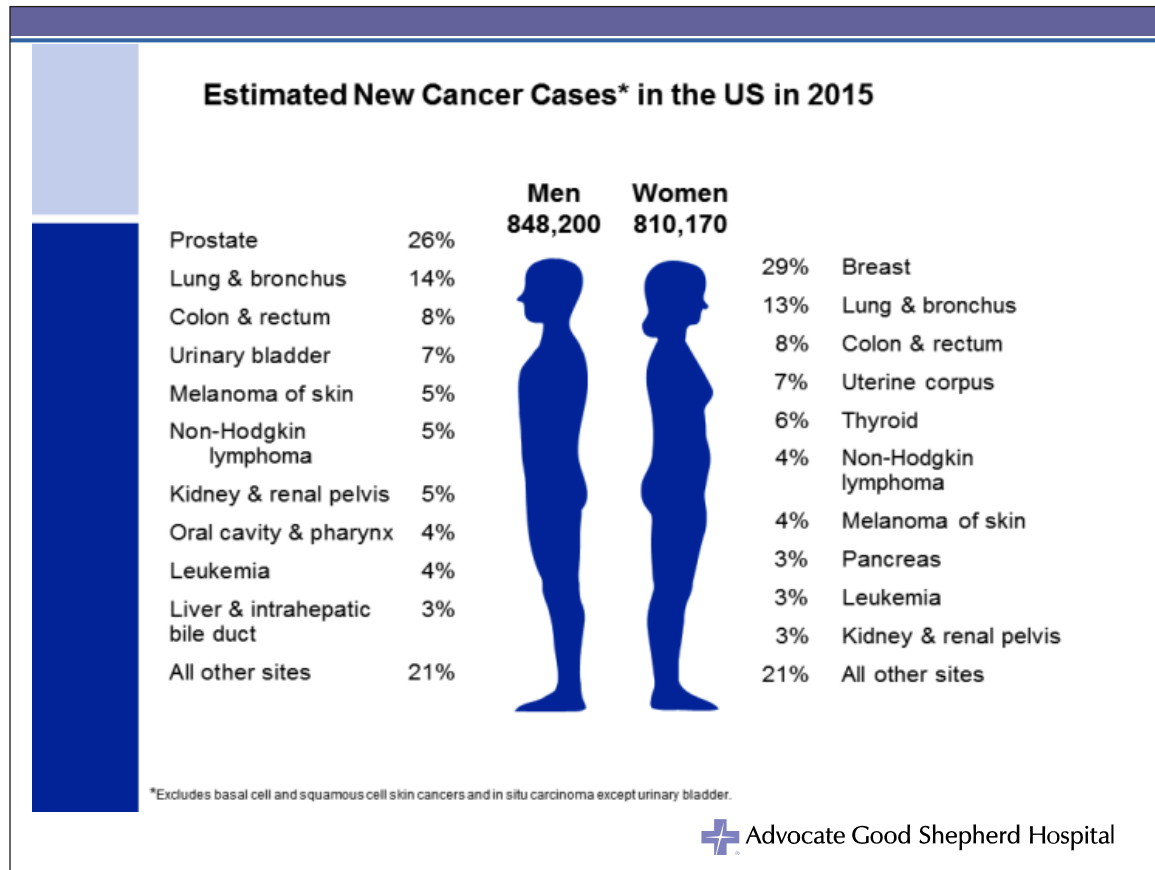
<https://www.illinois.gov/hfs/info/factsfigures/Pages/default.aspx>

Illinois Youth Survey, 2014. <https://iys.cprd.illinois.edu/>

Truven Health, Claritas, 2016.

Truven Insurance Coverage Estimates, 2016.

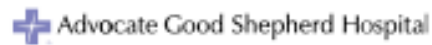
Appendix 3: Cancer Presentation Provided to Good Shepherd's Community Health Council



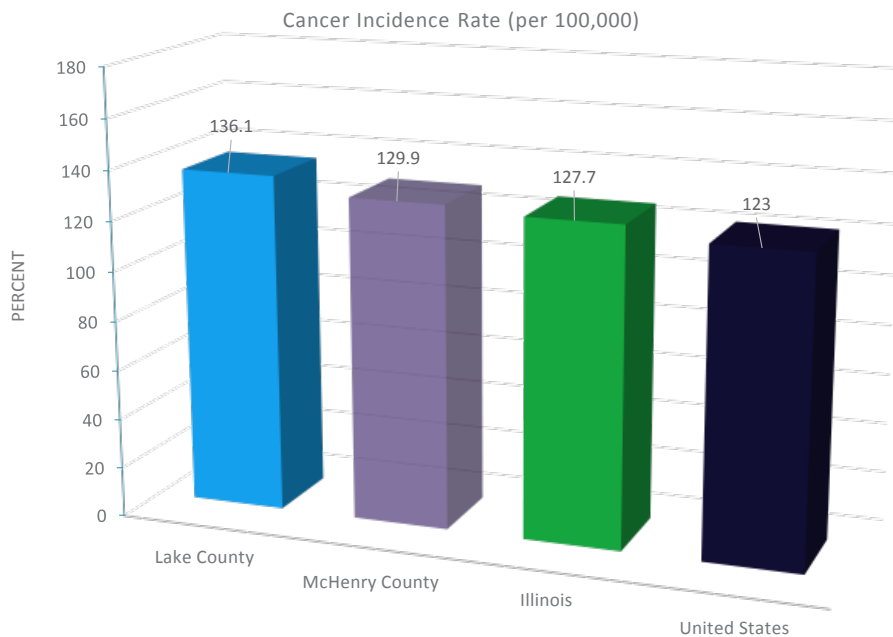
Cancer in Illinois

Every day in Illinois.....

- 179 people are diagnosed with cancer
- 26 women are diagnosed with breast cancer
- 23 men are diagnosed with prostate cancer
- 17 people are diagnosed with colorectal cancer
- 25 people are diagnosed with lung cancer



Breast Cancer Incidence

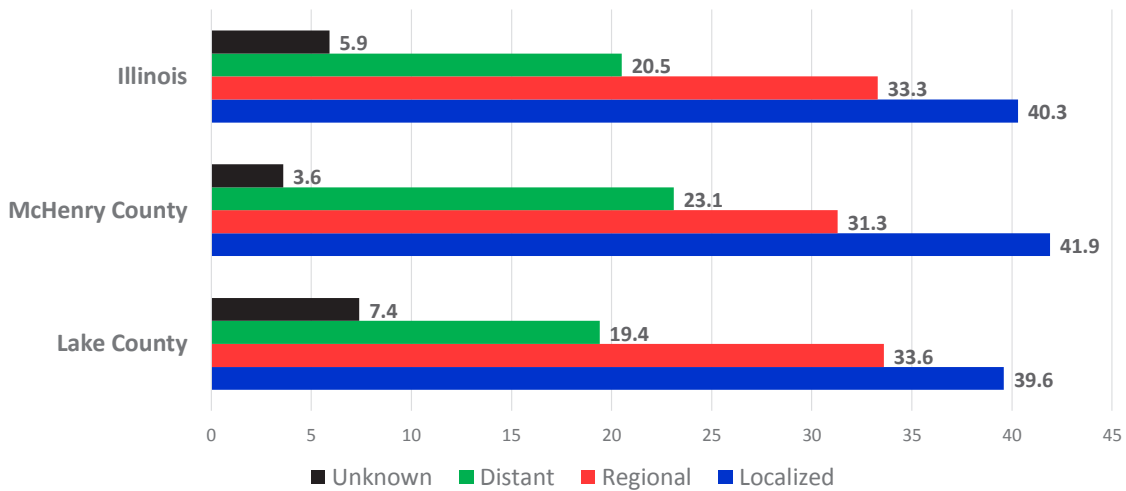


Data Source: National Institutes of Health, National Cancer Institute, [Surveillance, Epidemiology, and End Results Program. State Cancer Profiles. 2008-12.](#) Source geography: County



Female Breast Cancer Stage at Diagnosis

Percent Distribution of Stage at Diagnosis



DATA SOURCE: Illinois Department of Public Health, Illinois State Cancer Registry, data as of November 2015

Advocate Good Shepherd Hospital

Screening


Screening	Illinois	USA
Had a Mammogram in Past 2 Years, Ages 40+, 2014	73.6	73.7
Had a Mammogram in Past 2 Years, Ages 50-74, 2014	78.1	78.5

Data Source: CDC, Modeled Estimates Combining BRFSS & NHIS

Advocate Good Shepherd Hospital

Breast Cancer Death Rates in Illinois

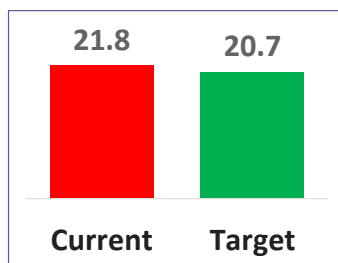
- Illinois death rates: (2007-2011)
 - Female: 23.4
 - *Per 100,000, age adjusted to the 2000 US standard population.

 Advocate Good Shepherd Hospital

Healthy People 2020 Death Rate Due to Breast Cancer

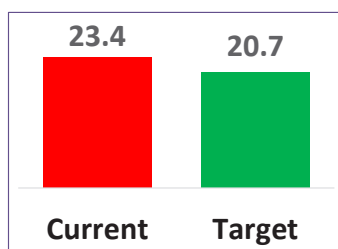


Lake County




TARGET NOT MET

McHenry County



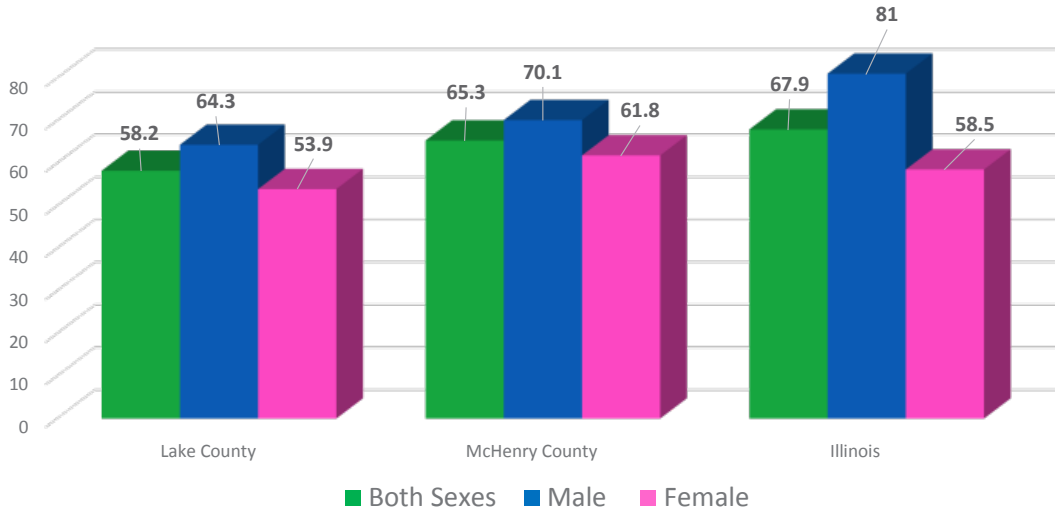
TARGET NOT MET


Data Source: [Local Initiatives Support Corporation](#)

 Advocate Good Shepherd Hospital

Lung and Bronchus Cancer Incidence Rates 2009-2013

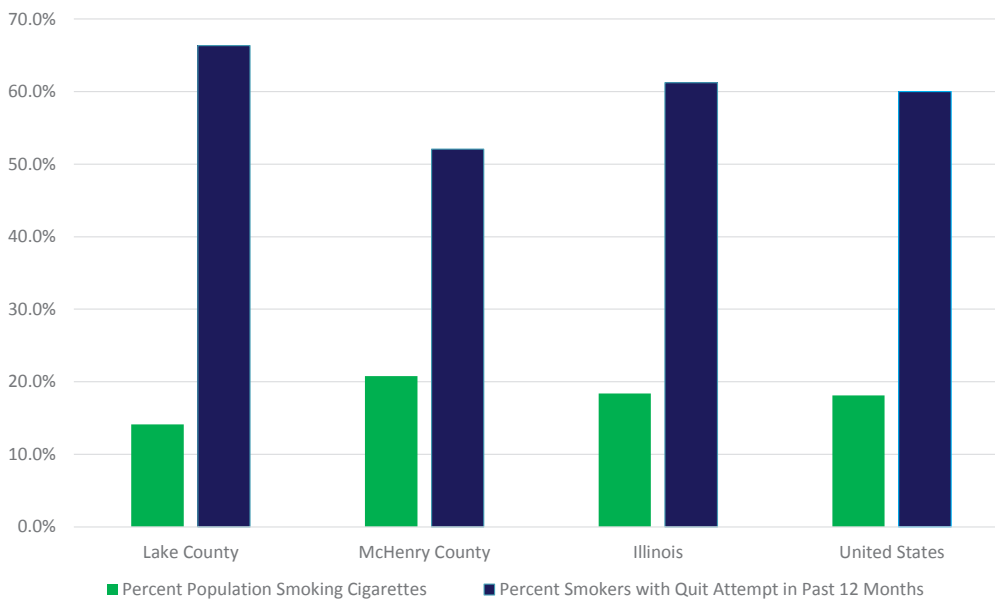
Lung and Bronchus Cancer Rates Per 100,000



DATA SOURCE: Illinois Department of Public Health, Illinois State Cancer Registry, data as of November 2015  Advocate Good Shepherd Hospital

Tobacco Usage

Tobacco Use- Current Smokers/ Quit Attempt



Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Additional data analysis by CARES. 2011-12. Source geography: Count  Advocate Good Shepherd Hospital

Who Smokes?

Percentage of U.S. Adults who Smoke by Race/Ethnicity

Race/Ethnicity Category	Percentage
Whites	19.7
African Americans	18.1
Hispanics	12.5
American Indians/Alaska Natives	21.8
Asian Americans	10.7
Multi-Racial People	26.1

Data Source: Centers for Disease Control and Prevention

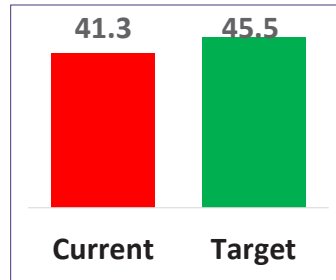


Healthy People 2020

Age-Adjusted Death Rate due to Lung Cancer

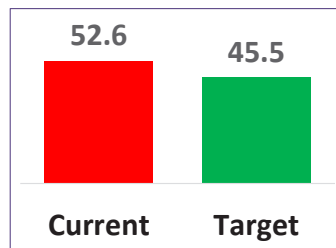


Lake County



TARGET MET

McHenry County



TARGET NOT MET

Data Source: [Local Initiatives Support Corporation](#)

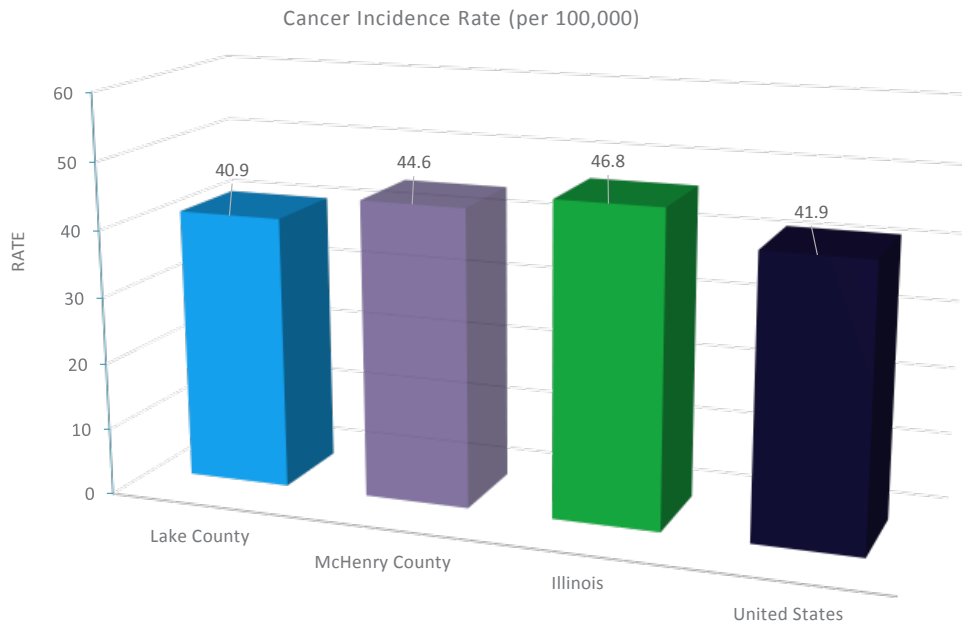
Advocate Good Shepherd Hospital

Lung and Bronchus Death Rates in Illinois

- Illinois death rates: (2007-2011)
 - Male: 64.2
 - Female: 41.6
 - *Per 100,000, age adjusted to the 2000 US standard population.

Advocate Good Shepherd Hospital

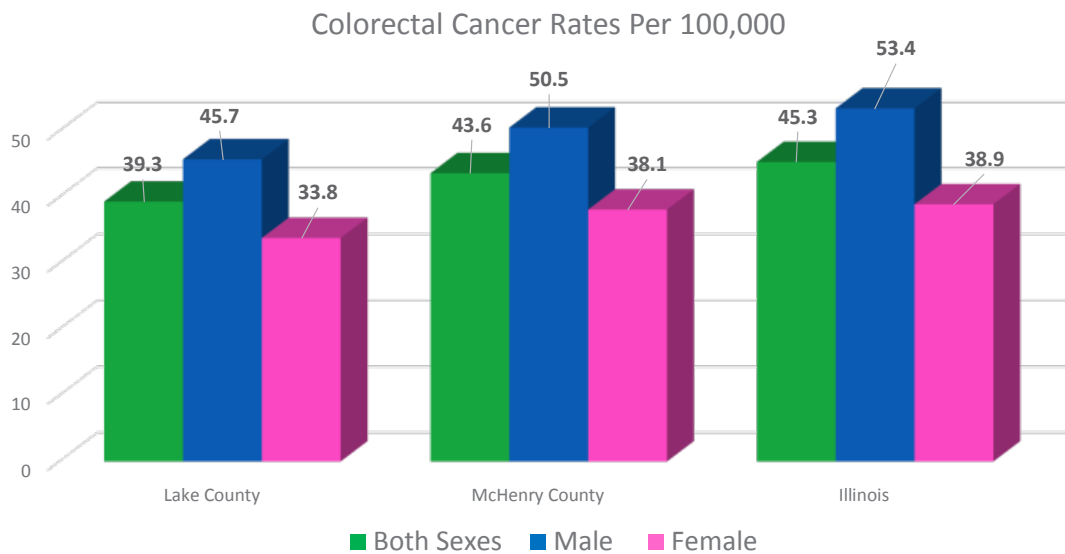
Colorectal Cancer Incidence



Data Source: National Institutes of Health, National Cancer Institute, *Surveillance, Epidemiology, and End Results Program. State Cancer Profiles, 2008-12. Source geography: Count*

Advocate Good Shepherd Hospital

Colorectal Cancer Incidence Rates 2009-2013

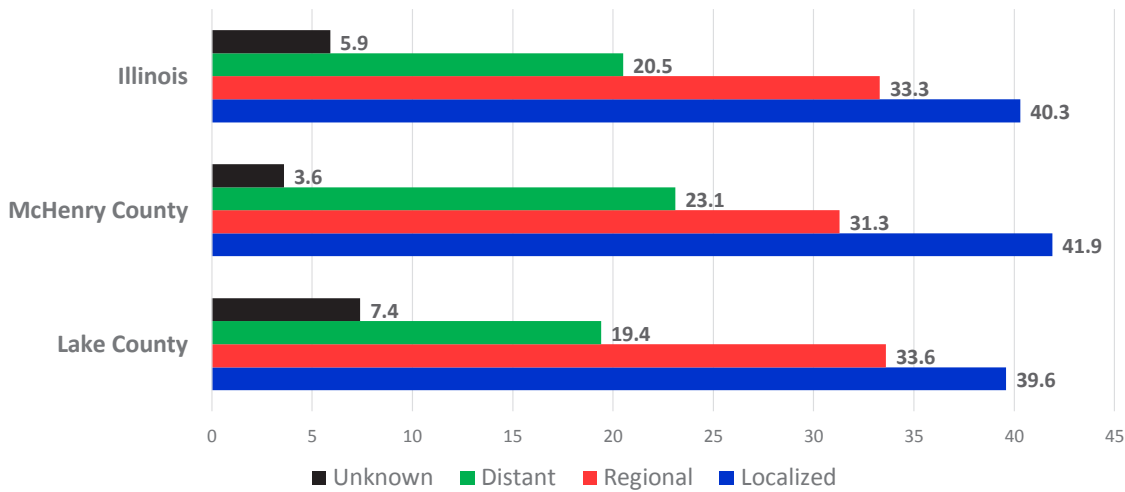


DATA SOURCE: Illinois Department of Public Health, Illinois State Cancer Registry, data as of November 2015

Advocate Good Shepherd Hospital

Colorectal Cancer Stage at Diagnosis

Percent Distribution of Stage at Diagnosis



DATA SOURCE: Illinois Department of Public Health, Illinois State Cancer Registry, data as of November 2015

 Advocate Good Shepherd Hospital

Screening

Screening & Risk Factors: Colorectal Screening	Illinois	USA
Ever Had Colorectal Endoscopy (Sigmoidoscopy or Colonoscopy), Ages 50+	65.1	69.1
FOBT in last year and/or flex sig in last 5 years and FOBT in last 3 years and/or colonoscopy in last 10 years, Ages 50-75	61.4	66.3
Home-Based Fecal Occult Blood Test (FOBT) in Past Two Years, Ages 50+	9.9	14.9
Home-based FOBT in the past two years or ever had a colorectal endoscopy, Ages 50+	67.6	72.9

Data Sources: CDC, Modeled Estimates Combining BRFSS & NHIS

 Advocate Good Shepherd Hospital

Colorectal Cancer Death Rates in Illinois

- Illinois death rates: (2007-2011)
 - Male: 20.7
 - Female: 14.8
 - *Per 100,000, age adjusted to the 2000 US standard population.

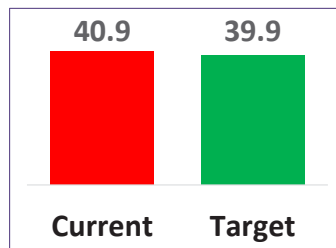


Source: US Mortality Data, National Center for Health Statistics, Centers for Disease Control and Prevention.

Healthy People 2020 Colorectal Cancer Incidence Rate

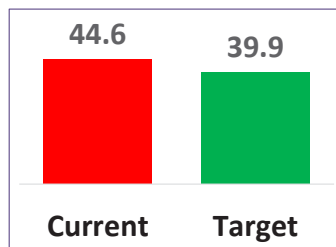


Lake County



TARGET NOT MET

McHenry County



TARGET NOT MET



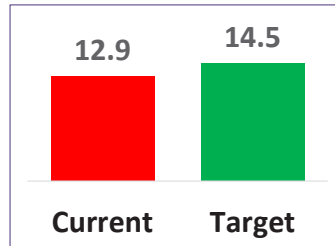
Data Source: [Local Initiatives Support Corporation](#)

Healthy People 2020

Age-Adjusted Death Rate due to Colorectal Cancer

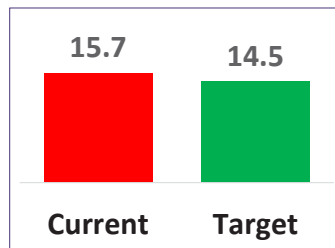


Lake County



TARGET MET

McHenry County



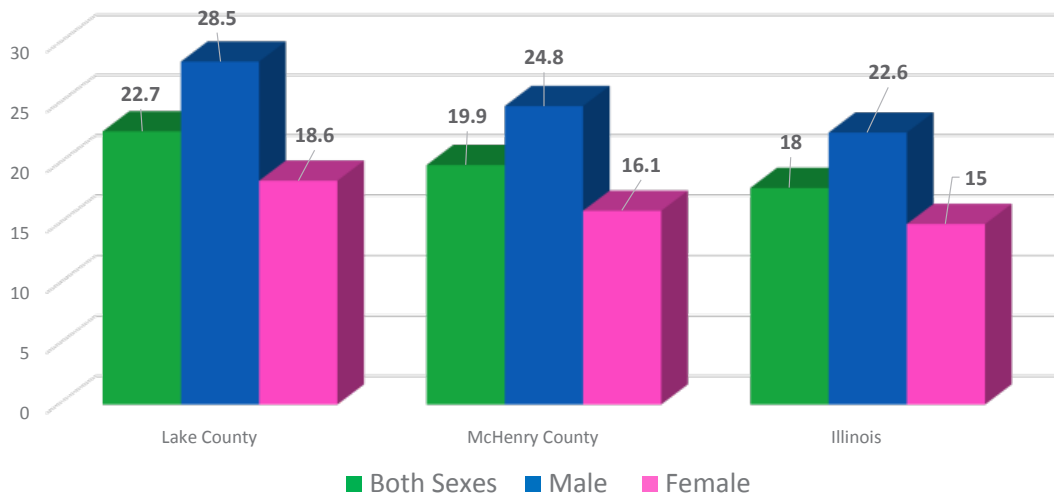
TARGET NOT MET

Data Source: [Local Initiatives Support Corporation](#)

Advocate Good Shepherd Hospital

Skin Cancer Incidence Rates 2009-2013

Skin Cancer Rates Per 100,000

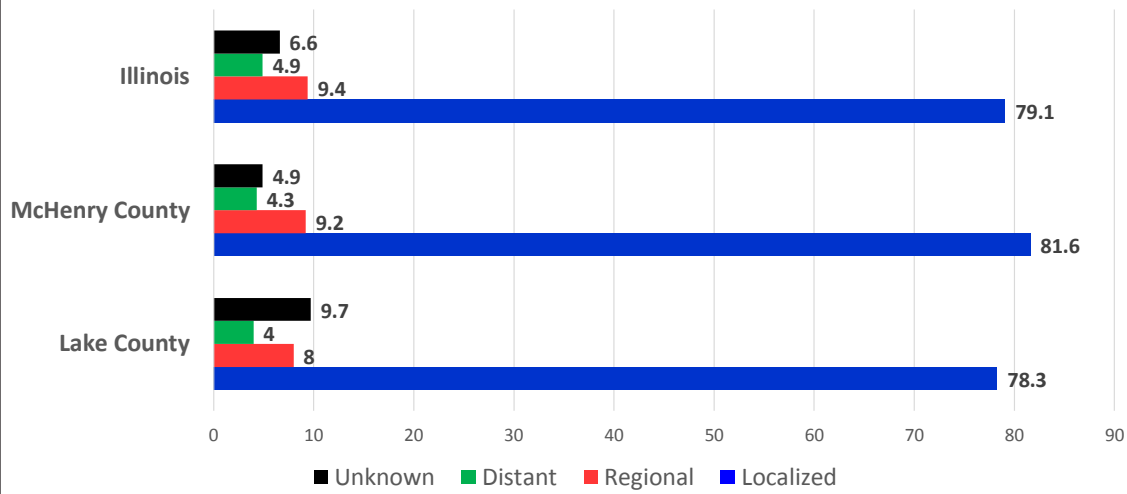


DATA SOURCE: Illinois Department of Public Health, Illinois State Cancer Registry, data as of November 2015

Advocate Good Shepherd Hospital

Skin Cancer Stage at Diagnosis

Percent Distribution of Stage at Diagnosis



DATA SOURCE: Illinois Department of Public Health, Illinois State Cancer Registry, data as of November 2015

 Advocate Good Shepherd Hospital

Health Issues Review



Advocate Good Shepherd Hospital (AGSH) Top Health Issues

Diabetes

Obesity

Substance Abuse

Mental Health

Cardiovascular Disease

Cancer

Social Determinants

Health Issues Review

Diabetes

Lake County

8.4% of adults have been diagnosed with diabetes

49% of diabetes cases are **women** 
51% are **men** 

McHenry County

8.8% of adults have been diagnosed with diabetes

46% of diabetes cases are **women** 
54% are **men** 

Illinois

8.67% of adults have been diagnosed with diabetes

ER Rates and Hospitalization Rates for Diabetes are increasing each year in Primary Service Area

The zip codes with the highest Hispanic population are the same zip codes with the highest hospitalization and ER rates

Top Zip Codes for Long Term Diabetes Issues

60156-	Lake in the Hills
60050-	McHenry
60042-	Island Lake
60084-	Wauconda
60010-	Carpentersville

14% Of Lake County residents have been told by a medical provider that they have pre-diabetes.



SOURCES:

America Diabetes Association, 2013, IHA Comp data 2012-2014, CDC National Center for Disease Prevention and Health Promotion 2012, Lake County Health Department.

 Advocate Good Shepherd Hospital

Health Issues Review

Obesity



29% of Lake County Adults are Obese
36% of Lake County Adults are Overweight

Low-Income preschool children

McHenry County- **16.8%** are obese.

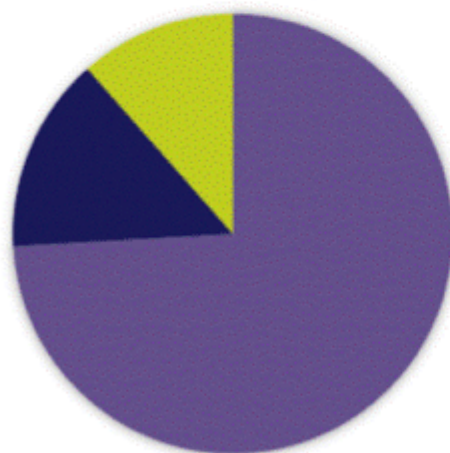
Lake County, **17.6%** are obese.

Each year the percentage of people who are overweight or obese continues to rise in the US.
McHenry and Lake Counties



Top Priority

Both Lake County and McHenry County Health Departments have made Obesity a top health priority



In Illinois...

14.4% of adolescents are overweight

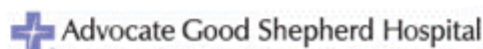
11.5% of adolescents are obese

Low-Income Obesity rates are in the RED for the AGSH Primary and Secondary Service Area



SOURCES:

YRBSS, 2013. WICPC, 2012, CDC 2015, U.S. Department of Agriculture - Food Environment Atlas 2009-2011, Community Commons, Centers for Disease Control and Prevention, Diabetes Data & Trends: Methods and References for County-Level Estimates and Ranks. (2012), Finkelstein EA1, Trogdon JG, Cohen JW, Dietz W. Annual medical spending attributable to obesity: payer-and service-



Cardiovascular Disease



Adults with Heart Disease:

Lake County: **2.8%** McHenry: **2.9%** Illinois: **3.8%**



Rates of Hypertension in the Service Area have dropped over the last 5 years



Heart disease is the second leading cause of death in both Lake and McHenry County



The communities with the highest Hospitalization Rate due to Heart Failure in AGSH's service area are


Wauconda
McHenry
Carpentersville
Lake in the Hills
Island Lake

Mortality— Heart Disease

The death rate in the AGSH service area is lower than the state and national rates.

SOURCES:

Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER. 2009-13.
Source geography: County, CDC, NCHS. Underlying Cause of Death 1999-2013 on CDC WONDER Online Database, released 2015.

 Advocate Good Shepherd Hospital

Substance Abuse

Alcohol has emerged as the most abused substance in the AGSH service area.

Heroin

While the use of heroin is spreading throughout the United States, both Lake and McHenry Counties are below the state and national averages.

Top Hospitalization Rates Due to Alcohol Abuse

Barrington

Cary

Crystal lake

Fox River Grove

Wauconda

McHenry



Teens Who Use Marijuana

24% - Lake County

25% - McHenry County

Adults who drink excessively is in the **RED** in the AHSB service area.

Top Zip Codes for Substance Abuse

60050- McHenry

60014- Crystal Lake


60156- Lake in the Hills

60084- Wauconda



SOURCE

Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2014 Illinois Youth Survey

 Advocate Good Shepherd Hospital

Health Issues Review

Mental Health

ER Rate due to Adolescent Suicide and Intentional Self-inflicted Injury

47.3 per 10,000
for PSA



31.2 ER =   = 64.1 ER
Visits Visits

Lake County and McHenry County have both had **significant** increases in ER Rates due to Pediatric and Adult Mental Health



Adult ER Rate due to Mental Health

73.1- Lake County

90.8-McHenry County

91.1- Illinois

Per 10,000

McHenry (60050) has the highest...

- ER Rate due to adolescent suicide and intentional self-inflicted injury
- ER Rate due to pediatric mental health
- ER Rate due to adult mental health
- ER Rate due to suicide and Intentional self-inflicted injury

SOURCES:

NAMI (National Alliance on Mental Illness) , Illinois Hospital Association, data as of September 2015 , University of Wisconsin Population Health Institute, County Health Rankings. 2016. :



Advocate Good Shepherd Hospital

Health Issues Review

Cancer

Most common cancers in AGSH Service Area

Breast Cancer
Prostate Cancer
Lung Cancer
Colorectal Cancer

Cancer Mortality Rates

155.4– Lake County
176.4– McHenry County
173.9- Illinois
166.3-United States
Per 100,000

Breast Cancer Incidence Rate Per 100,000:

Lake County: 135.8 McHenry County: 138.2 Illinois: 128.5



Healthy People 2020

TARGET MET

Lake County

- Colorectal Cancer Death Rate
- Lung Cancer Death Rate
- Prostate Cancer Death Rate
- Colorectal Cancer Incidence Rate

McHenry County

- Prostate Cancer Death Rate

TARGET NOT MET

Lake County


- Breast Cancer Death Rate

McHenry County

- Breast Cancer Death Rate
- Colorectal Cancer Death Rate
- Lung Cancer Death Rate
- Colorectal Cancer Incidence Rate

SOURCES:

NAMI (National Alliance on Mental Illness), Illinois Hospital Association, data as of September 2015, University of Wisconsin Population Health Institute, County Health Rankings. 2016. :

 Advocate Good Shepherd Hospital

Health Issues Review

Social Determinants

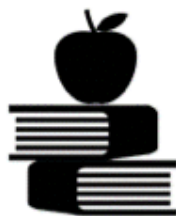
4.8% of Lake County is unemployed, **5.7%** of McHenry County is unemployed

15.26% of adults don't have health insurance in the AGSH Primary Service Area

Foreclosure Risk

Carpentersville
McHenry
Algonquin
Crystal Lake
Lake in the Hills

AGSH Service Area has Housing affordability issues with homeowners/renters spending more than 30% of their income on housing.



Children Eligible for Free/Reduced Price Lunch

31.99% Lake County

27.71% McHenry County

USE OF PUBLIC TRANSPORTATION IS EXTREMELY LOW IN SERVICE AREA



SOURCES:

Local Initiatives Support Corporation, US Department of Agriculture Food Environment Atlas 2015, American Community Survey, US Bureau of Labor Statistics 2016

 Advocate Good Shepherd Hospital

 Advocate Good Shepherd Hospital

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Barrington, IL 60010
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