

Community Health Needs Assessment

2014 - 2016





December 2016

Advocate Sherman Hospital is pleased to present the 2014-2016 Community Health Needs Assessment (CHNA). Over this past year, our Sherman Hospital Manager of Community Outreach and the Advocate Director of Community Health for the north region have worked closely with the Community Health Council to complete a comprehensive review of the health issues in our primary service area. Advocate Sherman Hospital has strong commitment as a faith-based community hospital to fulfill the mission of meeting the health needs of patients, families and community members.

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 Sherman Hospital focus on obesity and diabetes as our priority issues for the next three years. The Board of Directors then voted to approve these priorities. We are committed to work in collaboration with community partners to develop programs to impact obesity, and to continue to grow and refine the current Diabetes Program for the Latino community.

We want to extend a special thank you to the members of the Community Health Council, particularly our chairperson, Pastor Nat Edmond. Additionally, we want to thank the Kane County Health Department and the McHenry County Health Department for their assistance. The community needs assessments from both health departments served as valuable reference documents for the hospital's CHNA.

It is indeed a privilege to serve as your community hospital, focused on "leading health" and serving as a regional destination for high quality healthcare. We look forward to our work together to improve the health of our community.

Sincerely,

Linda Deering, President Advocate Sherman Hospital

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I. Executive Summary

Advocate Sherman Hospital has a 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. Sherman 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 needs and the ability to create solutions that are comprehensive and inclusive. This Community Health Needs Assessment (CHNA) report explains the process, data sources and strategy used to help bring improved health and vitality to the communities that Sherman Hospital is privileged to serve.

The hospital created a Community Health Council in 2015 with its first official meeting in January 2016. For purposes of this (CHNA) process, the council defined the community as the hospital's Primary Service Area (PSA). This geographical area includes parts of three counties; however, the majority of the hospital's PSA is split equally between Kane and McHenry counties. In order to ensure a comprehensive representation of data, Sherman Hospital was able to successfully leverage community partnerships through health coalitions established in both Kane and McHenry Counties.

Through these partnerships, the hospital participated in two comprehensive community assessments: the 2014 Kane County Community Health Status Data, Advocate Sherman Hospital PSA and Kane County, and the 2014 McHenry County Healthy Community Study. 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. Through the use of this data, the Community Health Council was able to determine areas of need for the community.

In preparation for the selection of priorities, Sherman Hospital community health staff presented a summary of the demographics, five health issues and social determinants 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. Diabetes and obesity were the main health priorities selected for focus. Once priorities were determined, specific tactics and measurable targeted outcomes were established, including a hospital budget to ensure specific resources were allocated toward addressing the health needs.

The final CHNA document was presented for approval to the hospital Governing Council in November 2016. The Community Health Council will work in conjunction with the Sherman Hospital community health staff to develop a detailed implementation 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 strategic discussion to evaluate any modifications that might be necessary. It is the hope of Advocate Sherman Hospital that this report will prove valuable and will allow members of the community to gain a greater understanding of the health issues within Kane and McHenry County.

II. Description of Advocate Health Care and Advocate Sherman Hospital

Advocate Health Care

Advocate Sherman Hospital is one of eleven 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 holistic philosophy rooted in the fundamental understanding of human beings as created in the image of God. This holistic 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 holistic 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, Sherman Hospital embraces the Advocate system MVP.

Advocate Sherman Hospital

Advocate Sherman Hospital in Elgin is an acute care facility with highly skilled physicians and clinical professionals offering a comprehensive range of health services. Since 1888, Sherman Hospital has provided quality, compassionate care to its patients and communities, and is a leader in delivering the most advanced technologies and services available in the northwest suburbs. Sherman Hospital has 255 beds in private rooms, a Level II Trauma Center, three outpatient centers with immediate care services staffed by emergency medicine physicians in Elgin, South Elgin and Algonquin, one comprehensive imaging center in Elgin, a fully-accredited skilled nursing facility in Elgin-Advocate Sherman Hospital West Court, and a 15-acre geothermal lake which heats and cools the facility. Sherman Hospital's vision is to be the leading provider of coordinated and comprehensive health care for the region. The hospital is certified as a Primary Stroke Center by DNV-GL Healthcare and achieved 2015 "Gold Plus" designation for stroke care from the American Heart Association and the American Stroke Association. The Center for Breast Care is fully-accredited by the National Accreditation Program for Breast Centers (NAPBC), and is designated as a Breast Imaging Center of Excellence by the American College of Radiology. The Chest Pain Center is fully-accredited by the Society of Cardiovascular Patient Care. Sherman Hospital is one of 10 hospitals in the nation selected by the American College of Cardiology to participate in a pilot Patient-Navigator Program to reduce cardiac-related diseases and readmissions in the community. Sherman Hospital consistently achieves a "3-Star" designation for cardiac surgery care from the Society of Thoracic Surgeons.

Exhibit 1: Advocate Sherman Hospital Statistics 2015

Category	Number
Inpatient Admissions and Observations	19,955
Births	2,758
Emergency Department Visits	65,430
Surgeries	12,030
Outpatient Visits	192,699
Medical Staff Physicians	772

Source: Advocate Health Care Strategic Planning Department, 2016.

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

Community Definition

Service Area

For the purpose of Advocate Sherman Hospital's 2011-2013 Community Health Needs Assessment (CHNA), the community was defined as the Primary Service Area (PSA) and Secondary Service Area (SSA), which included communities located in both Kane and McHenry Counties. These communities were Crystal Lake, Algonquin, Bartlett, Streamwood, Carpentersville, Dundee, Elgin, Gilberts, Huntley, Lake in the Hills and South Elgin, with a total population of 390,045 in 2010. Sixty-two percent of the PSA and SSA population was White, 7% Asian, 4% African American, and 2% two or more races. Twenty-five percent of the residents were of Hispanic ethnicity.

In 2010, approximately 11% of the population in Kane County was living below 100% of the Federal Poverty Level, and the area was affected by the economic downturn which began in 2008. Similarly, poverty status in Elgin increased to 15.9%. About 89% of the high school students graduated in the major school districts serving the area (U-46 and D300) with a composite ACT score of 20.4. Of the 35,124 homes in Elgin, about a quarter were renter-occupied, with half of the renters spending 35% or more of their income on rent.

Overall Process of the Assessment

Sherman Hospital worked collaboratively with the McHenry County Health Department and Kane County Health Department as well as with other community-based organizations in the County Health Department needs assessments. Both health departments used the MAPP process (Mobilizing Action through Planning and Partnerships). This strategy enabled the hospital to participate in data collection that covered all of the hospital's primary service area and the majority of the secondary service area. For the 2011-2013 Community Health Needs Assessment (CHNA), Sherman Hospital reviewed the results of the 2010 McHenry County Healthy Community Study, the 2011 Kane County Community Needs Assessment, the 2010 Behavioral Risk Factor Surveillance System, and data from Centers for Disease Control and Prevention (CDC). Additionally, a wide array of 2010-2012 hospital discharge, registry and hospitalization data was reviewed, including hospital admission, discharge and emergency department data, which allowed the committee to examine disease-specific health information about Sherman Hospital patients.

Needs Identified and Priorities Selected

In 2011, Sherman Hospital staff examined the CHNA results from both counties. The following priority areas were identified: 1) Information & Referral System; 2) Access to Dental Care for Low Income Population; 3) Access to Mental Health and Substance Abuse Services (Kane County defined this area as Poor Social and Emotional Health); 4) Obesity; 5) Cancer; 6) Chronic Disease; 7) Infant Mortality; and 8) Childhood Lead Poisoning.

Sherman Hospital's leadership considered these health needs and selected two priorities based on availability of resources and opportunities for intervention:

- · Breast Cancer
- · Obesity and Nutrition

Although there was agreement that the two priorities above would receive significant resources, the hospital continued existing programs and partnerships in the areas of heart disease (diabetes and cholesterol) and stroke.

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.

Breast Cancer

To decrease the mortality rate for breast cancer, the goal was to increase access to breast cancer screenings for the low income female Hispanic population. The performance measure was to increase the number of referrals made for screening mammograms as compared to the actual number of mammograms completed.

Advocate Sherman Hospital Auxiliary has been providing annual funding to the Women's Organization for Wellness (WOW) to pay for women to receive free mammograms. WOW distributes a voucher to patients at health events as well as through the Greater Elgin Family Care Center or the Visiting Nurses Association, both Federally Qualified Health Centers. In 2015, WOW processed 32 screening mammograms (two of which were diagnostic mammograms). This is a 6.7% increase from 2014. In 2016 (January-October), WOW processed 119 screening mammograms (nine of which were diagnostic mammograms). The hospital worked with WOW to provide educational information to low-income Hispanic women during two outreach programs in the community. No pre- or post-evaluations were provided at these events.

In 2015, Sherman Hospital's annual Pampering & Prevention event was combined with the First Annual Women's Conference sponsored in partnership with Senator Karen McConnaughey's office on October 21, 2015. A health fair provided educational information from vendors including the American Cancer Society and WOW, as well as screening and education opportunities such as blood pressure screenings, breast self-exam education, bra-fitting and the availability of skin therapy products. Two patients spoke of their journey with breast cancer to over 70 participants.

Obesity

Sherman Hospital's goal was to decrease obesity for low-income community members. The key performance measure identified was the total number of pounds of produce donated from the hospital's community garden to the local food pantry, Food for Greater Elgin.

The Sherman Hospital Natural Prairie & Community Garden Master Gardens (in partnership with the University of Illinois Master Gardener Program) and community gardeners provided approximately 400 pounds of produce which was donated to Food for Greater Elgin. The garden season was March through October 2016. Eighty families (approximately 325 individuals) were positively impacted by harvested produce from the gardens. Eighty-nine community members were screened for blood pressure and glucose at the food pantry in 2016 and five patients were referred to the Greater Elgin Family Care Center, a Federally Qualified Health Center, for appointments because they had elevated blood pressure or abnormal glucose levels.

In addition, the hospital's community garden committee partnered with Food for Greater Elgin to have their own garden bed at Sherman Hospital. Volunteers and staff from the food pantry tended the garden and harvested all crops for their clients.

Finally, Sherman Hospital dietitians provided healthy seasonal recipes on a monthly basis to food pantry clients. The recipes were available for all clients in English and Spanish and provided nutritional information using items collected at the pantry.

Input From the Community

After the CHNA was completed, it was posted on the hospital's website for public comment in December 2013. 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

Sherman Hospital identified two key lessons learned from the previous CHNA cycle. First, the goals identified were vague and needed to be more detailed. Secondly, the metrics used to track the impact of the program initiatives needed to be more specific. 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.

IV. 2014-2016 Community Health Needs Assessment

Community Definition and Sociodemographic Description

For purposes of this 2014-2016 CHNA, Sherman Hospital defines the community as its primary service area (PSA), which includes communities in McHenry County and Kane County, Illinois. As of 2016, the population of the PSA is 295,699. (Truven Health, 2016.) Generally 80% of all patients served come from the PSA.

The three largest communities within the PSA are Elgin (zip code 60120), with a population of 52,703; Elgin (60123) with a population of 47,644 and Carpentersville (60110), population 39,541. (Truven Health, 2016.) The population of the PSA has grown by 2.9% from 2010 to 2016 (Healthy Communities Institute, Claritas, 2016). The table in Exhibit 2 contains the cities and zip codes within the PSA.

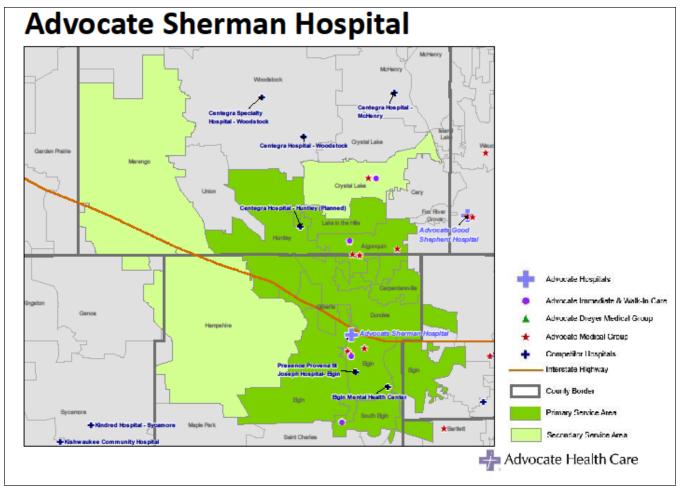
Exhibit 2: Sherman Hospital PSA Communities by Zip Code 2016*

Advocate Sherman Hospital		
Primary Service Area		
Zip Code	City	
60102	Algonquin	
60110	Carpentersville	
60118	Dundee	
60120	Elgin	
60123	Elgin	
60124	Elgin	
60136	Gilberts	
60142	Huntley	
60156	Lake in the Hills	
60177	South Elgin	

Source: Advocate Health Care Strategic Planning Department, 2016.

^{*}Because of changes in the Sherman service area, the summary Healthy Communities Institute data for the PSA does not completely match the current configuration of zip codes. Crystal Lake (60014), Hampshire (60140), and Marengo (60152) were included, but they are actually in the Secondary Service area. In addition, Gilberts (60136) was not in the calculation of PSA values. Zip code analysis, however, is confined to those zip codes identified in Exhibit 2 as in the PSA.

Exhibit 3: Advocate Sherman Hospital Primary Service Area Map 2016



Source: Advocate Health Care Strategic Planning Department, 2016.

Age, Gender, Race and Ethnicity

Age

The median age for the PSA is 37.49 years old (Healthy Communities Institute, Claritas, 2016). In the PSA, 27% of the residents are age 17 and younger, and eight percent are age 70 and older. (Truven Health, 2016.) Carpentersville and Gilberts are the two communities with the largest percentage of people age 17 and younger, at 32% and 30% respectively. Huntley (21%) and Dundee (10%) have the largest population in the PSA age 70 and older. (Truven Health, 2016.)

Gender

Fifty percent of PSA residents are male and 50% are female. (Healthy Communities Institute, Claritas, 2016.)

Race and Ethnicity

Seventy-seven percent of the PSA population is White, 6% Asian, 4% African American, 3% Two or More Races, 9% Some Other Race, and less than 1% American Indian or Alaska Native, as displayed in Exhibit 4. Twenty-nine percent of the PSA population is of Hispanic ethnicity. (Healthy Communities Institute, Claritas, 2016.)

Two or More Races, 2.81% Other Race, 9.17% 29% of PSA residents are of Asian, 6.26% Native Hispanic Hawaiian/Pacific ethnicity Islander, 0.04% African American, 4.21% American Indian/Alaskan Native, 0.69% White, 76.81%

Exhibit 4: Sherman Hospital Primary Service Area Race and Ethnicity 2016

Source: Healthy Communities Institute, Claritas, 2016.

The largest Hispanic population in the PSA is in Elgin (60120) at 54% and Carpentersville (60110) at 49.6% as shown in Exhibit 5.

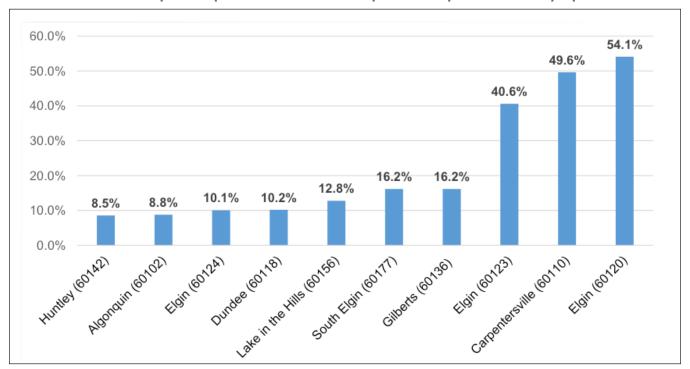


Exhibit 5: Percent of Hispanic Population in Sherman Hospital Primary Service Area by Zip Code 2016

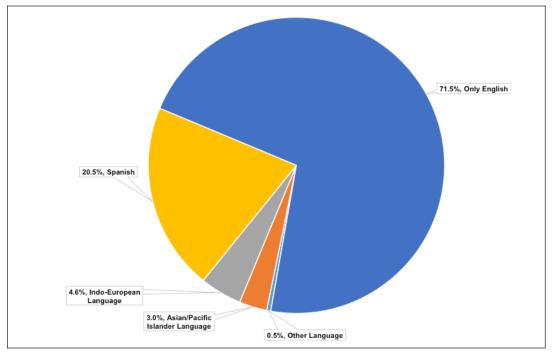
Source: Healthy Communities Institute, Claritas, 2016.

Languages Spoken at Home

A total of 28.5% of the PSA population (age five and older) speak a language other than English at home, including Spanish, Indo-European languages, Asian/Pacific Island and other languages, as shown in Exhibit 6. A total of 71.5% of PSA households speak only English at home. When compared to the other communities in the PSA, the zip codes in the PSA with the highest percentage of the population speaking Spanish at home are Elgin (60120) at 49% and Carpentersville (60110) at 41%. South Elgin (60177) at 4.7% and Elgin 60120 at 4.6% have the highest percentage of the population speaking an Asian or

Pacific Island language at home. The zip codes in the PSA with the highest percentage speaking an Indo-European language at home are Algonquin (60102) at 8.0% and Lake in the Hills (60156) at 6.2%. (Healthy Communities Institute, Claritas, 2016.)

Exhibit 6: Sherman Hospital Primary Service Area Population Age 5+ by Language Spoken at Home 2016



Source: Healthy Communities Institute, Claritas, 2016.

Economics

Income and Poverty Level

The Sherman Hospital PSA has an overall median household income of \$79,805. However, the median household income in the PSA varies by race and ethnicity as shown in Exhibit 7. Native Hawaiian/Pacific Island, African American and American Indian/Alaskan Native households have a lower median household income than Hispanic, White and Asian households. (Healthy Communities Institute, Claritas, 2016.)

Exhibit 7: Sherman Hospital PSA Median Household Income by Race and Ethnicity 2016

Household Type	Median Household Income
White	\$82,406
African American	\$47,219
American Indian/ Alaskan Native	\$47,449
Asian	\$107,683
Native Hawaiian/ Pacific Islander	\$46,846
Hispanic Ethnicity	\$61,949

Source: Healthy Communities Institute, Claritas, 2016.

In the PSA, 6.20% of families are living below 100% of the Federal Poverty Level (FPL), which is \$24,300 for a family of four. (Healthy Communities Institute, Claritas, 2016.) The rate for the PSA is lower than the Illinois rate of 14% and the Kane County rate of 12%. The PSA rate is also lower than the rate for McHenry County of 7.6%.

Elgin (60120) and Carpentersville are the two communities in the PSA with the highest percentage of families living below 100% of the FPL, at 17% and 16% respectively, as shown in Exhibit 8. (US Census, American Community Survey, 2008-2012).

60120 16.70% Elgin 15.70% Carpentersville 60123 14.60% Elgin 6.60% Dundee 4.40% Lake in the Hills 60124 4.20% Elgin 60102 3.60% Algonquin 60177 3.20% South Elgin 1.50% 9 60136 0.00% Gilberts 4.00% 8.00% 10.00% 0.00% 2.00% 6.00% 12.00% 14.00% 16.00% 18.00%

Exhibit 8: Sherman Hospital PSA Percentage of Families Living Below Poverty by Zip Code 2016

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

Additionally, in the PSA, 1.7% of households are receiving public assistance, including Temporary Assistance to Needy Families (TANF). The PSA public assistance rate is lower than the Illinois rate of 2.5% and the Kane County rate of 1.8%, but higher than the rate for McHenry County of 1.2%. (Healthy Communities Institute, American Community Survey, 2010-2014.)

Insurance Status

Total Insured Adults

In 2015, the percentage of adults with health insurance in Kane County increased to 86.7%, up from 80.1% in 2011, as illustrated in Exhibit 9. The rate for McHenry County was 86.8% in 2011, and increased to 92.5% in 2015, as shown in Exhibit 10. Both rates are still below the Healthy People 2020 national health target of 100% of people with health insurance. (Healthy Communities Institute, American Community Survey, 2016.)

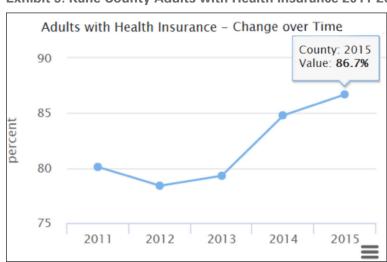
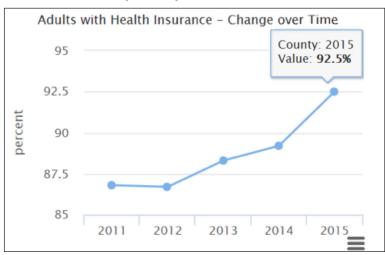


Exhibit 9: Kane County Adults with Health Insurance 2011-2015

Source: Healthy Communities Institute, American Community Survey, 2016.

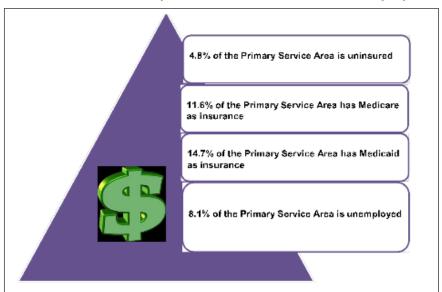
Exhibit 10: McHenry County Adults with Health Insurance 2011-2015



Source: Healthy Communities Institute, American Community Survey, 2016.

Exhibit 11 provides an overview of the key insurance and economic status indicators for the hospital's PSA.

Exhibit 11: Sherman Hospital PSA Health Insurance and Employment Status 2016



Source: Truven Health, 2016.

Medicare

Twelve percent of the PSA population are Medicare recipients. (Truven Insurance Coverage Estimates, 2016.) In the PSA, 4.9% of residents age 65 and older are living below 100% of the FPL. In Kane County, the rate is 5.6% and the rate for McHenry County is 4.7%. All three rates are lower than the Illinois rate of 8.6% and US rate of 9.4%. (Healthy Communities Institute, American Community Survey, 2010-2014.)

Medicaid

On July 22, 2013, the Illinois Governor signed Medicaid expansion into law, making low-income adults eligible for Medicaid in Illinois. In Illinois from state fiscal year (FY) 2014 to state FY2016, an additional 50,805 Kane County adults and 20,914 McHenry County adults enrolled in Medicaid, who were previously not eligible. (Illinois Healthcare and Family Services, 2016.) There are an estimated 43,381 Medicaid enrollees in the PSA; fifteen percent of the PSA population has Medicaid insurance. (Truven Health, 2016.) Exhibit 12 shows that the PSA communities with the highest Medicaid enrollment are Elgin (60123) with 31% and Carpentersville with 29%. (Truven Insurance Coverage Estimates, 2016.)

60123 30.6% Elgin 60110 Carpentersville 60152 Kane County 60177 South Elgin 60118 Dundee 60120 Elgin 60140 McHenry County 60124 Elgin 10.3% 60102 Algonquin 10.0% 42 Huntley 601 ß Lake in the Hills 601 8 Gilberts 4.0% 60

Exhibit 12: Sherman Hospital PSA, Kane County and McHenry County Percent of Medicaid Enrollees by Zip Code 2016

Source: Truven Insurance Estimates, 2016.

0.0%

5.0%

10.0%

Uninsured

As of 2016, 3.7% of the Kane County population is uninsured and 3.1% of the McHenry County population is uninsured. In the PSA, 4.8% of the population is uninsured. The community in the PSA with the highest percentage of uninsured residents is Elgin–both zip code 60120 (4.5%) and 60123 (4.5%). (Truven Insurance Coverage Estimates, 2016.)

20.0%

25.0%

30.0%

35.0%

15.0%

Employment

Employment by Occupation

In Kane County 58.6% of the employed civilian population, age 16 and older, occupy white collar positions, 23.9% have blue collar jobs and 17.0% work in a service or farm-related occupation. In McHenry County 63.2% occupy white collar positions, 20.6% have blue collar jobs and 14.8% are in service or farm occupations. In the PSA, the same occupation split holds true – 61.5% are white collar workers, 22.3% are in blue collar jobs and 15.5% work in service or farm jobs. (Healthy Communities Institute, Claritas, 2016).

Unemployment

The 2016 percentage of the population (age 16 and older) that is unemployed in Kane County is 8.4% and the rate for McHenry County is 8.9%, both lower than the 9.8% rate for Illinois. The percentage of the population that is unemployed in the PSA is 8.1%. The communities in the PSA with the highest percentage of residents who are unemployed are Carpentersville at 10.8% and Elgin (60123) at 10.6%. (Truven Insurance Coverage Estimates, 2016.)

Education

Graduating high school is important for an individual's social and economic advancement. In the PSA, 12.4% of the population, age 25 or older, has less than a high school diploma. (Healthy Communities Institute, Claritas, 2016.) The PSA rate is the same as the Illinois rate of 12.4%, higher than the McHenry County rate (11.7%), but lower than the rate for Kane County (17%). (US Census, American Community Survey, 2008-2012.)

The communities in the PSA with the highest percentage of population without a high school degree are Carpentersville at 27%, Elgin (60120) at 26% and Elgin (60123) at 22%. (US Census, American Community Survey, 2008-2012.) Six percent of PSA residents have less than a ninth grade education. In contrast, 21% of the PSA population has a bachelor's degree, which is slightly higher than the Illinois rate at 20%. The communities in the Sherman Hospital PSA with the highest percentages of adults with a bachelor's degree are Elgin (60124) at 28%, Algonquin at 27% and Lake in the Hills at 25%. (Healthy Communities Institute, Claritas, 2016.)

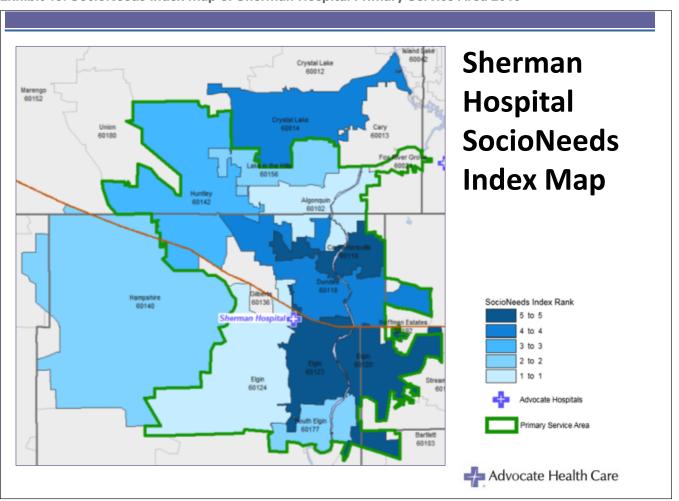
Social Determinants of Health: Socioneeds Index

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 communities in the PSA with the SocioNeeds Index ranking of 5 are Carpentersville (60110), Elgin (60120) and Elgin (60123). Dundee (60118) has a SocioNeeds Index ranking of 4. See the map in Exhibit 13. (Healthy Communities Institute, Claritas, 2016.)

Exhibit 13: SocioNeeds Index Map of Sherman Hospital Primary Service Area 2016



Source: Healthy Communities Institute, Claritas, 2016.

Key Findings: Sociodemographic

- The median age of the Sherman Hospital PSA is 37.49 with 27% of the population age 17 and younger. Eight percent of the PSA population are age 70 and older.
- Carpentersville and Gilberts are the two communities in the PSA with the largest percentage of youth age 17 and younger.
- The Sherman Hospital PSA is 77% White, 4% African American, 6% Asian and 3% two or more races, less than 1% American Indian or Alaskan Native, and 9% some other race.
- The PSA population is 29% Hispanic ethnicity. The largest Hispanic ethnicity population communities in the PSA are Elgin (zip code 60120) at 54%, Carpentersville at 50% and zip code 60123 in Elgin at 41%.
- Twenty-nine percent of the PSA population speaks a language other than English at home.
- The median household income for the PSA is \$79,805. However, the median household income for African American, Native Hawaiian/Pacific Islander, American Indian/Alaskan Native households, and households of Hispanic ethnicity are all lower.
- The highest poverty PSA communities are Elgin (60120) and Carpentersville.
- The communities in the PSA with the highest percentage of the population who is unemployed are Carpentersville at 10.8% and Elgin (60123) at 10.6%.
- Elgin (60123) and Carpentersville have the highest percentage of Medicaid enrollees in the PSA.
- The communities in the PSA with the highest percentage of uninsured residents are Elgin zip codes 60120 and 60123.
- The zip codes in the PSA with the highest socioeconomic need are Carpentersville and Elgin (60120 and 60123).

Key Roles in the 2014-2016 Community Health Needs 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 Advocate 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. Sherman Hospital brought a long history of support for community health; key staff now include a Regional Director for Community Health (Good Shepherd Hospital, Sherman Hospital and Condell Medical Center) and a full-time Manager of Community Outreach for Advocate Sherman Hospital.

Community Health Council

In alignment with Advocate Health Care's standardized approach, Sherman Hospital convened its first 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 Board member of the hospital. The Council is comprised of nine community members, representing 65% of the total membership. Non-Advocate-affiliated members represent the McHenry County and Kane County Health Departments, federally qualified health centers, faith-based organizations, United Way of Elgin, Mayor of Elgin, the American Cancer Society and social service agencies. Sherman Hospital representatives include executive team members, a physician champion, and a business development leader.

2016 Advocate Sherman Hospital Community Health Council Members

- · American Cancer Society, Hospital Systems Manager
- · City of Elgin, Mayor
- Elgin Community Member; Advocate Sherman Hospital Board member
- · Greater Elgin Family Care Center, Chief Operating Officer
- Kane County Health Department, Executive Director
- · McHenry County Health Department, Administrative Manager
- Second Baptist Church of Elgin, Pastor; Advocate Sherman Hospital Board Chair and Community Health Council Chair
- United Way, President/CEO
- · Advocate Health Care, Community Health Director, North Region
- Advocate Sherman Hospital, Administrative Director, Population Health and Service Excellence
- · Advocate Sherman Hospital, Manager, Community Outreach
- · Advocate Sherman Hospital, Manager, Strategic Planning
- · Advocate Sherman Hospital, Physician, Family Practice
- Advocate Sherman Hospital, Vice President of Operations

During 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 CHC during 2016. The CHC voted to ratify a formal charter, outlining the council's authority, purpose, responsibility, scope of activities and annual goals.

Community Health Department staff presented data in a series of four meetings over a nine-month period. In a fifth meeting, Council members voted to select two health priorities to focus on during the 2017-2019 time period.

Hospital Board of Directors

The Sherman Hospital Board of Directors is comprised of 19 community members, representing 83% of the board's total membership. Non-Advocate-affiliated members represent the following: specialty care medical practices, financial sector, auction service, law practices, faith community, manufacturing sector, television media, private philanthropic foundation, the McHenry County Board, and educational institutions. Two members of the hospital's Board also sit on the Community Health Council to ensure coordination of information. The Sherman Hospital Board reviewed and approved the recommended health need priorities from the Community Health Council as well as the 2016 CHNA Report on November 28, 2016.

Collaboration with Health Departments

Since the PSA for Sherman Hospital includes both McHenry County and Kane County, the hospital collaborated with both county health departments to conduct a comprehensive CHNA.

McHenry County Health Department

The McHenry County Health Department conducted its most recent assessment in 2013-2014, the McHenry County Healthy Community Study. 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 assessment, 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 assessment also strives 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. Finally, a broad data review of McHenry County using secondary sources was conducted which included demographics, housing, income and poverty, education and employment, crime and safety, birth and death rates, health status, and behaviors and health utilization.

Sherman 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, Sherman Hospital reviewed the assessment results with other members and helped to select priorities and develop strategies to address the identified needs in McHenry County.

Kane County Health Department

The Kane County Health Department conducted its most recent community health needs assessment in 2014, titled, *Executive Report 2014 Community Health Needs Assessment*, Kane County, Illinois. Additionally, in 2014, Advocate Sherman Hospital and a consortium of community partners, commissioned a special community health needs assessment report for the Sherman Hospital Service Area and Kane County. This report was titled, *Executive Report, Community Health Status Data, Advocate Sherman Hospital Primary Service Area and Kane County*. This consortium included the Mental Health 708 INC Board, Advocate Sherman Hospital, Delnor Hospital, the Kane County Health Department, Presence Mercy Medical Center, Presence Saint Joseph Hospital and Rush-Copley Medical Center. This assessment was conducted by Professional Research consultants, Inc. (PRC), a custom market research firm that also conducts community health needs assessments in accordance with IRS guidelines.

The Community Health Status Data report included three components – a community survey, key informant focus groups, and secondary data analysis consisting of public health, vital statistics and other data. The goal of the Community Health Status Data report was to determine the health status, behaviors and needs of residents in Kane County, Illinois and the Sherman Hospital PSA. This report is posted on the Advocate website adjacent to the Sherman Community Health Needs Assessment report.

Questions in the community survey covered topics such as:

- General Health Status perceptions of health and prevalence of diseases and conditions (including physical health, mental health and modifiable health risks);
- · Access to Health Services;
- · Local Resources:
- Other Issues (including child care and collaborations).

Focus groups included a total of 26 key informants, including physicians, other health professionals, social service providers, and other business and community leaders. Interview questions focused on a variety of health topics and were rated as either a "major problem," "moderate problem," "minor problem," or "not a problem at all." Interviews also focused on identifying existing programs, resources and facilities available to address the needs or issues rated as a "major problem." A variety of secondary data sources were consulted for county-level data in the areas of demographics, public health, mental health, substance abuse, education, disease incidence and prevalence, economics and public safety.

Sherman Hospital community health staff also served on the executive committee for the Community Health Status Data Assessment of Advocate Sherman Hospital PSA and Kane County. As an active member of the executive committee, Sherman Hospital staff reviewed the assessment results with other community members and helped to select priorities and develop strategies to address the identified needs in Kane County.

Collaboration with Other Partners

Advocate Sherman Hospital also consulted with a number of additional partner organizations on the hospital CHNA. These include Greater Elgin Family Care Center, Visiting Nurses Association, Aunt Martha's, Kane County Substance Abuse Coalition, McHenry County Substance Abuse Coalition and the Mental Health 708 INC Board. Each of the organizations have a focus on medically underserved, low-income, and minority populations.

Methodology

Timeline

For the CHNA process, Sherman Hospital gathered a variety of primary and secondary data from 2014 through 2016. This data was presented to the hospital's 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 were included when available, and a detailed table comparing the incidence and mortality rates for McHenry and Kane County was presented to the Community Health Council on September 16, 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 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 (ED) 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 ED data for five time periods from 2009-2015. The HCI contract also provided a wealth of county and zip code data comparisons, a SocioNeeds Index visualizing vulnerable populations within service areas and counties, a Healthy People 2020 tracker and a database of promising practices and evidence-based interventions.

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 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 the resource listing in Appendix 2.

Primary Data

In order to garner community viewpoints and opinions on specific health issues, two sources of primary data were included in the CHNA. These were:

- Surveys conducted as part of the 2014 McHenry County Healthy Community Study
- Surveys conducted as part of the 2014 Executive Report Community Health Status Data, Advocate Sherman Hospital PSA and Kane County

McHenry County Healthy Community Survey

The purpose of the 2014 McHenry County Healthy Community Survey was to learn the views of the residents themselves. 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.

Kane County Community Health Survey

The Kane County community health survey was conducted via telephone interview (both landline and cell phone). The sample design used for this effort consisted of a random sample of individuals age 18 and older yielding 1,084 respondents in Kane County. Questions in the telephone survey covered:

- Social Determinants
- · Overall Health
- · Access to Health Services
- Cancer
- · Child Care
- · Chronic Kidney Disease
- Diabetes
- · Dementia, including Alzheimer's Disease
- Emergency Preparedness
- Family Planning
- · Heart Disease and Stroke
- HIV
- Immunizations and Infectious Diseases
- Injury and Violence Prevention
- · Maternal, Infant and Child Health

- · Mental Health and Mental Disorders
- · Nutrition and Weight Status
- · Oral Health
- · Physical Activity
- · Potentially Disabling Conditions
- · Respiratory Diseases
- Sexually Transmitted Diseases
- Substance Abuse
- Tobacco Use
- Vision

A series of three key informant focus groups was conducted in November 2014. A total of 26 key informants were interviewed including physicians, health professionals, social service agencies, and other business and community leaders. These participants represented those who work with low-income, minority, or other medically underserved populations.

Input from the Community and Vulnerable Populations

For the Kane County community focus groups, a list of recommended participants were provided by the study sponsors. Potential participants were chosen because of their ability to identify primary concerns of the populations with whom they work, including low-income and minority groups, as well as the community overall. In the McHenry County study, interview participants included several individuals who work with low-income, minority, or other medically underserved populations. The participants were selected with careful consideration to ensure that diverse perspectives of vulnerable populations. For both studies, surveys were conducted in English and Spanish to ensure that language was not a barrier to providing input on key community and health issues.

Summary of Results by County

Upon thorough review of the primary and secondary data, Sherman Hospital community health staff presented to the Community Health Council a comprehensive demographic profile of the Sherman Hospital Service Area, as well as detailed health profiles of the top identified needs through two assessments:

- McHenry County Healthy Community Study
- Executive Report, Community Health Status Data, Advocate Sherman Hospital PSA and Kane County

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 were:

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

Executive Report, Community Health Status Data, Advocate Sherman Hospital PSA and Kane County The priorities selected in this assessment were:

- · Chronic Disease (Obesity, Diabetes and Heart Disease);
- · Behavioral Health; and
- · Income, Education and Employment.

Summary of Sherman Hospital Primary Service Area Health Needs

Key criteria for selection of the specific health issues were the incidence, prevalence and mortality rates within Kane and McHenry Counties and the PSA, coupled with community opinion and perspective from various surveys. Sherman Hospital community health staff analyzed the results from the two 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 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:

- · Heart Disease and Stroke;
- · Diabetes and Kidney Disease;
- · Obesity;
- · Mental Health;
- · Substance Abuse.

Heart Disease and Stroke

Heart 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. (Live Well Lake County Community Health Improvement Plan, 2016-2021.)

Heart Disease is the second leading cause of death in Kane County (CDC, Division of Public Health Surveillance and Informatics, 2014). Heart disease is also the second leading cause of death in McHenry County. (McHenry County Healthy Community Study, Health Systems Research, 2014.)

In Kane County, the 2010-2014 age-adjusted heart disease death rate is 128.8/100,000. In comparison, the McHenry County heart disease death rate is higher, at 155.9/100,000. Both county death rates for heart disease are lower than the Illinois and US rates, as shown in Exhibit 14. (Community Commons, CDC National Vital Statistics System, 2016.) As of 2013, the prevalence of heart disease in Kane County at 2% is lower than the rate in McHenry County at 2.9%, Illinois at 3.8% and the US at 4.4%. (CDC, National Center for Chronic Disease Prevention and Health Promotion, 2016.)

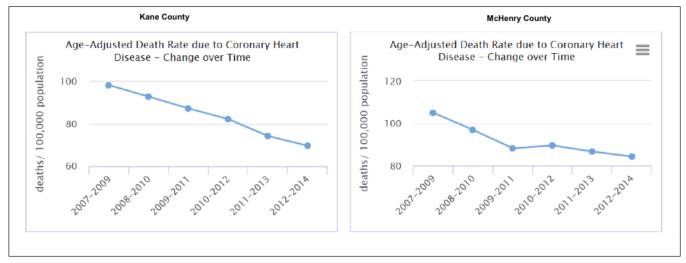
Exhibit 14: Kane County and McHenry County, Illinois and US Comparison Heart Disease Prevalence 2013 and Heart Disease Mortality per 100,000 Population 2010-2014

Heart Disease (Adult)		Mortality –	Mortality – Heart Disease		
County	Rate	County	Rate		
Kane County	2.0%	Kane County	128.8		
McHenry County	2.9%	McHenry County	155.9		
Illinois	3.8%	Illinois	174.5		
United States	4.4%	United States	171.8		
Percent Adults with Heart Disease		Age-Adjusted Dear	Age-Adjusted Death Rate (Per 100,000 Pop.)		

Source: CDC, National Center for Chronic Disease Prevention and Health Promotion, 2013; Community Commons, CDC National Vital Statistics System, 2016.

The 2012-2014 age-adjusted death rate due to coronary artery disease for Kane County (69.7/100,000) has shown a decline since 2007-2009 (98.3/100,000). The same downward trend is occurring with the death rate for coronary artery disease for McHenry County, dropping from 105/100,000 in 2007-2009 to 84.3/100,000 in 2012-2014. (Healthy Communities Institute, Centers for Disease Control and Prevention, 2016.) Both county death rates for coronary artery disease are in the HCl green zone, when compared to other counties in Illinois and the US. Additionally, both county death rates are well below the Healthy People 2020 target of 103.4/100,000. The change in rates over time for each county is shown in Exhibit 15.

Exhibit 15: Kane County and McHenry County Age-Adjusted Death Rate due to Coronary Artery Disease per 100,000 population 2012-2014



Source: Healthy Communities Institute, Centers for Disease Control and Prevention, 2016.

The 2012-2014 Sherman Hospital PSA age-adjusted emergency room (ER) rate for adults due to hypertension has shown an increase over time from 2009-2011 (14 visits per 10,000 population) to 19.6/10,000 for 2012-2014. The ER rates due to hypertension increase as age increases. The PSA rate is in the HCI green zone, when compared to other Illinois counties. The communities in the PSA with the highest ER rates due to hypertension are:

Elgin (60123)	27.5/10,000	HCI Yellow Zone
Carpentersville	26.1/10,000;	HCI Yellow Zone
Elgin (60120)	23.2/10,000;	HCI Green Zone
Gilberts	19.8/10,000;	HCI Green Zone
South Elgin	19.1/10,000;	HCI Green Zone

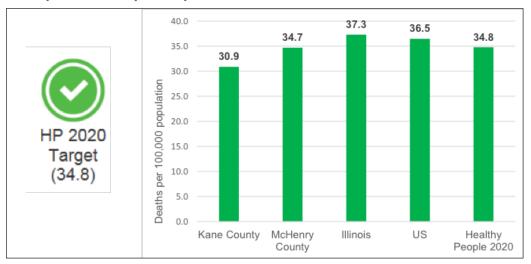
Source: Healthy Communities Institute, Illinois Hospital Association, COMPdata, 2015.

In 2014, 55.9% of Medicare beneficiaries were treated for hypertension in Kane County. This is in the HCl green zone, when compared to other Illinois counties, but in the HCl yellow zone when compared to other counties in the US. In McHenry County, 54.3% of Medicare beneficiaries were treated for hypertension in 2014. This rate is in the HCl green zone when compared to other Illinois counties and counties in the US. In both counties, the rates have shown a downward trend since 2013. (Healthy Communities Institute, Centers for Medicare and Medicaid Services, 2016.)

Stroke

The Centers for Disease Control and Prevention (CDC) states that stroke is the fourth leading cause of death in the United States, is a leading cause of long-term disability, and is the cause of almost 133,000 deaths annually. (Healthy Communities Institute, 2016.) The Kane County 2012-2014 age-adjusted death rate from stroke is 30.9 deaths per 100,000 population. The McHenry County death rate from stroke is 34.7/100,000. Both county rates are in the HCl green zone, when compared to other Illinois counties and other counties in the US. The Illinois rate is 37.3/100,000 and the US rate is 36.5/100,000. Finally, both rates are lower than the Healthy People 2020 target of 34.8 deaths per 100,000. (Healthy Communities Institute, 2016.) See Exhibit 16.

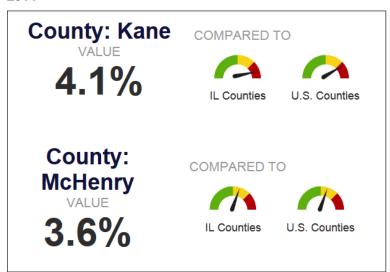
Exhibit 16: Comparison of Age-Adjusted Death Rate due to Stroke per 100,000 population for Kane County and McHenry County 2012-2014



Source: Healthy Communities Institute, Centers for Disease Control and Prevention, 2012-2014.

Nearly three-quarters of all strokes occur in people over the age of 65. (Healthy Communities Institute, 2016.) In 2014 in Kane County, 4.1% of Medicare beneficiaries were treated for stroke. This is in the HCl red zone, when compared to other Illinois counties (3.8%) and other counties in the US (3.7%). In McHenry County, 3.6% of Medicare beneficiaries were treated for stroke. This rate is in the HCl yellow zone, when compared other Illinois counties and other counties in the US. Both county rates have been on a downward trend since 2010. (Healthy Communities Institute, Centers for Medicare and Medicaid Services, 2016.)

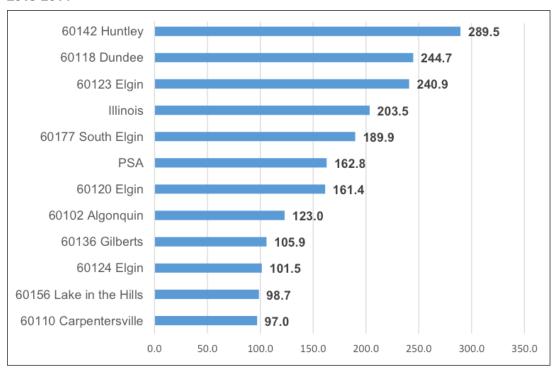
Exhibit 17: Percentage of Medicare Beneficiaries Treated for Stroke in Kane County and McHenry County 2014



Source: Healthy Communities Institute, Centers for Medicare and Medicaid Services, 2016.

The 2013-2014 Sherman Hospital PSA inpatient discharge and observation rate for stroke is 162.8 per 10,000 cases. The highest rates are for Huntley (289.5/10,000), Dundee (244.7/10,000) and Elgin (60123) at 240.9/10,000. These rates are higher than the Illinois rate of 203.5/10, 000, but the overall PSA rate is lower than the Illinois rate, as shown in Exhibit 18. (Illinois Hospital Association, COMPdata, 2013-2014.)

Exhibit 18: Sherman Hospital PSA Inpatient Discharge and Observation Rate for Stroke per 10,000 Cases 2013-2014



Source: Illinois Hospital Association, COMPdata, 2015.

Key Findings: Heart Disease and Stroke

- · Heart disease is the second leading cause of death in both Kane County and McHenry County.
- The prevalence of heart disease and the 2010-2014 age-adjusted death rate for heart disease is higher in McHenry County than Kane County.
- The 2012-2014 age-adjusted death rates due to coronary artery disease for both Kane and McHenry County have shown declines from 2007-2009 to 2012-2014.
- The 2012-2014 age-adjusted death rate due to coronary artery disease for both counties is below the Healthy People 2020 target.
- The 2012-2014 age-adjusted ER rate for adults due to hypertension for the Sherman Hospital PSA has shown an increase from 2009-2011 to 2012-2014. The communities with the highest ER rates due to hypertension are Elgin (60123) and Carpentersville.
- The 2012-2014 age-adjusted death rate from stroke in Kane County and McHenry County are both in the HCl green zone and below the Healthy People 2020 target.
- In 2014, a larger percentage of Medicare beneficiaries in Kane County were treated for stroke than in McHenry County.
- The ER rates due to hypertension increase as age increases.
- The PSA communities with the highest ER rates due to hypertension are Elgin (60120) and Carpentersville.
- The 2013-2014 inpatient discharge and observation case rate for stroke was highest for the PSA communities of Huntley, Dundee and Elgin (60123).
- In 2014, 56% of Medicare beneficiaries were treated for hypertension in Kane County; 54% of Medicare beneficiaries were treated for hypertension in McHenry County.
- The 2012-2014 age-adjusted death rate for stroke is higher in McHenry County than in Kane County. However, both rates are lower than the Healthy People 2020 target.
- In Kane County, 4.1% of Medicare beneficiaries were treated for stroke in 2014. This is in the HCl red zone when compared to other counties in Illinois and the US.
- In McHenry County, 3.6% of Medicare beneficiaries were treated for stroke in 2014.

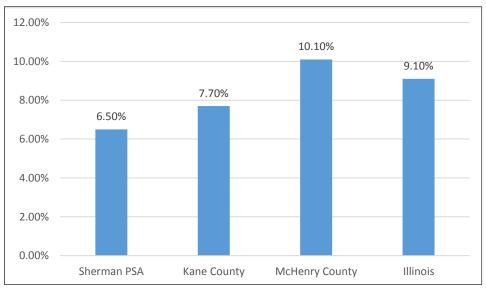
Diabetes and Kidney Disease

Diabetes

In the United States, nearly 30 million people have diabetes and 86 million are estimated to have pre-diabetes. (American Diabetes Association, 2013.) In the key informant interviews conducted as a part of the 2014 Community Health Status Data, Advocate Sherman Hospital PSA and Kane County assessment, 57.7% of participants characterized diabetes as a "major problem" in the community. Focus group conversations were focused on the issues of knowledge of available services and partnerships and funding. Diabetes was identified as a significant health need in the assessment. (Executive Report, Community Health Status Data, Advocate Sherman Hospital PSA and Kane County), Professional Research Consultants, 2014). In the 2014 McHenry County Health Department study, among survey respondents and their household members, 13.7% reported being diagnosed with diabetes, and diabetes was selected as a health priority by the McHenry County Healthy Communities partner organizations. (McHenry County Healthy Community Study, Health Systems Research, 2014.)

In Kane County, as of 2013, 7.7% of adults over the age of 20, have been diagnosed with diabetes, a slight decrease from the 2012 rate of 7.8%. McHenry County has a higher rate of 10.1% of adults diagnosed with diabetes, an increase from the 2012 rate of 9.5%. (Healthy Communities Institute, Centers for Disease Control and Prevention, 2013.) An estimated 6.5% of Sherman Hospital PSA residents have diabetes. (Community Health Status Data, Advocate Sherman Hospital Primary Service Area and Kane County, Professional Research Consultants, 2014.) The Illinois rate of 9.1% is higher than the rate for Kane County and the hospital PSA, but lower than the McHenry County rate (10.10%) as shown in Exhibit 19. (Healthy Communities Institute, Centers for Disease Control and Prevention, 2013.)

Exhibit 19: Percent of Adults over Age 20 with Diabetes – Sherman Hospital PSA, Kane County, McHenry County and Illinois 2013-2014



Source: Community Health Status Data, Professional Research Consultants, 2014; Healthy Communities Institute, Centers for Disease Control and Prevention, 2015.

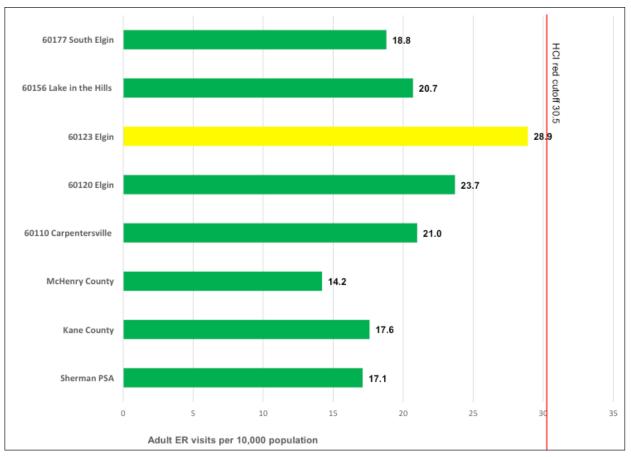
A total 26.5% of Kane County Medicare beneficiaries and 23.7% of McHenry County beneficiaries have been treated for diabetes. Both county Medicare rates for diabetes are lower than Illinois at 26.6% and the US at 26.7%. (Healthy Communities Institute, Centers for Medicaid and Medicare Service, 2014.)

The 2014 age-adjusted death rate for diabetes for the Sherman Hospital PSA is 15.9 per 100,000 population. This is lower than the Illinois rate (18.5/100,000) and US rate (20.8/100,000). The rate for the Sherman Hospital PSA is also lower than the Healthy People 2020 target of 20.5 per 100,000 population. (Community Health Status Data, Advocate Sherman Hospital and Primary Service Area and Kane County, Professional Research Consultants, 2014.)

The 2012-2014 age-adjusted ER rate due to diabetes for Sherman Hospital's PSA is 17.1 per 10,000 population. Although in the HCl green zone, the rate has been climbing steadily since the 2009-2011 period (from 11.9/10,000). The ER rates for diabetes are highest for Elgin (60123) at 28.9/10,000 population; Elgin

(60120) at 23.7/10,000; and Carpentersville at 21.0/10,000, as shown in Exhibit 20. Although higher than the PSA rate, the rates for these communities are all below the zip code cutoff for the HCl red zone of 30.5/10,000 population. (Healthy Communities Institute, Illinois Hospital Association COMPdata, 2015.)

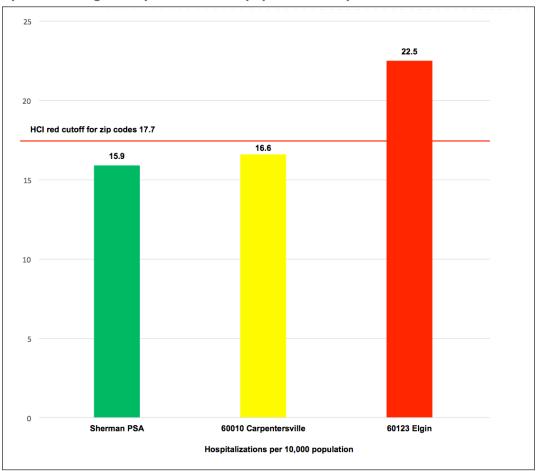
Exhibit 20: PSA Highest Age-Adjusted Emergency Room Visit Rates Due to Diabetes by Zip Code per 10,000 population 18+ years 2012-2014



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

The 2012-2014 age-adjusted hospitalization rates due to diabetes in the Sherman Hospital PSA have declined over time from 18.4/10,000 population to 15.9/10,000 from 2009 to 2014. The zip codes in the PSA with the highest hospitalization rates are Elgin (60123) (22.5/10,000) and Carpentersville (16.6/10,000) as shown in Exhibit 21. (Healthy Communities Institute, Illinois Hospital Association, COMPdata, 2015.)

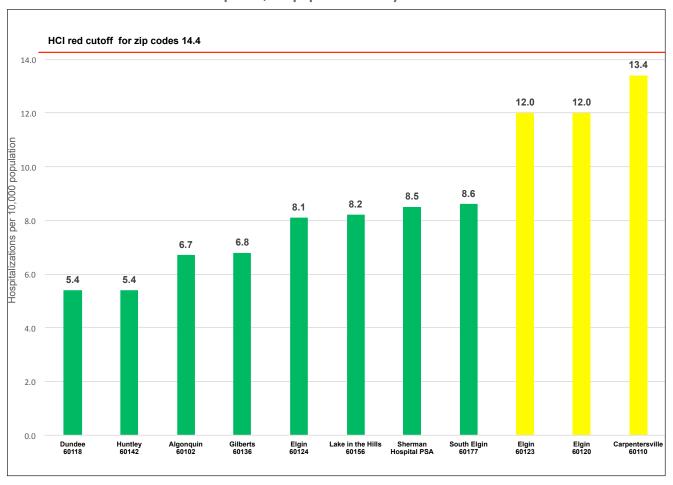
Exhibit 21: Sherman Hospital PSA Age-Adjusted Hospitalization Rate Due to Diabetes by Selected Highest Zip Codes/10,000 population 18+ years 2012-2014



Source: Healthy Communities Institute, Illinois Hospital Association COMPdata, 2012-2014.

Finally, as shown in Exhibit 22, the Sherman Hospital PSA 2012-2014 age-adjusted hospitalization rate due to long-term complications of diabetes is in the HCl green zone at 8.5/10,000 population, when compared to other counties in Illinois. The rate has declined from 2009-2011, when it was 11.2/10,000. When compared to other zip codes in Illinois, Carpentersville (13.4/10,000) and Elgin (60120 and 60123) both at 12.0/10,000, have the highest rates, and are in the HCl yellow zone. (Healthy Communities Institute, Illinois Hospital Association COMPdata, 2015.)

Exhibit 22: Sherman Hospital PSA Age-Adjusted Hospitalization Rate due to Long-term Complications of Diabetes – Selected Communities per 10,000 population 18+ years 2012-2014



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

Kidney Disease

Diabetes can have a harmful effect on most organ systems in the human body and is a frequent cause of renal disease in adults. (Healthy Communities Institute, 2016). The 2012-2014 Kane County age-adjusted death rate for kidney disease is 18.9 deaths per 100,000 population and is in the HCl yellow zone, compared to other Illinois counties, and compared to all counties in the US. The 2012-2014 age-adjusted death rate for kidney disease for McHenry County is 16.5/100,000 and is in the HCl green zone when compared to other Illinois counties, but is in the HCl yellow zone when compared to all counties in the US. (Healthy Communities Institute, CDC, 2015.) In both counties, the kidney disease death rate is higher for men than for women, as shown in Exhibit 23. (Healthy Communities Institute, CDC, 2016.)

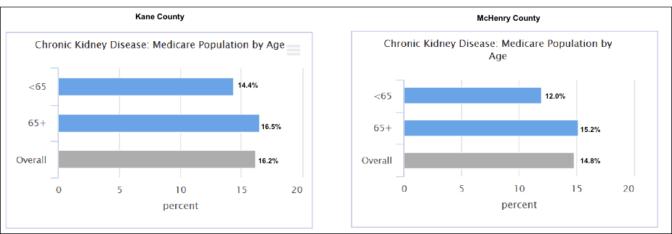
Exhibit 23: Age-Adjusted Death Rate due to Kidney Disease for Kane County and McHenry County per 100,000 population 2012-2014

	Age-Adjusted Death Rate per 100,000 population	Age-Adjusted Death Rate for Men per 100,000 population	Age-Adjusted Death Rate for Women per 100,000 population
Kane County	18.9	23	16.2
McHenry County	16.5	24.4	11.6

Source: Healthy Communities Institute, Centers for Disease Control and Prevention, 2016.

In Kane County in 2014, 16.2% of Medicare beneficiaries were treated for chronic kidney disease; the rate has been on an upward trend since 2010, when it was 14.8%. In 2014 in McHenry County, 14.8% of Medicare beneficiaries were treated for chronic kidney disease, also on an upward trend since 2010 (12.9%). For both counties, the rate is higher for those age 65 and older. (Healthy Communities Institute, Centers for Medicare and Medicaid Services, 2016.) See Exhibit 24.

Exhibit 24: Kane County and McHenry County Percent of Medicare Beneficiaries Treated for Chronic Kidney Disease by Age 2014



Source: Healthy Communities Institute, Centers for Medicare and Medicaid Services, 2016.

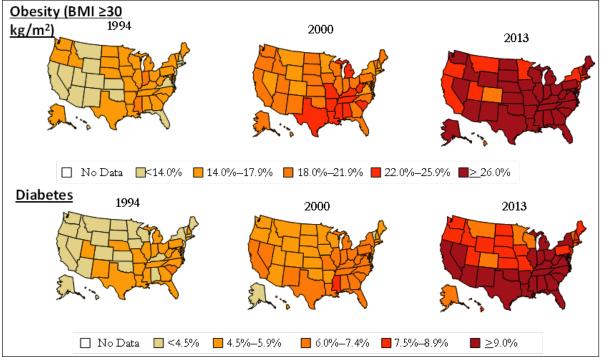
Key Findings: Diabetes and Kidney Disease

- Diabetes was characterized as a "major problem" by 58% of participants in the Kane County Health Department key informant interviews.
- Fourteen percent of survey respondents to the McHenry County Health Department survey reported being diagnosed with diabetes.
- Diabetes was identified as a health priority in the McHenry County Healthy Community Study and as a significant health need in the Kane County CHNA.
- As of 2013, 8% of adults over the age of 20 in Kane County have been diagnosed with diabetes. This rate has decreased slightly from 2012.
- As of 2013, 10% of adults over the age of 20 in McHenry County have been diagnosed with diabetes.
- An estimated 6.5% of Sherman Hospital PSA residents have diabetes.
- Twenty-seven percent of Kane County Medicare beneficiaries, and 24% of McHenry County beneficiaries are diagnosed with diabetes.
- The 2014 Sherman Hospital PSA age-adjusted death rate for diabetes is lower than the Illinois and US rates. The PSA rate is lower than the Healthy People 2020 target.
- The highest 2012-2014 age-adjusted ER rates due to diabetes are for the PSA communities of Elgin (60123 and 60120) and Carpentersville.
- The 2012-2014 age-adjusted hospitalization rates due to diabetes in the Sherman Hospital PSA have declined over time.
- The zip codes in the PSA with the highest hospitalization rates due to diabetes are Elgin (60123) and Carpentersville.
- The 2012-2014 age-adjusted hospitalization rate due to long-term complications of diabetes has declined over time. The zip codes in the PSA with the highest rates are Carpentersville and Elgin (60120 and 60123).
- The 2012-2014 age-adjusted death rate for kidney disease is higher for Kane County than McHenry County. The death rate is also higher for men than for women in both counties.
- Sixteen percent of Medicare beneficiaries were treated for kidney disease in Kane County in 2014; 15% of McHenry County Medicare beneficiaries were treated for kidney disease in 2014. Both rates are on an upward trend since 2010.
- The 2014 percentage of Medicare beneficiaries treated for kidney disease in both counties is higher for those age 65 and older than for those under age 65.

Obesity

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 25 visually portrays the increasing rate of obesity from 1994 to 2013 as well as 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. (Centers for Disease Control and Prevention, Division of Diabetes Translation, National Diabetes Surveillance System, 2016.)

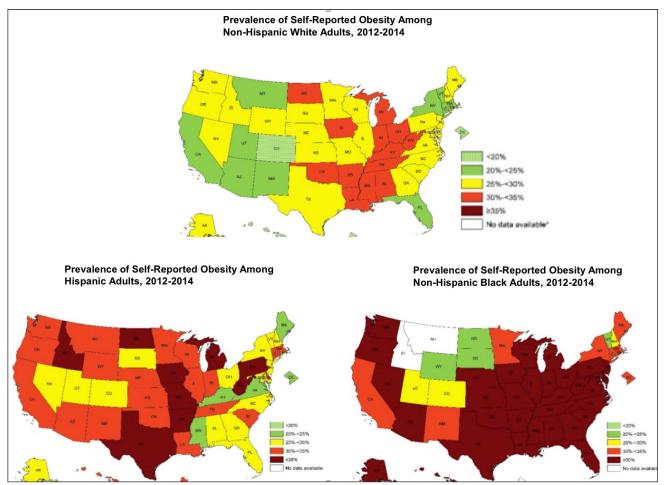
Exhibit 25: Age-Adjusted Prevalence of Obesity and Diagnosed Diabetes among US Adults 1994-2013



Source: Center for Disease Control, Divisions of Diabetes Translation, National Diabetes Surveillance System, 2016.

The 2012-2014 obesity prevalence rates for Illinois Hispanic adults (greater than 30% to less than 35%) and non-Hispanic African American adults (greater than or equal to 35%) are higher than the rate for non-Hispanic White adults (25% to less than 30%), as shown in the maps in Exhibit 26.

Exhibit 26: Prevalence of Self-Reported Obesity by Adults in US – Race and Ethnicity Comparison 2012-2014



Source: CDC, Prevalence Maps, 2014.

The percentage of obese adults in the Sherman Hospital PSA is 23.5%. (Executive Report, Community Health Status Data, Advocate Sherman Hospital Primary Service Area and Kane County, Professional Research Consultants, 2014.) The 2010-2014 percentage of obese adults in Kane County is 29.9%. In Kane County, there is a higher prevalence of obesity for those of Hispanic ethnicity (29.9%) when compared the White population at 26.3%. The percentage of adults who are obese in Kane County has been increasing since 2004-2006, from 19.2% to 29.9% in 2010-2014.

In McHenry County, 26.5% of adults are obese. In McHenry County, there is also a higher prevalence of obesity for those of Hispanic ethnicity, 26.5% as compared to 25.6% for the White population. The McHenry County rate has also been increasing, from 21.4% in 2004-2006, to 26.5% in 2010-2014. Both county obesity prevalence rates are lower than the Healthy People 2020 goal of 30.5%. (Healthy Communities Institute, Behavioral Risk Factor Surveillance System, 2016).

In the Kane County CHNA key informant interviews, 84.6% of participants characterized nutrition, physical activity and weight as a "major problem" in the community. Key related issues mentioned included social norms and healthy living, safety and the built environment, accessibility for persons with disabilities and children and youth. (Kane County CHNA, Professional Research Consultants, 2014.) Key informants in the McHenry County Healthy Community Study mentioned the growing number of children and adolescents who are overweight and its increase in prevalence among the local Hispanic population. (McHenry County Healthy Community Study, Health Systems Research, 2014.)

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) program 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.)

Adolescents Who are Overweight or Obese

WIC 2-4 year olds who are Overweight or Obese

11.50%

15.90%

15.70%

Healthy Weight
Adolescents who are Overweight
Adolescents who are Overweight
Adolescents who are Obese

* Healthy Weight
Obese

* Healthy Weight
Obese

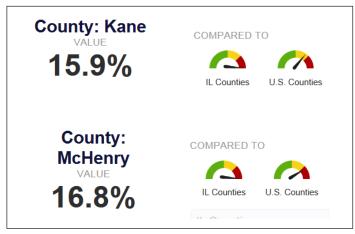
* WIC 2-4 year olds who have an Overweight Classification
Obese

Exhibit 27: Childhood Overweight and Obesity Percentages in Illinois 2012 & 2013

Source: Illinois State Nutrition, Physical Activity and Obesity Profile, 2016; Centers for Disease Control and Prevention, 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 who are obese in both Kane and McHenry counties is in the HCl red zone when compared to other Illinois counties and all counties in the US. Sixteen percent of Kane County low-income pre-school children are classified as obese. The Kane County rate increased slightly from 15.6% in 2008-2010 to 15.9% in 2009-2011. The rate for McHenry County is 16.8%. The McHenry County rate decreased from 17.6% in 2008-2010 to 16.8% in 2009-2011. See Exhibit 28.

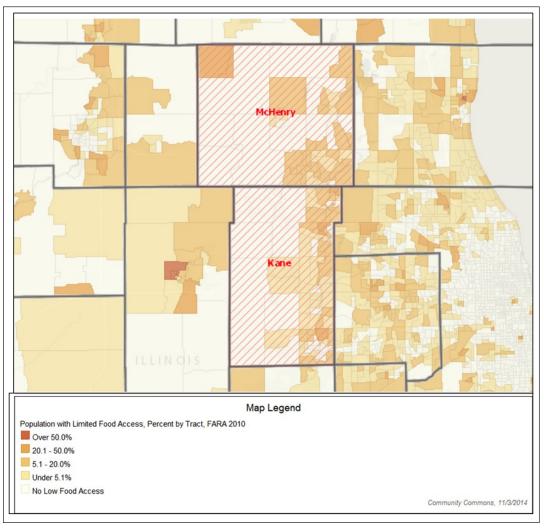
Exhibit 28: Kane and McHenry County Comparison of Low-Income Preschool Obesity 2009-2011



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

Factors such as access to food and physical activity affect obesity rates. In Kane County, 22.3% of the population has low food access, which is the percent of the population living in census tracts designated as food deserts. This is relevant because it highlights populations and geographies facing food insecurity. In McHenry County, 43.2% of the population has low food access. The rate for Illinois is 20.4% and 23.6% for the US. The map in Exhibit 29 provides an illustration of food deserts by census tract in Kane County and McHenry County. A large share of residents in portions of northeastern and southeastern Kane County have limited food access. In McHenry County, areas of food access are located in the far northwest corner, central and eastern half of the county. (Community Commons, US Department of Agriculture, Food Access Research Atlas, 2010.)

Exhibit 29: Percentage of Population with Limited Food Access by Census Tract in Kane County and McHenry County 2010

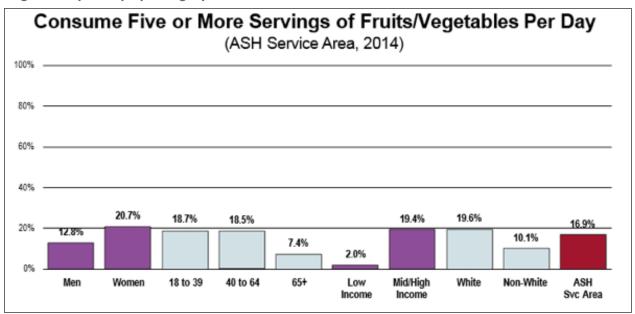


Source: Community Commons, US Department of Agriculture, Food Access Research Atlas, 2010.

In Kane County, for the period 2005-2009, 78.1% of adults over the age of 18 were consuming less than five servings of fruits and vegetables each day. In McHenry County, the rate is 76.4% of adults. The rates for Illinois (76.3%) and the US (75.7%) are lower. (Community Commons, CDC, Behavioral Risk Factor Surveillance System, 2016.)

In the Sherman Hospital PSA, 16.9% of the population is consuming five or more servings of fruits and vegetables per day. Men, individuals age 65 and older, individuals who are low-income and non-White residents all have lower rates of fruit and vegetable consumption, as shown in Exhibit 30. (Executive Report, Community Health Status Data, Advocate Sherman Hospital Primary Service Area and Kane County, Professional Research Consultants, 2014.)

Exhibit 30: Sherman Hospital PSA Percentage of Residents That Consume Five or More Servings of Fruit/ Vegetables per Day by Category 2014



Source: Executive Report, Community Health Status Data, Advocate Sherman Hospital PSA and Kane County.

Data from 2013 indicates that 16.2% of Kane County adults aged 20 and older, and 20.4% of McHenry County adults self-report no time for physical activity in leisure time. This data is based on how adults answered the question, "During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening or walking for exercise?" The Illinois rate is 20.8% and the US rate is 21.8%. (Community Commons, CDC, National Center for Chronic Disease Prevention and Health Promotion, 2016.)

Key Findings: Obesity

- The prevalence of obesity in the United States has steadily increased.
- 2013 data indicates that 36% of adults in Illinois are overweight and 27% are obese.
- The 2012-2014 obesity prevalence rates are even higher for Illinois Hispanic adults and non-Hispanic African American adults.
- Sixteen percent of Illinois WIC preschoolers (age two to four) are overweight and 16% are obese.
- The percentage of obese adults in the Sherman Hospital PSA is 24%.
- In Kane County, 30% of adults are obese. In McHenry County, 27% are obese. Both county obesity prevalence rates are lower than the Healthy People 2020 goal of 30.5%.
- · In both counties, there is a higher prevalence of obesity for those of Hispanic ethnicity.
- In Illinois 14% of adolescents are overweight and 12% are obese.
- Illinois WIC program data indicates that 16% of the recipients, ages two to four, are overweight and 16% are obese.
- Sixteen percent of Kane County low-income pre-school children are classified as obese. The rate for McHenry County is 17%.
- In Kane County, 22.3% of the population has low food access. In McHenry County, 43.2% of the population has low food access. Both rates are higher than the Illinois rate of 20.4%.
- In Kane County, for the period 2005-2009, 78.1% of adults over the age of 18 were consuming less than five servings of fruits and vegetables each day. In McHenry County, the rate is 76.4% of adults. In the Sherman Hospital PSA, 16.9% of the population is consuming five or more servings of fruits and vegetables per day.
- Data from 2013 indicates that 16.2% of Kane County adults aged 20 and older, and 20.4% of McHenry County adults, self-report no time for physical activity in leisure time.

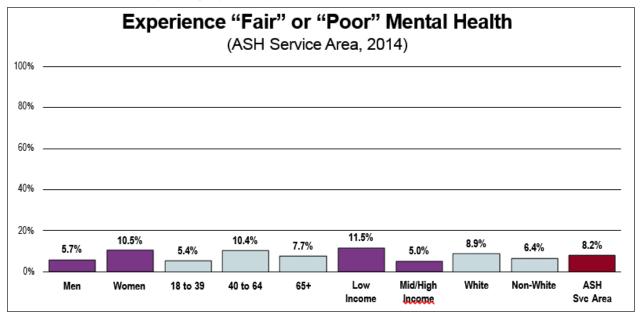
Mental Health

Mental Health in Adults

Mental health plays a major role in a person's ability to maintain good physical health. Mental health can also be a burden on an individual's quality of life. Both the Kane County and McHenry County Health Departments selected mental health or behavioral health as one of their health priorities in their respective community assessments.

In the 2014 Executive Report, Community Health Status Data, Advocate Sherman Hospital PSA and Kane County informant interviews 84.6% of those interviewed perceived mental health as a major problem and 15.4% as a moderate problem. Some of the issues that were discussed at these interviews were state funding cuts, disparate level of access for services, lack of follow-up or long-term care, stigma, denial, co-occurrence with other health issues, no impatient facility for children and youth, and use of jails as an answer to the problem. In the PSA, 8.2% of adults over the age of 18 reported experiencing "fair" or "poor" mental health. Several groups reported higher rates of experiencing fair or poor mental health, including low-income residents (11.5%), women (10.5%) and those ages 40 to 64 (10.4%) (Kane County CHNA, Professional Research Consultants, 2014). These are displayed in Exhibit 31.

Exhibit 31: Percentage of Kane County Key Informant Interview Participants Who Rated Their Mental Health as Fair or Poor by Category of Respondent 2014



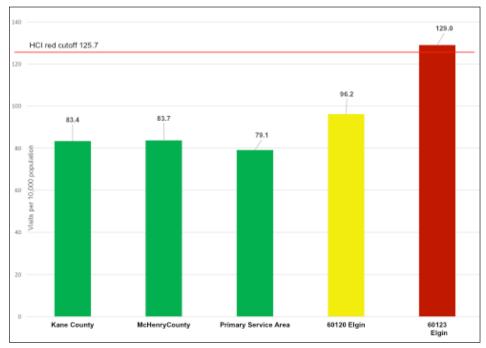
Source: Executive Report, Community Health Status Data, Advocate Sherman Hospital PSA and Kane County, 2014.

In the 2014 McHenry County Healthy Community Study, key informant interviews identified the target population needing attention as mentally ill persons and those with substance abuse issues. Mental health and substance abuse services were identified 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.

Twenty-one percent of the McHenry County Healthy Community survey respondents reported that they have been diagnosed by a health professional as experiencing depression. Among those age 65 and older, 14.4% reported being depressed. (McHenry County Healthy Community Study, Health Systems Research, 2014.) Twenty percent of Sherman Hospital PSA residents who responded to the Kane County survey indicated feeling sad, blue or depressed in the past 30 days. Twelve percent of PSA residents responded in the survey that they had been told by a healthcare provider that they have a depressive disorder. (Executive Report, Community Health Status Data, Advocate Sherman Hospital PSA and Kane County, Professional Research Consultants, 2014).

The 2012-2014 age-adjusted ER rate due to mental health for the PSA is 79.1 per 10,000 ER visits. The rate for Kane County is 83.4/10,000 and the McHenry County rate is 83.7/10,000 ER visits. The PSA, Kane and McHenry County rates are all in the HCl green zone. ER rates in the PSA due to mental health have been increasing over time with the largest number of visits for those ages 18-24 years of age, African American adults, and those living in Elgin zip codes 60120 and 60123. The PSA community with the highest ER rate for mental health is Elgin (zip code 60123) at 129.0/10,000, which is in the HCl red zone. The next highest rate is the Elgin zip code 60120 at (96.2/10,000), which is in the HCl yellow zone. (Healthy Communities Institute, Illinois Hospital Association, COMPdata, 2015.) See Exhibit 32.

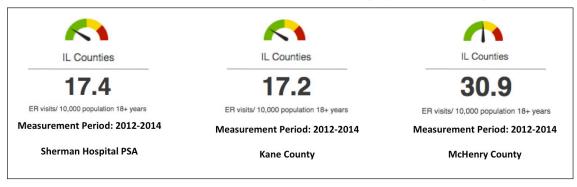
Exhibit 32: Sherman Hospital PSA, Kane County, McHenry County and Highest Age Adjusted Emergency Room Visit Rates due to Mental Health by Zip Code/10,000 Population 18+ 2012-2014



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

The Sherman Hospital PSA 2012-2014 age-adjusted ER rate due to suicide and intentional self-injury for adults age 18 and older is 17.4/10,000. The ER rate due to suicide and intentional self-injury for McHenry County (30.9/10,000) is higher than Kane County (17.2/10,000). In the PSA, Kane County and McHenry County, 18-24 year olds made up the largest percentage of the ER visits. See Exhibit 33.

Exhibit 33: Sherman Hospital PSA, Kane County and McHenry County Age-Adjusted Emergency Room Visit Rates due to Suicide and Intentional Self-Inflicted Injury Per 10,000 Population 18+ Years 2012-2014



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

Finally, the 2012-2014 age-adjusted death rate due to suicide is higher in McHenry County (11.6 deaths/100,000 population) than in Kane County (8.4/100,000 population). Both are in the HCl green zone. Men have more than four times the number of deaths due to suicide than women in Kane County (13.8/10,000 for men and 3.2/10,000 for women). In McHenry County, the death rate for men is more than three times the rate for women (17.9/10,000 for men and 5.6/10,000 for women). The McHenry County death rate due to suicide is above the Healthy People 2020 target of 10.2/100,000. (Healthy Communities Institute, Centers for Disease Control and Prevention, 2012-2014.)

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 2014, 14.4% of McHenry County Medicare recipients were diagnosed with depression. In Kane County, an estimated 15.7% of Medicare recipients were diagnosed with depression. (Healthy Communities Institute, Centers for Medicare and Medicaid Services, 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, National Institute of Mental Health, www.nimh.nih.gov, Leading Causes of Death in the United States, 2014.)

Mental health presents unique, acute challenges for adolescents in Kane County and McHenry County. According to the 2014 Kane County Illinois Youth Survey, 33% of eighth graders, 31% of tenth graders, and 31% of twelfth graders said they had experienced depression in the past twelve months. Nearly 17% of tenth grade students and 14% of high school seniors had seriously considered suicide within the past twelve months. (Illinois Youth Survey, 2014; Kane County Report, University of Illinois Institute of Government and Public Affairs, 2014.)

In McHenry County, 36% of eighth graders, 31% of tenth graders, and 26% of twelfth graders said they had experienced depression in the past twelve months. Eighteen percent of tenth grade students and 13% of twelfth graders had seriously considered suicide within the past twelve months. (Illinois Youth Survey, 2014; McHenry County Report, University of Illinois Institute of Government and Public Affairs, 2014.)

Social stresses weigh heavily on adolescents. In Kane County, almost half of middle school students (46% of sixth graders and 47% of eighth graders) have experienced some type of bullying in the past year. In high school, almost one in three tenth graders (32%) and 23% of twelfth graders experienced some type of bullying. (Illinois Youth Survey 2014 Kane County Report, University of Illinois Institute of Government and Public Affairs, 2014.) The data for McHenry County students shows 53% of sixth graders and 55% of eighth graders have experienced some type of bullying in the past year. Thirty-eight percent of tenth graders and 27% of twelfth graders experienced some type of bullying in the past twelve months.

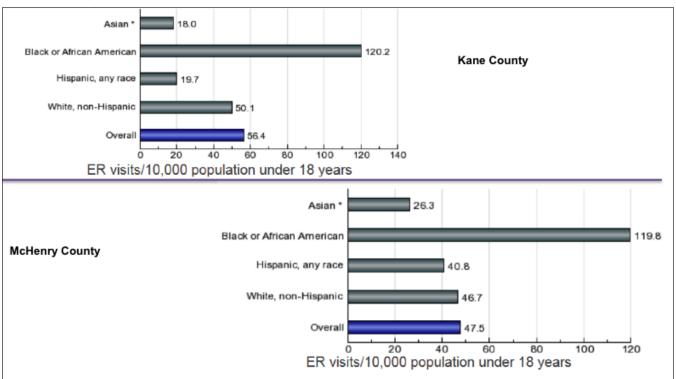
In the 2014 McHenry County Healthy Community Study, a quarter (25.0%) of McHenry County children between 0-17 years had a diagnosis of ADD/ADHD, with an additional 10.8% having a diagnosis of depression and 10.3% anxiety or panic disorders. Twelve percent of survey respondents rated behavioral/mental 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."

In the Kane County survey, mental health was perceived by parents as a top concern for adolescents. However, only 2% of Sherman Hospital PSA parents who responded to the survey indicated that their child has fair/poor mental health. A total of 58.8% of survey respondents indicated that they are aware of local mental health resources. (Executive Report, Community Health Status Data, Advocate Sherman Hospital PSA and Kane County.)

The 2012-2014 age-adjusted ER rate for pediatric mental health for the PSA is 49.3 emergency room visits/10,000 population, which is in the HCl green zone. The age-adjusted ER rate due to pediatric mental health in Kane County is 56.4/10,000, and is in the HCl yellow zone. The rate for McHenry County is lower at 47.5/10,000 and is in the HCl green zone. The highest rate of ER visits for pediatric mental health in both counties is for African Americans (120.2/10,000 in Kane County and 119.8/10,000 in McHenry County) as shown in Exhibit 34. In both counties and the PSA, 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. (Healthy Communities Institute, Illinois Hospital Association, COMPdata, 2015.)

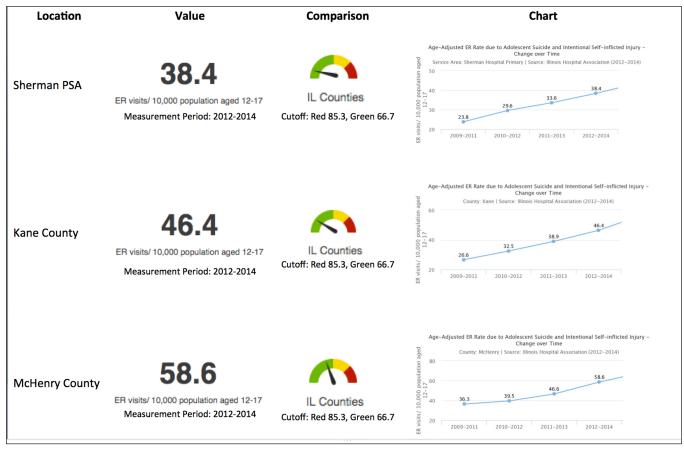
Exhibit 34: Kane County and McHenry County Age-Adjusted ER Rate due to Pediatric Mental Health by Race/Ethnicity 2012-2014



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

The age-adjusted ER rate due to adolescent (ages 12-17) suicide and intentional self-Inflicted injury for the PSA has been increasing over time, from 23.8/10,000 in 2009-2011 to the 2012-2014 rate of 38.4/10,000 (in the HCl green zone). The Kane County rate is 46.4/10,000 and the rate in McHenry County is 58.6/10,000. The county rates have also been increasing over time, as displayed in Exhibit 35. The ER rate for females is higher than the ER rate for males in both counties. ER visits from adolescents ages 15-24 years make up the largest percentage of the total visits in both counties. (Healthy Communities Institute, Illinois Hospital Association, COMPdata, 2015.)

Exhibit 35: Sherman Hospital PSA, Kane County and McHenry County Emergency Room Rate due to Adolescent Suicide and Intentional Injury Change Over Time 2012-2014



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

Key Findings: Mental Health

- Both Kane County and McHenry County have had steady increases in emergency room rates due to mental health for both pediatrics and adults.
- The PSA community with the highest ER rate for mental health is Elgin (60123). The next highest rate is the Elgin zip code of 60120.
- The rate of ER visits for McHenry County adults due to mental health is slightly higher than the rate for Kane County and both are in the HCl green zone.
- In the PSA, Kane County and McHenry County, 18-24 year olds made up the largest percentage of the ER visits due to suicide and intentional self-injury.
- The age-adjusted death rate due to suicide is higher in McHenry County than in Kane County.
- Men have more than four times the number of deaths due to suicide than women in Kane County. In McHenry County, the death rate for men is more than three times the rate for women.
- Fourteen percent of McHenry County Medicare recipients were diagnosed with depression as of 2014. In Kane County, an estimated 15.7% of the Medicare recipients were diagnosed with depression.
- The age-adjusted ER rate due to pediatric mental health in Kane County is in the HCl yellow zone. The PSA ER rate and McHenry County ER rate for pediatric mental health are both in the HCl green zone.
- The highest rate of ER pediatric visits for mental health in both counties is for African Americans. In both counties and the PSA, 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.

- In Kane County, 17% of tenth grade students and 14% of high school seniors had seriously considered suicide within the past twelve months according to the 2014 Illinois Youth Survey. In McHenry County, 18% of tenth grade students and 13% of twelfth graders had seriously considered suicide within the past twelve months.
- The age-adjusted ER rate due to adolescent suicide and intentional self-inflicted injury for the PSA has been increasing over time. The ER rate for McHenry County is higher than Kane County.

Substance Abuse

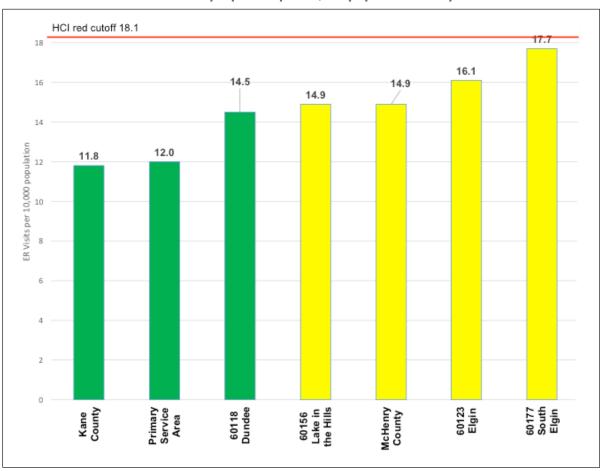
Preventing initiation of substance use is an important strategy for preventing abuse. Those who are mentally ill are more likely to abuse drugs or alcohol. The two issues often co-occur. According to the Substance Abuse and Mental Health Services Administration (SAMHSA), 26.7% of people with mental health 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)

Issues related to substance abuse identified in the 2014 Kane County CHNA included the prevalence of alcohol use and difficulty seeking help for alcohol and drug issues. Substance abuse is perceived by parents as a top health concern for adolescents. Substance abuse was identified as a "major problem" by 50% of focus group participants. (Kane County CHNA, Professional Research Consultants, 2014.) The McHenry County Health Department identified substance abuse as one of its health priorities in the 2014 Healthy Community Study. As mentioned earlier, drug and alcohol abuse among youth was identified as a community problem by key informants. Focus group participants 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. (McHenry County Healthy Community Study, Health Systems Research, 2014.)

The 2014 Illinois Youth Survey data shows that 69% of twelfth graders in Kane County and 65% of twelfth grade students in McHenry County have used some substance (alcohol, cigarettes, inhalants or marijuana) in the past year. Substance use is starting early, as 15% of Kane County sixth graders and 17% of McHenry County sixth graders have used some substance in the past year.

The 2012-2014 ER rate due to substance abuse for the Sherman Hospital PSA is 12.0 visits per 10,000 population; the rate is in the HCl green zone. The ER rate for substance abuse for Kane County is 11.8/10,000 (HCl green zone) and the McHenry County rate is 14.9/10,000, which is in the HCl yellow zone. South Elgin (60177) at 17.7/10,000, and Elgin (60123) at 16.1/10,000 have the highest ER rates for substance abuse, all in the HCl yellow zone, shown in Exhibit 36. (Healthy Communities Institute, Illinois Hospital Association, COMPdata, 2015.)

Exhibit 36: Sherman Hospital PSA, Kane County, McHenry County and Selected Highest Age-Adjusted ER Visit Rates due to Substance Abuse by Zip Code per 10,000 population 18+ years 2012-2014



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

Smoking

The 2014 data shows the number of teens who smoke in Kane County (13%) and McHenry County (11%) has gone down since 2010. Although also declining, the adult smoking rates for Kane County (14.2%) and McHenry County (15.9%) both are 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. Kane and McHenry County twelfth graders have the highest percentage who have used marijuana in the past 12 months, compared to other grade levels (39% and 36% respectively). According to the Illinois Youth Survey, 27% of Kane County high school seniors and one-quarter of McHenry County high school seniors had used marijuana in the last 30 days. Nine percent of Kane County and 11% of McHenry County twelfth grade students indicated that they had driven a car or other vehicle six or more times when they had been using marijuana. (Illinois Youth Survey, Kane County Report and McHenry County Report, University of Illinois Institute of Government and Public Affairs, 2014.)

Heroin and Opioids

In 2015, Kane County had fewer heroin-related drug overdose deaths at 14 than McHenry County at 19. (Illinois Department of Public Health, Illinois Center for Health Statistics, 2015.) While the use of heroin is spreading throughout the United States, the death rates for both Kane (7.4 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 Kane County and McHenry County tenth and twelfth grade students who have used heroin in the past year is only 1%. Heroin is not the drug most highly used by teens. Ecstasy, followed by hallucinogens/LSD and crack cocaine are the most popular. (Illinois Youth Survey, Kane County Report and McHenry County Report, University of Illinois Institute of Government and Public Affairs, 2014.)

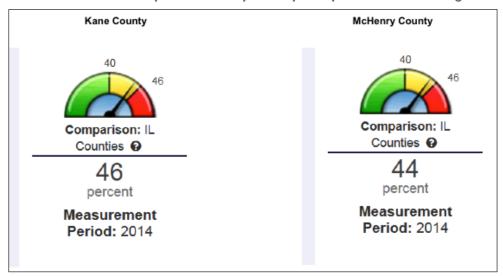
Drug overdose deaths are the leading cause of injury death in the United States, with over 100 drug overdose deaths occurring every day. The US death rate due to drug overdose has been increasing over the last two decades. In 2010, 60% of drug overdose deaths were related to pharmaceuticals, the majority of which were prescription painkillers. Drug overdose deaths may be accidental, intentional, or of undetermined intent. (Healthy Communities Institute, April 2016.)

The 2012-2014 age-adjusted death rate due to drug poisoning for Kane County is 9.1/100,000 population which is in the HCl green zone. The Kane County death rate has shown a steady upward trend from 6.3/100,000 in 2004-2010 to 9.1/10,000 in 2012-2014. McHenry County has also shown a steady increase over time during the same time period, from 9.3/100,000 to 13.0/100,000. The McHenry County death rate is in the HCl yellow zone. (Healthy Communities Institute, County Health Rankings, 2016.)

Alcohol

The 2014 percentage of teens who use alcohol in Kane County is 46%, and this rate increased from 43% in 2010. In McHenry County, 44% of teens use alcohol. The McHenry County rate has decreased from 50% in 2010. Both county rates are in the HCl yellow zone. (Healthy Communities Institute, Illinois Youth Survey, 2014.) See Exhibit 37.

Exhibit 37: Kane County and McHenry County Comparison of Percentage of Teens Who Use Alcohol 2014



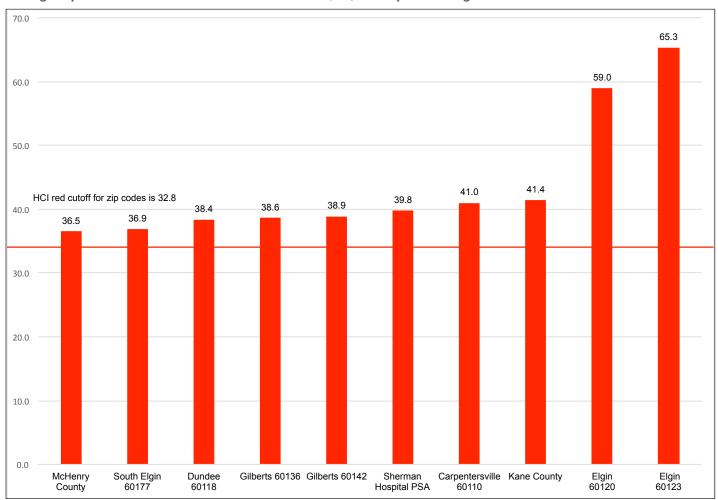
Source: Healthy Communities Institute, Illinois Youth Survey, 2014.

According to the Illinois Youth Survey, 25% of Kane County high school seniors and 25% of McHenry County high school seniors have engaged in binge drinking in the past two weeks. Exposure to alcohol and experimentation is starting early. In McHenry County, the age that youth take more than a sip or two of alcohol was 14.9 years old and in Kane County, the age was 14.6 years old. In both counties, the average age of drinking alcohol regularly (at least once or twice a month) is 16 years old. (Illinois Youth Survey, Kane County Report and McHenry County Report, University of Illinois Institute of Government and Public Affairs, 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). As of 2014, 23.4% of adults in McHenry County and 21.2% of adults in Kane County drink excessively, compared to the Illinois rate of 21.4% of adults who drink excessively. Both county rates are below the Healthy People 2020 target of 25.4%. (Healthy Communities Institute, County Health Rankings, 2015.)

The 2012-2014 age-adjusted ER Rates for adults age 18 and older due to alcohol abuse for the Sherman Hospital PSA is 39.8/10,000. The rate for Kane County is 41.4/10,000 and the McHenry County rate is 36.5/10,000. All three rates are in the HCl red zone. The two zip codes in the PSA with the highest ER rates due to alcohol abuse are Elgin (60123) at 65.3/10,000 and Elgin (60120) at 59/10,000. (Healthy Communities Institute, Illinois Hospital Association, COMPdata, 2015.) These are displayed in Exhibit 38.

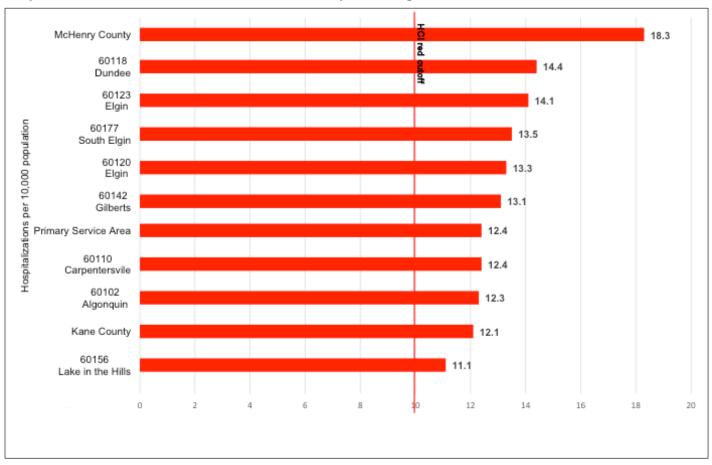
Exhibit 38: Sherman Hospital PSA, Kane County, McHenry County and Selected Highest Age-Adjusted Emergency Room Visit Rates due to Alcohol Abuse/10,000 Population Age 18+ 2012-2014



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

The 2012-2014 age-adjusted hospitalization rate for adults age 18 and older due to alcohol abuse for the PSA is 12.4/10,000. The Kane County rate is 12.1/10,000 and the McHenry County rate is 18.3/10,000. All three rates are in the HCl red zone. The majority of the communities in the PSA are also in the HCl red zone for hospitalization rates due to alcohol abuse, as shown in Exhibit 39. The communities with the highest rates are Dundee (14.4/10,000) and Elgin (60123) at 14.1/10,000). (Healthy Communities Institute, Illinois Hospital Association COMPdata, 2015.)

Exhibit 39: Sherman Hospital PSA, Kane County, McHenry County and Selected Highest Age-Adjusted Hospitalization Rate due to Alcohol Abuse/10,000 Population Age 18+ 2012-2014



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

Between 2012 and 2014, 38.9% of all motor vehicle crash deaths in McHenry County involved alcohol (HCl yellow zone). This rate has increased more than six percentage points since the 2008-2012 period (32.6%). The alcohol-impaired driving death rate for Kane County has actually declined slightly in the same period, from 39.7% in 2008-2012 to 33.3% in 2012-2014, and is in the HCl green zone. (Healthy Communities Institute, County Health Rankings, 2016.)

Key Findings: Substance Abuse

- 69% of twelfth graders in Kane County and 65% in McHenry County have used some substance (alcohol, cigarettes, inhalants or marijuana) in the past year.
- The communities of South Elgin (60177) and Elgin (60123) have the highest ER rates for substance abuse.
- The number of teens who smoke in Kane County (13%) and McHenry County (11%) has gone down since 2010.
- Adult smoking rates for Kane County (14.2%) and McHenry County (15.9%) are also declining, but have not met the Healthy People 2020 target of less than 12%.
- 39% of Kane County high school seniors and 36% of McHenry County high school seniors have used marijuana in the past 12 months; 27% of Kane County seniors and 25% of McHenry County seniors have used marijuana in the past 30 days.
- While the use of heroin is spreading throughout the United States, both Kane 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 Kane County has also seen an increase since 2010 to 2014, from 6.3 deaths/100,000 to 9.1 deaths/100,000.

- Forty-six percent of Kane County teens and 44% of McHenry County teens use alcohol. The Kane County rate increased from 2010 to 2014, and the McHenry County rate decreased from 2010 to 2014.
- Twenty-five percent of Kane County twelfth graders and 25% of McHenry County high school seniors have engaged in binge drinking in the past 30 days.
- As of 2014 in Kane County, 21.2% of adults drink excessively; in McHenry County, 23.4% of adults drink excessively.
- The Sherman Hospital PSA 2012-2014 age-adjusted ER rate due to alcohol abuse for adults age 18 and older is in the HCl red zone. Elgin (both zip codes 60123 and 60120) has the highest rate of ER visits for alcohol abuse in the PSA.
- The communities in the PSA with the highest rates of hospitalization for adults due to alcohol abuse are Dundee and Elgin (60123).

V. Identifying Priorities

Priority Setting Process

In preparation for the selection of priorities, Sherman Hospital community health staff presented a comprehensive summary of the demographics, the five most significant health issues and social determinant factors to the Community Health Council on September 16, 2016. A copy of the Health Issues Review handout is contained in Appendix 4. The five health issues are listed below:

- · Heart Disease and Stroke;
- · Diabetes and Kidney Disease;
- · Obesity;
- · Mental Health;
- · Substance Abuse.

A profile of cancer was provided to the Community Health Council, but 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.

Community health 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 examined indicators had been trending up over time.
- Is the health issue in alignment with other goals and objectives?
 - Staff provided handouts of the Kane County Health Department Community Health Improvement Plan (CHIP) goals and objectives and the McHenry County Health Department Mobilizing for Action through Planning and Partnerships (MAPP) goals and objectives. These were to inform Council members of the priorities that were selected and already being worked on in the community. Opportunities may exist for collective impact. Collective impact refers to the commitment of a group of important factors 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?
 Kane County Health Department and McHenry County Health Department action teams are already in existence around the selected priorities from the most recently completed community health needs assessments and CHIP.
- Does Advocate Sherman 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, CHC 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:

- Diabetes
- Obesity

Diabetes

In the key informant interviews conducted as a part of the 2014 Kane County Health Department Community Health Needs Assessment, 58% of participants characterized diabetes as a "major problem" in the community. Diabetes was identified as a significant health need in the Kane County assessment. In the 2014 McHenry County Health Department study, 14% of survey respondents reported being diagnosed with diabetes, and diabetes was selected as a health priority by the McHenry County Healthy Communities partner organizations. There is strong interest in diabetes as a health concern in the Sherman Hospital PSA, and strong alignment with both the Kane and McHenry County Health Department priorities.

An estimated 6.5% of Sherman Hospital PSA residents have diabetes, and 27% of Kane County and 24% of McHenry County Medicare beneficiaries have been treated for diabetes. Emergency room rates for diabetes are highest in Elgin (60123 and 60120) and Carpentersville (60110). Carpentersville, Huntley and Elgin (60123) have the highest hospitalization rates due to diabetes, and Carpentersville and Elgin (60120 and 60123) have the highest hospitalization rates due to long-term complications of diabetes.

Over the past year, Sherman Hospital has been working collaboratively with a Latino Advisory Committee comprised of representatives from a variety of local public, private and non-profit organizations serving the Latino community to develop a diabetes prevention and treatment program.

The committee has advised hospital staff in the development and launch of a diabetes prevention and treatment program for the Latino community in the Elgin and Carpentersville area. The data reviewed indicates that diabetes continues to be a significant health issue in the Sherman Hospital PSA, and particularly in communities of high poverty and high socioeconomic need – Carpentersville and Elgin. Therefore, the Community Health Council voted to select diabetes as a priority to continue to focus on over the next three years.

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 ≥ 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, Behavioral Risk Factor Surveillance System, 2012-2014.)

In the Kane County CHNA key informant interviews, 85% of participants characterized nutrition, physical activity and weight as a "major problem" in the community. Key informants in the McHenry County Healthy Community Study mentioned the growing number of children and adolescents who are overweight and its increase in prevalence among the local Hispanic population. In Kane County, the prevalence of obesity for those of Hispanic ethnicity is higher (29.9%) when compared to the White population at 26.3%. The same holds true in McHenry County; the obesity prevalence for those of Hispanic ethnicity (26.5%) is higher than the rate for those of White race (25.6%).

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 Kane County, 30% of adults are obese. In McHenry County, 27% are obese. Sixteen percent of Kane County preschool children are obese and 17% of 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 Kane County and McHenry County Health Departments have identified obesity as one of the priorities in their respective community health improvement plans. Sherman Hospital did select obesity as a priority health issue in the last CHNA cycle. However, because the obesity rates continue to climb locally and nationally, and because of the demonstrated relationship between obesity and diabetes, the Community Health Council voted to again select obesity as a priority.

Needs Not Selected

Heart Disease and Stroke

Heart disease and stroke were both identified as health needs within the Primary Service Area. Although heart disease is the second highest cause of death in both Kane County and McHenry County for 2014, both county death rates for heart disease are lower than the Illinois and US rates. Additionally, the prevalence rate of heart disease for Kane County and McHenry County are lower than the rates for Illinois and the US. Furthermore, the age-adjusted death rate for both counties due to coronary heart disease has declined since the 2007-2009 period, and are below the Healthy People 2020 target. Both county death rates for stroke are in the HCI green zone, when compared to other Illinois counties and other counties in the state, and both rates are lower than the Healthy People 2020 target. The percentages of Medicare beneficiaries treated for stroke in both counties have been on a downward trend since 2010.

Because of the decline in the death rates and the positive performance against the Healthy People 2020 targets for heart disease and stroke, the Community Health Council determined that progress is being made to decrease heart disease and stroke. Additionally, Sherman Hospital is a member of the Advocate Heart Institute, which combines advanced diagnostics and treatment with state-of-the-art technology to provide patients with the best possible outcomes. The Heart Institute initiates a variety of annual heart disease prevention and treatment programs to decrease cardiovascular disease. The Community Health Council determined it was more beneficial to prioritize obesity because of its underlying relationship to heart disease.

Mental Health

In the Kane County CHNA, 85% of those interviewed perceived mental health as a major problem and 15% as a moderate problem. Adults, seniors and adolescents are all affected by depression. Emergency room rates in the PSA due to mental health have been increasing over time with the largest number of visits being for those 18-24 years of age, African American adults, and those living in the Elgin zip codes of 60120 and 60123. The ER rate due to suicide and intentional self-injury for McHenry County is higher than Kane County. McHenry County also has a higher death rate due to suicide than Kane County and the rate is higher than the Healthy People 2020 target. The ER rate due to pediatric mental health in Kane County is higher than the McHenry County rate. The ER rate due to pediatric mental health and the ER rate due to adolescent suicide and intentional self-inflicted injury for the PSA has been increasing over time. Assessment results demonstrated that mental health continues to be a need in the PSA.

Sherman Hospital currently works closely with the Ecker Center, a non-profit outpatient mental health agency with offices in Elgin, St. Charles and Streamwood. The Ecker Center is located on-site at the hospital and works in conjunction with Sherman Hospital emergency department staff to receive referrals for patients who need further mental health support after being seen in the Sherman Hospital emergency room. The hospital also works with a large array of other mental health providers in the PSA to ensure a continuum of care for patients, and hospital staff are on a number of community coalitions and committees focusing on the capacity of mental health services in the PSA. Because of this ongoing activity, the Community Health Council decided to focus on other health issues for 2017-2019.

Substance Abuse

Substance abuse was identified as a need within the Sherman Hospital PSA. 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 the Substance Abuse and Mental Health Services Administration, 27% of people with mental health issues abused illicit drugs in 2012. However, a great deal of work is currently being done to address areas of substance abuse through collaborations within both Kane County and McHenry County, including substance abuse coalitions and action teams addressing the use of opioids. Because the hospital is already heavily involved in these coalitions, the Community Health Council decided to focus on other priorities.

Approval of CHNA by Hospital Board

The Community Health Director for the Advocate North Region and the Manager of Community Outreach provided a copy of the Community Health Needs Assessment to each Governing Council member in advance of the November meeting in preparation for approval. The Chairperson of the Community Health Council, who is also a Sherman Hospital Board member, the Community Health Director of the North Region and the Sherman Hospital Manager of Community Outreach presented the CHNA document and recommended health priorities of diabetes and obesity to the Hospital Board. The Sherman Hospital Board approved the CHNA and selected priorities on November 28, 2016.

VI. 2017 Implementation Planning

The Advocate North Region Community Health Director and Sherman Hospital Community Outreach Manager will lead the development of the Sherman Hospital 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 diabetes. Additionally, in the implementation planning, Sherman 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.)

Diabetes

Kane County Health Department and McHenry County Health Department and the Sherman Hospital Latino Advisory Committee

Because diabetes is a health priority of the Kane County and McHenry County Health Departments, Sherman Hospital will work collaboratively with both agencies in the planning and development of interventions. The McHenry County Health Department is just completing its updated community health needs assessment and Community health staff will review the updated data for issues related to diabetes and obesity. The hospital will continue, in collaboration with the Latino community, to develop and expand the Diabetes Prevention and Treatment program. In any new interventions, the hospital will focus on high need communities—those with the higher SocioNeeds Index ranking and/or higher rates of related health indicators. Evidence-based diabetes prevention initiatives may also be considered.

Obesity

Kane County Health Department and McHenry County Health Department

Obesity is a health priority of both the Kane County and McHenry County Health Departments. Sherman Hospital will continue its focus on obesity with the Natural Prairie and Community Garden, and the provision of fresh produce for the Food for Greater Elgin food pantry. Efforts will be made to develop interventions that are coordinated or aligned with existing strategies through the two health departments. Other evidence-based programs that promote healthy lifestyle, good nutrition and fitness will also be explored to be implemented with community-based partners in geographic areas with a higher SocioNeeds Index ranking.

VII. Vehicle for Community Feedback and Sharing Results

Advocate Sherman 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 for any other questions, please click below to send an email:

AHC-CHNAReportCmtyFeedback@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 Sherman Hospital Community Wellness Department at 224.783.6136.

Sharing Results

In addition to the opportunity to provide feedback through the means described above Sherman Hospital Community Health and Community Outreach 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: 2014 McHenry County Healthy Community Study – Community Analysis

2014 McHenry County Healthy Community Study – Community Analysis

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 2: Data Sources for 2014-2016 CHNA

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

Primary Sources

Community Survey of the McHenry County Healthy Community Study, Health Systems Research, Division of Health Policy and Social Science Research, University of Illinois College of Medicine at Rockford, 2014.

Community Survey of the Executive Report, Community Health Status Data, Advocate Sherman Hospital Primary Service Area and Kane County, Professional Research Consultants, Inc., 2014.

Secondary Sources

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

Centers 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

County Health Rankings, 2016. www.countyhealthrankings.org

Community Commons, 2016. www.communitycommons.org

Healthy Communities Institute. 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 HCl portal:

Centers for Disease Control and Prevention, 2015.

Claritas, 2015, 2016.

County Health Rankings, 2014, 2015.

Illinois COMPdata, 2015, 2016.

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

Illinois Hospital Association, COMPdata, 2015, 2016.

US Census, American Community Survey, 2008-2012, 2010-2014, 2015.

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

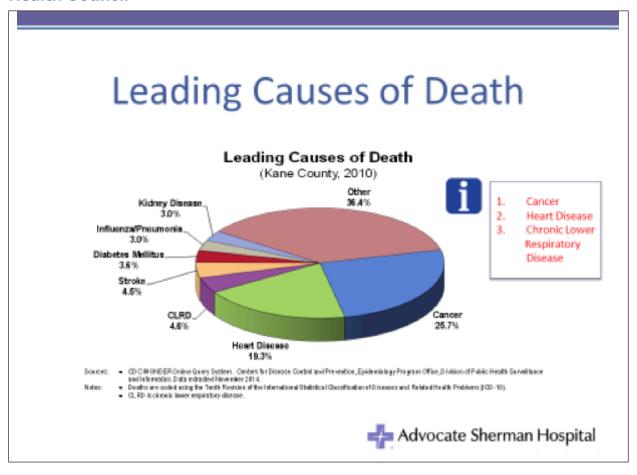
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Illinois Youth Survey, 2014. https://iys.cprd.illinois.edu/

Truven Health, Claritas, 2016.

Truven Insurance Coverage Estimates, 2016.

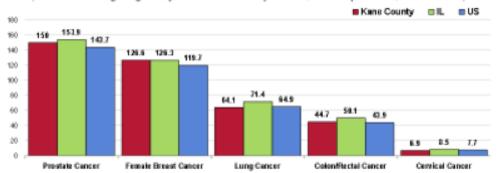
Appendix 3: Cancer Presentation Provided to Sherman Hospital Community Health Council



Cancer Incidence Rates by Site

Cancer Incidence Rates by Site

(Annual Average Age-Adjusted Incidence per 100,000 Population, 2006-2010)



- State Cancer Printies; 28 85-10.
 Retrieved November 2014 from Community Common oil http://www.newnoon.com/ http://www.newnoo



Areas of focus are Prostate Cancer and Female Breast Cancer.

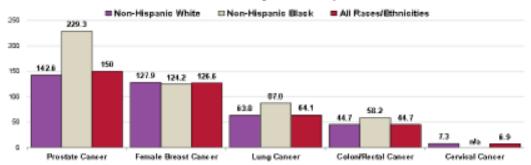
Cervical Cancer is so low



Cancer Incidence Rates by Site and Race/ Ethnicity

Cancer Incidence Rates by Site and Race/Ethnicity

(Annual Average Age-Adjusted Incidence per 100,000 Population, Kane County 2006-2010)



- Patienced blockers be 2014 from: Community Commons at http://www.strancy.

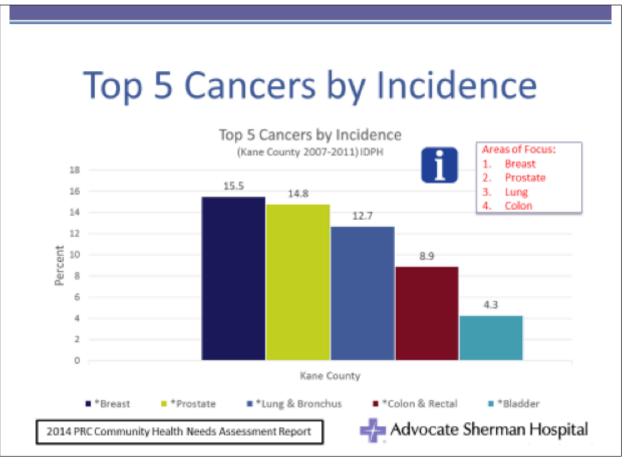
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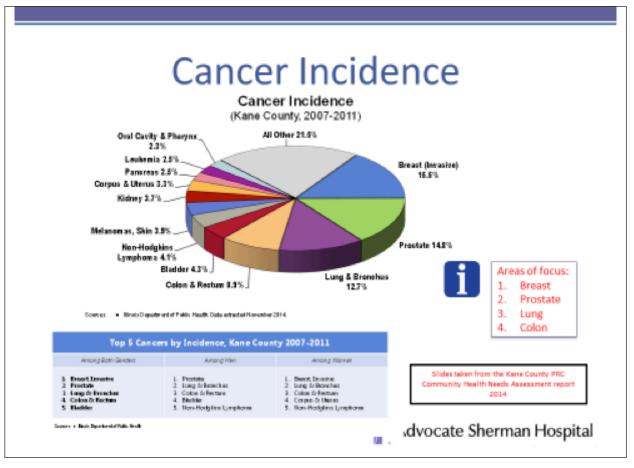


Areas of focus:

- Non-Hispanic Black—Prostate Cancer
- Non-Hispanic Black—Lung Cancer
- Non-Hispanic Black-Colon Cancer





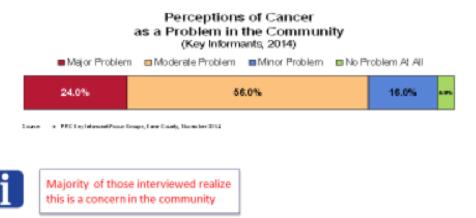


Healthy People 2020 Dashboard Kane County



Key Informant Input: Cancer

Most key informants taking part in the focus groups characterized Cancer as a "moderate problem" in the community



Healthy People 2020 Dashboard Kane County

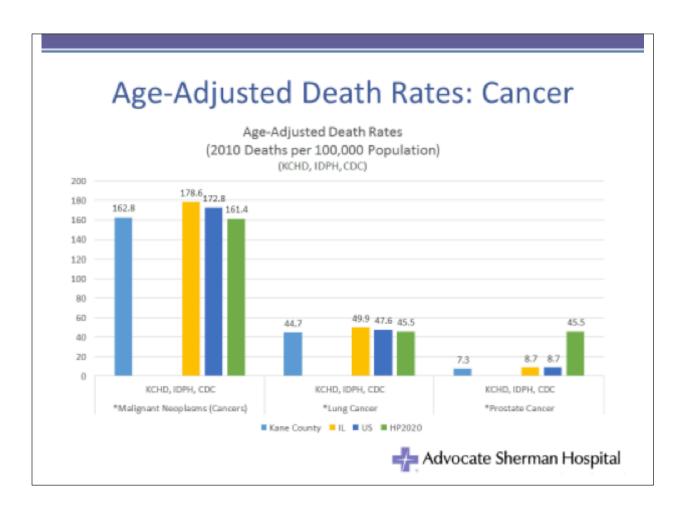


Source: National Cancer Institute, September 2015

Healthy People 2020 Dashboard McHenry County



Advocate Sherman Hospital



Age-Adjusted Death Rate due to Breast Cancer - Kane County



arget Not Met: The mortality rate for breast cancer for Kane County is just above the Healthy People 2020 target. rever, the rate has steadily declined since 2005.

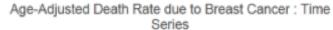


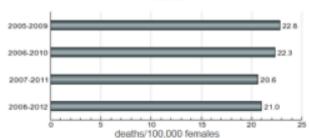
Comparison: Healthy People 2020 Target @

> 21.0 deaths/100.000 females

Measurement Period: 2008-2012

Kane County





Advocate Sherman Hospital

Source: National Cancer Institute, September 2015

Age-Adjusted Death Rate due to Breast Cancer McHenry County



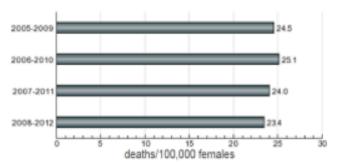
larget Not Met: The mortality rate for breast cancer for McHenry County is well above the Healthy People 2020 target. he rate has fluctuated, but has decreased since the 2007-11 time period.



Measurement Period: 2008-2012

McHenry County

Age-Adjusted Death Rate due to Breast Cancer: Time Series

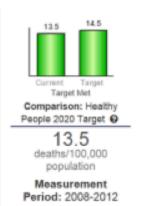


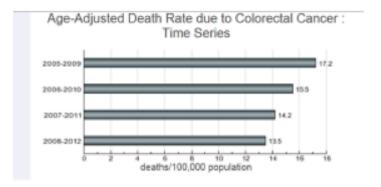
Advocate Sherman Hospital

Age-Adjusted Death Rate due to Colorectal Cancer– Kane County



Target Met: The mortality rate for colorectal cancer for Kane County is below the Healthy People 2020 target. The rate has steadily declined since 2005.





Kane County

Advocate Sherman Hospital

Age-Adjusted Death Rate due to Colorectal Cancer- McHenry County



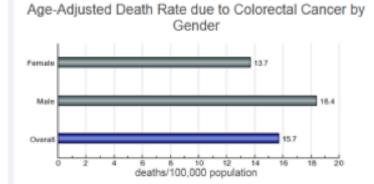
Target Not Met: The mortality rate for colorectal cancer for McHenry County is well above the Healthy People 2020 target. The rate for males is significantly higher than the overall rate and the Healthy People 2020 target at 18.4 deaths per 100,000 population.



15.7 deaths/100,000 population

Measurement Period: 2008-2012

McHenry County



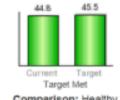


Source: National Cancer Institute, September 2015

Age-Adjusted Death Rate due to Lung Cancer– Kane County



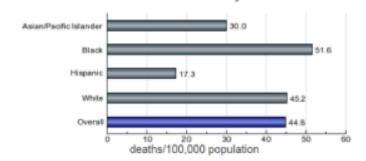
Target Met: The mortality rate for lung cancer for Kane County is just below the Healthy People 2020 target. However, the mortality rate for African Americans is significantly higher at 51.6 deaths per 100,000 population.



Comparison: Healthy People 2020 Target @

> 44.8 deaths/100,000 population

Measurement Period: 2008-2012 Age-Adjusted Death Rate due to Lung Cancer by Race/Ethnicity



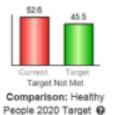
Kane County

Advocate Sherman Hospital

Age-Adjusted Death Rate due to Lung Cancer-McHenry County



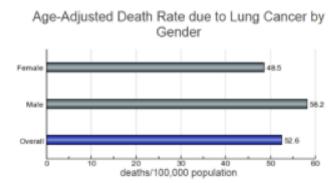
Target Not Met: The mortality rate for lung cancer for McHenry County is well above the Healthy People 2020 target. he mortality rate for males is even higher at 58.2 per 100,000 population.



52.6 deaths/100,000

Measurement Period: 2008-2012





McHenry County

Source: National Cancer Institute, September 2015



Age-Adjusted Death Rate due to Prostate Cancer-Kane County



Target Met: The mortality rate for prostate cancer for Kane County is just below the Healthy People 2020 target. However, the mortality rate for African Americans is more than 3.5 times higher than the overall rate at 75.1 deaths per 100,000 population.

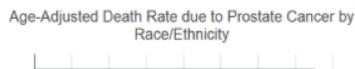


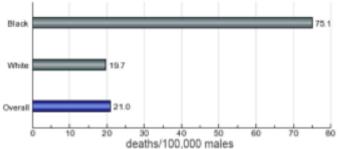
Comparison: Healthy People 2020 Target @

deaths/100,000 males

Measurement Period: 2008-2012

Kane County





Advocate Sherman Hospital

Age-Adjusted Death Rate due to Prostate Cancer-McHenry County



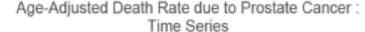
larget Not Met: The mortality rate for prostate cancer for McHenry County is above the Healthy People 2020 target. he mortality rate has fluctuated over the years, but has decreased since the 2007-11 period.

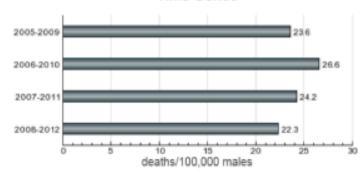


deaths/100,000 males

Measurement Period: 2008-2012

McHenry County





Source: National Cancer Institute, September 2015



Cervical Cancer Incidence Rate Kane County



Target Met: The incidence for cervical cancer in Kane County is below the Healthy People 2020 target, and has decreased significantly since the 2007-11 period.



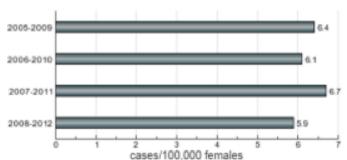
Comparison: Healthy People 2020 Target @

5.9 cases/100,000 females

Measurement Period: 2008-2012

Kane County

Cervical Cancer Incidence Rate: Time Series

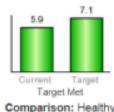


Advocate Sherman Hospital

Cervical Cancer Incidence Rate McHenry County



Target Met: The incidence rate for cervical cancer in McHenry County is well below the Healthy People 2020 target. The rate creased significantly since the 2007-11 period.

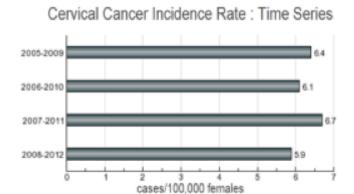


Comparison: Healthy People 2020 Target 6

cases/100,000 females

Measurement Period: 2008-2012

McHenry County



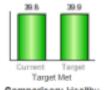
Source: National Cancer Institute, September 2015



Colorectal Cancer Incidence Rate Kane County



Target Met: The incidence rate for colorectal cancer in Kane County is slightly below the Healthy People 2020. target. However, the rate for African Americans is still much higher than the overall rate at 45.9 deaths per

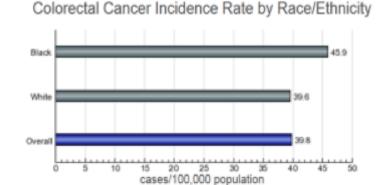


Comparison: Healthy People 2020 Target @

> 39.8 cases/100,000 population

Measurement Period: 2008-2012

Kane County





Colorectal Cancer Incidence Rate McHenry County

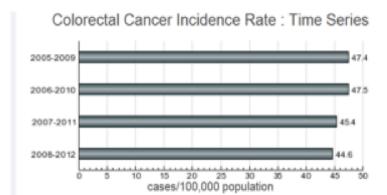


Target Not Met: The incidence rate for colorectal cancer in McHenry County is well above the Healthy People 2020 target. However, the rate has decreased since 2005.



44.6 cases/100,000 population

Measurement Period: 2008-2012



McHenry County

Advocate Sherman Hospital



Advocate Sherman Hospital's Top Health Issues

Diabetes / Kidney Disease
Obesity / Nutrition / Physical Activity
Stroke / Heart Disease
Substance Abuse
Behavioral Health (Mental Health)



Diabetes / Kidney Disease

Kane County

7.6% of adults have been diagnosed with Diabetes



9.4% of Kane County Residents have reported having Diabetes

Kane County mortality rates for Kidney Disease is in the Yellow zone, even higher in Men at 23%

McHenry County_

8.8% of adults have been diagnosed with Diabetes

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

Illinois

8.67% of adults have been diagnosed with Diabetes

Top Zip Codes for Long Term Diabetes Issues

60120- Elgin

60123- Elgin

60010- Carpentersville

60156— Lake in the Hills

60142— Huntley

96.2%

of key informants in Kane County report that Diabetes is a Major / Moderate problem



SOURCES:

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



Obesity/ Nutrition/ Physical Activity

17.8% of Kane County Residents report no leisure time physical activity in the past month

27.9% are Low-Income

23.9% are Hispanic

Each year the percentage of people who are overweight or obese <u>continues to rise</u> in the US,

McHenry and Kane Counties

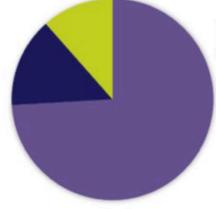


28.5% of Kane County adults are obese

16.3% of Kane County Children are obese

Top Priority

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



<u>In Illinois...</u>

14.4% of adolescents are overweight 11.5% of adolescents are obese

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



SOURCES:

2014 PRC Survey, Kane County 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-specific estimates. Health Aff (Millwood). 2009 Sep-Oct;28(5)





Stroke / Heart Disease



Age-Adjusted Death Rate for Heart Disease for Kane County residents is <u>lower</u> than state and national levels



Heart disease is the leading cause of death for both men and women



Stroke is the 4th leading cause of death in Kane County

Zip codes with highest level of inpatient visits are Huntley, Dundee and Elgin

The communities with the highest hospitalization rate due to Heart Issues in Sherman Hospital's service area are:

Huntley Elgin Dundee



Mortality - Stroke

Kane County death
rate for Stroke is higher
than the state and
national rates.

Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER. 2009-13. Source geography: County, IHA COMPdata July 2013-Jun 2014



Substance Abuse

65%

of Sherman Hospital service area residents reported having at least one alcoholic beverage in last 30 days (slightly higher than Kane County and US) of Sherman service area residents had 60+ alcoholic drinks in the past 30 days (higher than Kane County)

Top Hospitalization Rates

Due to Alcohol Abuse



Crystal Lake

Dundee

Elgin

South Elgin

Carpentersville

Algonquin

Alcohol

ER Rates due to Alcohol Abuse are highest for:

McHenry County: 20—24 year olds

Males

African Americans

Kane County: 45—64 year olds

Males

Teens Who Use Marijuana

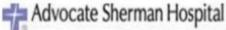
27% - Kane County

25% - McHenry County

Adults Who Drink
excessively is <u>below</u> the
Healthy People 2020 Target
of 25.4% or less in both
Kane and McHenry Counties

SOURCES:

Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2014 PRC Survey, Kane County Health Department, HCI



Invalidad madicina Changing lives

Behavioral Health (Mental Health)

Elgin has the highest...

- ER Rate due to adolescent suicide and intentional selfinflicted injury
- ER Rates due to mental health for 18—24 year olds
- Largest number of ER visits for adults due to mental health (African Americans are over-represented for their population size)



ER Rates due to Pediatric Mental
Health (under age 18) continues to
increase over time for
Kane County



Highest number of pediatric

Mental Health visits are for

African American children in

both Kane and McHenry Counties

Kane And McHenry Counties provider ratios are above the top performer level—indicating good access to mental health providers

SOURCES:

NAMI (National Alliance on Mental Illness) , Illinois Hospital Association, data as of September 2015 , IHA< Healthy Community Institutes, IDPH





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