2020 Community Health Needs Assessment
McHenry County, Illinois

Northwestern Medicine Huntley Hospital, Northwestern Medicine McHenry Hospital and Northwestern Medicine Woodstock Hospital
# Contents

**Executive Summary** .................................................. 3

**I. Introduction** .......................................................... 4  
  a. About Northwestern Memorial HealthCare  
  b. About Northwestern Medicine McHenry Hospital  
  c. About Northwestern Medicine Huntley Hospital  
  d. About Northwestern Woodstock Hospital  
  e. Acknowledgments

**II. The Community Health Needs Assessment** ........... 8  
  a. Background  
  b. McHenry Hospital, Huntley Hospital and  
     Woodstock Hospital Service Area  
  c. Goals  
  d. Methodology  
  e. Secondary Data Collection  
  f. Data Analysis  
  g. Information Gaps  
  h. Community Health Council  
  i. Public Dissemination  
  j. Public Comment and Dissemination

**III. Key Findings** ...................................................... 15  
  a. Community Description and Demographics  
  b. Social Determinants of Health  
  c. General Health Status  
  d. Access to Health Care  
  e. Housing  
  f. Caregiver Support  
  g. Chronic Disease  
    i. Arthritis  
    ii. Asthma  
    iii. Cardiovascular Disease  
    iv. Diabetes  
    v. Hypertension  
  vi. Maternal Child Health  
  vii. Infectious Disease  
  viii. Sexually Transmitted Infections  
  ix. Injury and Violence  
  x. Food Security and Food Access  
  xi. Mental Health  
    i. Anxiety  
    ii. Depression  
  xii. Racial and Ethnic Disparities: Communication  
    Difficulties, Cultural Barriers, Lack of Access  
    to Providers  
  xiii. Substance Use Disorders  
    i. Alcohol and Drugs  
    ii. Tobacco and E-Cigarettes

**IV. Interpreting and Prioritizing Health Needs** ...... 35

**V. Priority Needs Identified** ................................. 41

**VI. Additional Resources Available to Address**  
Significant Health Needs ............................................ 42

**VII. Priority Needs Not Addressed** ........................... 43

**VIII. Community Health Needs Assessment**  
Review and Approval Process ................................. 44

**IX. Development of Implementation Plan** ............... 45

**X. Availability of Community Health Needs**  
Assessment to the Community ............................. 46

**XI. Actions Taken to Address the 2019 CHNA**  
Community Health Needs ...................................... 47

**XII. References** ..................................................... 54
Northwestern Medicine McHenry Hospital (NM MH), Northwestern Medicine Huntley Hospital (NM HH) and Northwestern Medicine Woodstock Hospital (NM WH) have formally completed a comprehensive Community Health Needs Assessment (CHNA) in accordance with federal IRS regulations §1.501(r)-3 to better understand the population they serve as well as the issues that are of greatest concern affecting their community. The goal of the CHNA is to assess the health needs of residents within McHenry County, identify and prioritize those needs, and identify resources potentially available to address priority health needs.

In 2020, NM MH, NM HH and NM WH engaged with the McHenry County Department of Health, the McHenry County Mental Health Board and Advocate Aurora Health to conduct a systematic, data-driven CHNA that incorporated data from both quantitative and qualitative sources. The process identified areas of opportunity for community health improvement. Prevalent needs were identified across all socioeconomic groups, races, ethnicities, ages and genders. The assessment highlighted health and socioeconomic disparities and needs that disproportionately impact the medically underserved and uninsured.

While many health needs were identified through the CHNA process, NM MH, NM HH and NM WH, in conjunction with external partners representing the voice of the community, prioritized health needs of largest magnitude, seriousness and trend, as well as those that would be best addressed through a coordinated response from a range of healthcare and community resources.

In partnership with dedicated healthcare, social service, public health and policy organizations, NM MH, NM HH and NM WH will develop a three-year implementation plan, drawing on collective resources to make an impact on some of the most critical health needs of residents in McHenry County. Information identified during the CHNA process will aid NM MH, NM HH and NM WH in its determination of how best to commit resources to address priority health needs to improve the health of their communities.

Through the CHNA process, the 2020 NM MH, NM HH and NM WH priority health needs were identified as follows:

Introduction

Northwestern Memorial HealthCare (NMHC) is the nonprofit corporate parent of Northwestern Memorial Hospital (NMH); Northwestern Lake Forest Hospital d/b/a Northwestern Medicine Lake Forest Hospital (NM LFH); CDH-Delor Health System (CDHS); Central DuPage Hospital Association d/b/a Northwestern Medicine Central DuPage Hospital (NM CDH); Delnor-Community Hospital d/b/a Northwestern Medicine Delnor Hospital (NM Delnor); Kishwaukee Community Hospital d/b/a Northwestern Medicine Kishwaukee Hospital (NM Kishwaukee); Valley West Community Hospital d/b/a Northwestern Medicine Valley West Hospital (NM Valley West); Marianjoy Rehabilitation Hospital, part of Northwestern Medicine (MRH); Northern Illinois Medical Center (NIMC) d/b/a Northwestern Medicine McHenry Hospital, d/b/a Northwestern Medicine Huntley Hospital and d/b/a Northwestern Medicine Woodstock Hospital; Memorial Medical Center-Woodstock and Centegra Hospital-Huntley Holdings; Northwestern Medical Faculty Foundation d/b/a Northwestern Medical Group (NMG); Central DuPage Physician Group d/b/a Northwestern Medicine Regional Medical Group (NM RMG); Rehabilitation Medicine Clinic, Inc. d/b/a Marianjoy Medical Group (MMG); Northwestern Memorial Foundation (NMF); and other subsidiaries.

Working together under the brand Northwestern Medicine® (NM), NMHC and Northwestern University Feinberg School of Medicine (Feinberg) share a vision to transform medical care through clinical innovation, breakthrough research and academic excellence to make a positive difference in people’s lives and the health of our communities.

NM’s vision and values are deeply rooted in our mission to put patients first in everything we do. This includes geographical expansion to meet the growing demand for high-quality health care close to where people live and work. Since 2010, the Health System has grown to include 10 hospitals and more than 200 locations across Chicago, Illinois, and its surrounding counties.

Mission

| Northwestern Medicine® is a premier integrated academic health system where the patient comes first | We have an essential relationship with Northwestern University’s Feinberg School of Medicine |
| We are all caregivers or someone who supports a caregiver | We integrate education and research to continually improve excellence in clinical practice |
| We are here to improve the health of our community | We serve a broad community and bring the best in medicine closer to where patients live and work |
Vision

To be a premier integrated academic health system that will serve a broad community and bring the best in medicine—including breakthrough treatments and clinical trials enhanced through our affiliation with Northwestern University Feinberg School of Medicine—to a growing number of patients close to where they live and work.

Northwestern Medicine Northwest Region (NM NWR) Hospitals have a rich history of caring for their community. NM NWR hospitals include Northwestern Medicine McHenry Hospital, Northwestern Medicine Huntley Hospital and Northwestern Medicine Woodstock Hospital.

**Northwestern Medicine McHenry Hospital (NMMH)**

NMMH, located at 4201 Medical Center Drive in McHenry, Illinois, is a nationally recognized 166-bed, acute care teaching hospital with nearly 800 physicians and 60 specialties who provide comprehensive, leading edge health care to residents in McHenry and surrounding communities. NMMH is a regional destination for oncology and cardiovascular care. The facility provides emergency services, and inpatient and outpatient care, and specializes in cardiovascular interventions, surgical services, and obstetrics. The McHenry campus is home to the only open-heart surgery program in McHenry County and offers minimally invasive treatment for patients with diseased heart valves. The Northwestern Medicine McHenry Hospital Cancer Center is fully accredited and offers a full range of treatment services, including radiation and an on-site infusion center.

**Northwestern Medicine Huntley Hospital (NMHH)**

NMHH, located at 10400 Haligus Road in Huntley, Illinois, is an extension of NMMH and opened in 2016. NMHH is a comprehensive medical facility with nearly 800 physicians and 60 specialties offering leading-edge health care to residents in Huntley and surrounding communities. The 128-bed facility provides access to a Level 2 trauma center; surgical services, including a cardiac catheterization laboratory; a 20-bed Family Birth Center; Medical-Surgical Services; and a complement of supporting services. The hospital's Pediatric Unit is staffed by pediatric hospitalists from Ann & Robert H. Lurie Children's Hospital of Chicago. The Huntley campus also features an Immediate Care facility, a fitness center and wellness services designed to enhance the health and well-being of the community.

**Northwestern Medicine Woodstock Hospital (NMWH)**

NMWH, located at 3701 Doty Road in Woodstock, Illinois, is also an extension of NMMH. Serving the community for more than 100 years, NMWH is a regional destination for behavioral health and outpatient care. The 56-bed hospital features inpatient behavioral health services, an Emergency Department, an Inpatient Rehabilitation Department, and a wide range of outpatient services, including laboratory and imaging services.

NM NWR Hospitals have completed a comprehensive Community Health Needs Assessment (CHNA) to identify the highest priority health needs of residents of our community. This information has been utilized to guide new, and enhance existing, efforts to improve the health of our community. As described in detail in this report, the goal of the CHNA was to use a data-driven approach to determine the health status, behaviors and needs of all residents in the NM NWR service area. Through this analysis, health needs were identified that are prevalent among residents across all socioeconomic groups, races and ethnicities, as well as health issues that highlight health disparities or disproportionately impact the medically underserved and uninsured.
Acknowledgements

A key component of any comprehensive assessment involves reaching out to members of the community and organizations that interact with them in an effort to better understand the needs and issues that affect the health of its citizens. NM NWR gratefully acknowledges the participation of our community partners/key stakeholders for their input on perceived needs and priorities within the communities we serve. These individuals and organizations work closely with members of our community, including those most in need and with marginalized access to healthcare services. They have given generously of their time and expertise to help guide this 2020 McHenry County Healthy Community Study.

The 181 participants were chosen to participate in the online key informant survey because of their ability to identify primary concerns of the McHenry County populations with whom they work, as well as of the community overall. Key informants were contacted by email on November 14, 2019 introducing the purpose of the survey and providing a link to take the survey online; up to six reminder emails were sent as needed to increase participation.

The survey closed January 15, 2020. In all, 76 stakeholders took part in the online key informant survey.

The online questionnaire was administered by Northern Illinois University Center for Governmental Studies and covered the following topics:

| Aspects of health care in McHenry County that need improvement | Health disparities in the county |
| Preventative health services | Lifestyles in the county |
| Health concerns in McHenry County | Factors that are strengths and weaknesses of McHenry County as a “healthy community” |
Organizations marked with an asterisk denote programs that work with the poor, vulnerable and marginalized in McHenry County. Below is a list of the organizations asked to participate in the online key informant survey. Some organizations had multiple respondents that were part of the total number of respondents.

- Advocate Aurora Health*
- American Cancer Society
- AMITA Health*
- Association for Individual Development*
- Cary Police Department
- Cary School District 26*
- Clearbrook*
- Crystal Lake Food Pantry*
- Epilepsy Foundation of North Central Illinois*
- Family Health Partnership Clinic*
- Fox River Fire District
- Fox River Grove School District 3*
- Harvard Area Community Health Center*
- Harvard Community School District 50*
- Harvard Senior Center*
- Home of the Sparrow*
- Huntley Community School District 158*
- In Sync Systems, Inc.
- Independence Health & Therapy*
- Johnsburg School District 12*
- League of United Latin American Citizens*
- McHenry County Department of Health*
- McHenry County Dental Society
- McHenry County Government
- McHenry County Housing Authority*
- McHenry County Mental Health Board*
- McHenry County Office of Special Projects
- McHenry County Planning & Development
- McHenry County School District 15*
- McHenry County School District 154*
- McHenry County School District 156*
- McHenry County Sheriff
- McHenry County Substance Abuse Coalition*
- Northern Illinois Special Recreation Association*
- Northwest Center Against Sexual Assault*
- Northwestern Medicine McHenry Hospital*
- Northwestern Medicine Huntley Hospital*
- Northwestern Medicine Woodstock Hospital*
- Options and Advocacy*
- PFLAG*
- Pioneer Center for Human Services*
- Prairie Grove School District 46*
- Riley School District 18*
- Rosecrance*
- Sage YMCA*
- Salvation Army Extension Unit*
- Senior Care Volunteer Network*
- Senior Services, Inc.*
- The Mathers Clinic
- Turning Point*
- United Way of Greater McHenry County*
- Village of Bull Valley
- Village of Lake in the Hills
- Village of Port Barrington
- Village of Spring Grove
- Volunteer Center of McHenry County*
The Community Health Needs Assessment

Primary Population Groups Served by Online Key Informant Organization

A variety of services are provided by the respondents’ organizations, including human/social services (44 percent), education (39 percent), mental health services (37 percent), and advocacy (28 percent). Just under one out of five (19 percent) provide preventative services, 17 percent offer substance abuse services, 16 percent have medical services, and 15 percent provide public safety services. Slightly more than one out of ten (11 percent) organizations provide intellectual disability services. Just under one out five (19 percent) organizations provide services other than those listed in the survey, including funding, financial, housing, policy, and village government services.

Over one-half (53 percent) of the respondents’ organizations serve all residents of McHenry County. More than two-fifths (47 percent) of the respondents indicate their organization serves a specific population group; 23 percent serve adults, 23 percent serve low-income individuals, 21 percent serve children, 19 percent serve teens, 18 percent serve Latinos, 11 percent serve African Americans, and 9 percent serve immigrants.

<table>
<thead>
<tr>
<th>Service Type</th>
<th>Percent*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human/social</td>
<td>44%</td>
</tr>
<tr>
<td>Education</td>
<td>39%</td>
</tr>
<tr>
<td>Mental health</td>
<td>37%</td>
</tr>
<tr>
<td>Advocacy</td>
<td>28%</td>
</tr>
<tr>
<td>Preventative</td>
<td>19%</td>
</tr>
<tr>
<td>Substance abuse</td>
<td>17%</td>
</tr>
<tr>
<td>Medical</td>
<td>16%</td>
</tr>
<tr>
<td>Public safety</td>
<td>15%</td>
</tr>
<tr>
<td>Intellectual disability</td>
<td>11%</td>
</tr>
<tr>
<td>Other</td>
<td>19%</td>
</tr>
</tbody>
</table>

*The percentages do not equal 100% because multiple response was possible.
Slightly more than one out of ten (11 percent) organizations serve a population group other than those listed in the questionnaire; primarily these organizations serve seniors, individuals who identify as having a disability, veterans, and LGBTQ+ individuals.

<table>
<thead>
<tr>
<th>Population Group</th>
<th>Percent*</th>
</tr>
</thead>
<tbody>
<tr>
<td>All residents</td>
<td>53%</td>
</tr>
<tr>
<td>Low-income</td>
<td>23%</td>
</tr>
<tr>
<td>Adults</td>
<td>23%</td>
</tr>
<tr>
<td>Children</td>
<td>21%</td>
</tr>
<tr>
<td>Teens</td>
<td>19%</td>
</tr>
<tr>
<td>Latinos</td>
<td>18%</td>
</tr>
<tr>
<td>African Americans</td>
<td>11%</td>
</tr>
<tr>
<td>Immigrants</td>
<td>9%</td>
</tr>
<tr>
<td>Other groups</td>
<td>11%</td>
</tr>
</tbody>
</table>

Service Area

NM NWR’s primary service area is comprised of the following 18 ZIP codes, which account for 84 percent of patient volumes. NM NWR’s primary service area closely aligns with McHenry County boundaries. The service area identified for this report includes all of McHenry County. McHenry County’s population is estimated at 308,570 by the United States Census Bureau (2018 Quick Facts), making it the sixth-most populous county in Illinois. The county occupies 603.17 square miles with a population density of 511 people per square mile. It is bordered by Boone County (west); Kane, DeKalb and Cook counties (south); Lake County (east); and the state of Wisconsin (north).

McHenry County

<table>
<thead>
<tr>
<th>NM NWR CSA ZIP Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>60012 Crystal Lake</td>
</tr>
<tr>
<td>60013 Cary</td>
</tr>
<tr>
<td>60014 Crystal Lake</td>
</tr>
<tr>
<td>60021 Fox River Grove</td>
</tr>
<tr>
<td>60033 Harvard</td>
</tr>
<tr>
<td>60034 Hebron</td>
</tr>
<tr>
<td>60050 McHenry</td>
</tr>
<tr>
<td>60051 McHenry</td>
</tr>
<tr>
<td>60071 Richmond</td>
</tr>
<tr>
<td>60072 Ringwood</td>
</tr>
<tr>
<td>60081 Spring Grove</td>
</tr>
<tr>
<td>60097 Wonder Lake</td>
</tr>
<tr>
<td>60098 Woodstock</td>
</tr>
<tr>
<td>60102 Algonquin</td>
</tr>
<tr>
<td>60142 Huntley</td>
</tr>
<tr>
<td>60152 Marengo</td>
</tr>
<tr>
<td>60156 Lake in The Hills</td>
</tr>
<tr>
<td>60180 Union</td>
</tr>
</tbody>
</table>

*The percentages do not equal 100% because multiple responses were possible.*
Assessment Methodology

Northwestern Medicine, McHenry County Department of Health, McHenry County Mental Health Board, and Advocate Aurora Health Care commissioned the Northern Illinois University Center for Governmental Studies to conduct the 2020 McHenry County Healthy Community Study. The survey is conducted every three years. The findings are used to help understand the health trends and improve the quality of health services in the county.

The 2020 McHenry County Healthy Community Study includes a community survey, a key informant survey, and a community analysis. The study was conducted September 2019 through April 2020.

CHNA Goals

The CHNA serves as a tool toward reaching three organizational goals:

1. Improve residents' health status, increase their life spans and elevate their overall quality of life. A healthy community is one where its residents suffer little from physical and mental illness and enjoy a high quality of life.

2. Reduce health disparities among residents. Gathering demographic information along with health status and behavior data makes it possible to identify population segments that are most at risk for various diseases and injuries. Intervention plans aimed at targeting these segments may then be developed to combat some of the socioeconomic factors that have historically had a negative impact on residents' health.

3. Increase accessibility to preventive services for all community residents. More accessible preventive services will prove beneficial in accomplishing the first goal (improving health status, increasing life spans and elevating the quality of life), as well as lowering the costs associated with caring for late-stage diseases resulting from a lack of preventive care.

Quantitative Data Design

Quantitative data input included secondary research (vital statistics and other existing health-related data). These quantitative components allowed for trending and comparison to benchmark data at the state and national levels. A variety of existing (secondary) data sources was consulted to complement the research quality of this CHNA. Data for McHenry County was obtained from the following sources, with specific citations included in the graphs throughout this report:

- Centers for Disease Control and Prevention (CDC), Behavioral Risk Factor Surveillance System Survey Data
- CDC Office of Infectious Disease, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
- CDC Office of Public Health Science Services, Center for Surveillance, Epidemiology and Laboratory Services, Division of Health Informatics and Surveillance (DHIS)
- CDC Office of Public Health Science Services, National Center for Health Statistics
- Healthy People 2020
- McHenry County Government
- National Institute of Mental Health
Qualitative Data Design

**Questionnaire**

A 10-page questionnaire was developed by Northern Illinois University Center for Governmental Studies using questions from the CDC’s Behavioral Risk Factor Surveillance System (BRFSS) questionnaire. Additionally, questions were added that were specific to the county. The questionnaire that was administered covered the topics of perceptions of McHenry County residents on health-related quality of life, healthcare access, preventive healthcare services, physical and mental health conditions/diseases, tobacco and marijuana use, HIV/AIDS, and other issues. The questionnaire included a total of 54 questions and was also offered in Spanish.

**Sample**

A random sample of 7,000 households in McHenry County was selected to receive the survey. Additionally, oversamples of 500 Black households and 500 Hispanic households were selected. The samples were obtained from the Marketing Systems Group, a survey sampling firm. The Marketing Systems Group provided mailing addresses, email addresses and telephone numbers (landline and cell phone numbers) for the sampled households. This portion of the community study took place beginning October 2019 through January 2020 and was facilitated through Northern Illinois University Center for Governmental Studies.

Quantitative Data Design

**Data Collection**

On October 10, 2019, an email was sent to the 8,000 households inviting them to participate in the survey. The email described the purpose of the survey, how the results will be used, the confidentiality of the responses, and the approximate time to complete the survey. The email included a unique link to the survey. Up to six reminder emails were sent to non-respondents.

On November 2, 2019, the questionnaire, with a self-addressed, stamped envelope for returning it when completed, was mailed to those individuals who had not completed the online version.

Telephone reminder calls were made to non-respondents from November 16, 2019, through January 5, 2020.


A total of 1,200 completed surveys was received. Most (867) individuals completed the online version of the questionnaire; 333 completed the print version.

The margin of error for the survey is +/- 2.8 percentage points at the 95 percent level of confidence.
Data Analysis
The data was weighted on gender, age, race/ethnicity, educational level and annual household income using estimates from the 2014 - 2018 American Community Survey. Data weighting on key demographic variables results ensures that respondents to the McHenry County Healthy Community Survey are representative of the population of all adults in the county and that the findings can be generalized to the total adult population.

Chi-square tests were used to test significance between demographic groups.

The findings of the McHenry County Healthy Community Study are compared to the Illinois and national findings from the 2018 Behavioral Risk Factor Surveillance System unless otherwise noted in the report.

Respondent Characteristics
McHenry County Healthy Community Study respondent characteristics.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>47.9%</td>
</tr>
<tr>
<td>Female</td>
<td>52.1%</td>
</tr>
<tr>
<td>Age</td>
<td></td>
</tr>
<tr>
<td>18-29</td>
<td>19.4%</td>
</tr>
<tr>
<td>30-44</td>
<td>24.3%</td>
</tr>
<tr>
<td>45-64</td>
<td>37.9%</td>
</tr>
<tr>
<td>65-74</td>
<td>11.3%</td>
</tr>
<tr>
<td>75+</td>
<td>7.1%</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>84.6%</td>
</tr>
<tr>
<td>Black</td>
<td>1.0%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>10.5%</td>
</tr>
<tr>
<td>American Indian/or Alaska Native</td>
<td>0.1%</td>
</tr>
<tr>
<td>Asian</td>
<td>2.8%</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>0.0%</td>
</tr>
<tr>
<td>Other</td>
<td>1.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marital Status</td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>62.1%</td>
</tr>
<tr>
<td>Divorced</td>
<td>6.6%</td>
</tr>
<tr>
<td>Widowed</td>
<td>3.2%</td>
</tr>
<tr>
<td>Separated</td>
<td>1.0%</td>
</tr>
<tr>
<td>Never Married</td>
<td>18.3%</td>
</tr>
<tr>
<td>A Member of an Unmarried Couple</td>
<td>8.8%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Educational Attainment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Never Attended School/Attended Kindergarten Only</td>
<td>0.0%</td>
</tr>
<tr>
<td>Grade 1 through 8 (Elementary)</td>
<td>1.3%</td>
</tr>
<tr>
<td>Grade 9 through 12 (Some High School)</td>
<td>6.9%</td>
</tr>
<tr>
<td>Grade 12 or GED (High School Graduate)</td>
<td>23.9%</td>
</tr>
<tr>
<td>College 1 Year to 3 Years (Some College or Technical School)</td>
<td>35.2%</td>
</tr>
<tr>
<td>College 4 Years or More (College Graduate)</td>
<td>32.7%</td>
</tr>
</tbody>
</table>
### Employment Status

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employed for Wages</td>
<td>62.6%</td>
</tr>
<tr>
<td>Self-Employed</td>
<td>5.3%</td>
</tr>
<tr>
<td>Out of Work for 1 Year or More</td>
<td>1.9%</td>
</tr>
<tr>
<td>Out of Work for Less Than 1 Year</td>
<td>1.9%</td>
</tr>
<tr>
<td>A Homemaker</td>
<td>3.4%</td>
</tr>
<tr>
<td>A Student</td>
<td>4.9%</td>
</tr>
<tr>
<td>Retired</td>
<td>15.1%</td>
</tr>
<tr>
<td>Unable to Work</td>
<td>4.9%</td>
</tr>
</tbody>
</table>

### Annual Household Income

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less Than $10,000</td>
<td>3.1%</td>
</tr>
<tr>
<td>$10,000 to Less Than $15,000</td>
<td>2.2%</td>
</tr>
<tr>
<td>$15,000 to Less Than $20,000</td>
<td>3.7%</td>
</tr>
<tr>
<td>$20,000 to Less Than $25,000</td>
<td>1.0%</td>
</tr>
<tr>
<td>$25,000 to Less Than $35,000</td>
<td>1.9%</td>
</tr>
<tr>
<td>$35,000 to Less Than $50,000</td>
<td>7.2%</td>
</tr>
<tr>
<td>$50,000 to Less Than $75,000</td>
<td>15.7%</td>
</tr>
<tr>
<td>$75,000 to Less Than $100,000</td>
<td>15.7%</td>
</tr>
<tr>
<td>$100,000 to Less Than $150,000</td>
<td>22.5%</td>
</tr>
<tr>
<td>$150,000 to Less Than $200,000</td>
<td>10.8%</td>
</tr>
<tr>
<td>$200,000 or More</td>
<td>9.8%</td>
</tr>
<tr>
<td>Don’t Know</td>
<td>6.1%</td>
</tr>
</tbody>
</table>

### Location or Residence in County

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crystal Lake</td>
<td>26.1%</td>
</tr>
<tr>
<td>McHenry</td>
<td>14.7%</td>
</tr>
<tr>
<td>Woodstock</td>
<td>11.5%</td>
</tr>
<tr>
<td>Southeast</td>
<td>31.0%</td>
</tr>
<tr>
<td>Rural West</td>
<td>7.3%</td>
</tr>
<tr>
<td>Rural Northeast</td>
<td>9.4%</td>
</tr>
</tbody>
</table>

### Neighborhood Description

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>1.7%</td>
</tr>
<tr>
<td>Suburban</td>
<td>80.1%</td>
</tr>
<tr>
<td>Rural</td>
<td>18.2%</td>
</tr>
</tbody>
</table>
Information Gaps
While this assessment is comprehensive, it cannot measure all possible aspects of health in the community, nor can it adequately represent all possible populations of interest. It must be recognized that these information gaps might, in some ways, limit the ability to assess all the community’s health needs. In terms of content, this assessment was designed to provide a comprehensive and broad picture of the health of the overall community.

Community Health Council
Following completion of the CHNA, NM NWR Leadership convened the Community Health Council (CHC) to review the findings. This multidisciplinary committee was made up of key internal stakeholders who were selected based on strong collaborative efforts to improve the health of the community, including medically underserved, minority and low-income populations. Departments represented and rationale is as follows:

<table>
<thead>
<tr>
<th>NM NWR Department</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>External and Community Affairs</td>
<td>Knowledge of community relationships, data and hospital resources</td>
</tr>
<tr>
<td>Analytics</td>
<td>Knowledge of patient data, IS systems and analytics</td>
</tr>
<tr>
<td>Case Management</td>
<td>Knowledge of social determinants of health, patient barriers and community resources</td>
</tr>
<tr>
<td>Emergency Medicine</td>
<td>Knowledge of patient needs, social determinants of health and local emergency medical resources</td>
</tr>
<tr>
<td>Hospital Operations</td>
<td>Knowledge of hospital and staff operations</td>
</tr>
<tr>
<td>Human Resources</td>
<td>Knowledge of diversity and inclusion strategies</td>
</tr>
<tr>
<td>Medical Staff</td>
<td>Knowledge of medical staff operations</td>
</tr>
<tr>
<td>Nursing</td>
<td>Knowledge of patients, barriers and community nursing</td>
</tr>
<tr>
<td>Philanthropy</td>
<td>Knowledge of community programming and fundraising opportunities</td>
</tr>
<tr>
<td>Process Improvement</td>
<td>Knowledge of process improvement strategies</td>
</tr>
<tr>
<td>Quality</td>
<td>Knowledge of hospital quality data and resources</td>
</tr>
<tr>
<td>Strategy</td>
<td>Knowledge of business development and strategies</td>
</tr>
</tbody>
</table>

Public Comment on Prior CHNAs
NM NWR Hospitals made their prior CHNA report publicly available through their websites. Through that mechanism, the hospitals requested from the public written comments and feedback regarding the CHNA and implementation strategy. At the time of this writing, had not received any written comments. Northwestern Medicine will continue to use its website as a tool to solicit public comments and ensure that these comments are considered in the development of future CHNAs.
CHNA overview and key findings

Presented below are data sets and key findings related to the McHenry County Healthy Community Study 2020 and other readily available public health data. This information, coupled with input from the community and key stakeholders, forms the basis for identification and prioritization of community needs presented at the conclusion of this document.

Community Description
McHenry County is in northeastern Illinois along the Wisconsin and Illinois border approximately 20 miles west of Lake Michigan, 20 miles northwest of Chicago O’Hare International Airport, 20 miles east of Rockford International Airport, and 35 miles southwest of Milwaukee General Mitchell International Airport. It is more than 611 miles square. In order of magnitude, approximately 61 percent of the county is agricultural, 16 percent is residential, 11 percent is designated open space (parks, golf courses, neighborhood open space), 2 percent is government/institutional, 1 percent is mining (gravel pits), 1 percent is industrial, and 1 percent is commercial. More than 5 percent of the county is considered vacant. The county is also located within a region that is strategically advantageous to many industries.1

Demographics
Population Shift
A significant positive or negative shift in the total population over time impacts healthcare providers and the utilization of community resources. Between the 2000 and 2010 U.S. census, the population of McHenry County increased by 48,683 persons, or 18.7 percent. This reflects an increase significantly greater than state or national trends.

1 McHenry County Government
Age
It is critical to understand the age distribution within the service area as different age groups have unique health needs that must be considered when planning a response to community need. It is widely accepted that the U.S. population in general will be shifting with the aging out of the “baby boomer” population. However, in McHenry County, 24.6 percent of residents are children age 0 to 17; another 62.5 are age 18 to 64, while only 12.9 percent are age 65 and older. Additionally, the median age in McHenry County (39.9 years) is slightly older than that of Illinois (37.7) and the U.S. (37.8).

Gender, Race, and Ethnicity
50.2 percent of the population is female according to the U.S. Census Bureau (2019).^2^ When looking at race independent of ethnicity (Hispanic or Latino origin), 92.4 percent of residents in McHenry County are White, 2.7 percent are Asian and 1.3 percent are Black. This distribution is notably much less diverse than both state and national data. Additionally, a total of 12.5 percent of McHenry County residents are Hispanic or Latino, once again significantly below state and national data. It is notable, however, that the Hispanic population increased by more than 15,000 persons (79.8 percent) between 2000 and 2010.
Linguistic Isolation
A total of 2.0 percent of McHenry residents age 5 and older live in a home in which no person age 14 or older is proficient in English. This is lower than state (4.4 percent) and national (4.4 percent) reports.

Social Determinants of Health
Healthy People 2020 emphasizes that health starts in the home, schools, workplaces, neighborhoods and communities. Health is determined in part by access to social and economic opportunities; the resources available in neighborhoods and communities; quality of schools; safety of workplaces; cleanliness of water, food and air; and the nature of social interaction and relationships with others.

Poverty
The latest census estimate shows 7.3 percent (22,339) of McHenry County residents live below the poverty level; 9.9 percent (7,415) are children age 17 or younger.

Education
Among McHenry County residents age 25 and older, an estimated 7.3 percent (almost 15,000 people) do not have a high school education.
Employment
The unemployment rate in McHenry County was comparable to Illinois and the U.S. at the end of 2019.

Housing
In 1981, the federal government set a standard recommending that individuals spend no more than 30 percent of monthly gross income on housing. It was noted that those who spend more than 30 percent of their income on housing become “cost burdened,” thereby limiting the amount of spending for other personal needs. In McHenry County, 10.8 percent of residents self-reported that during the past year they were unable to pay their mortgage, rent or utility bills. This is less favorable than the national percentage rate of 8.1 percent.3
General Health Status
A total of 12.1 percent of McHenry County adults believe that their overall health is “fair” or “poor.” This is less than proportions reported statewide and nationally.

Access to Health Care
Access to comprehensive, quality healthcare services is important for the achievement of health equity and for increasing the quality of a healthy life for everyone.

It impacts:

| Overall physical, social, and mental health status | Quality of life |
| Prevention of disease and disability | Preventable death |
| Detection and treatment of health conditions | Life expectancy |

Access to health services means the timely use of personal health services to achieve the best health outcomes. It requires three distinct steps:

1. Gaining entry into the healthcare system
2. Accessing a healthcare location where needed services are provided
3. Finding a healthcare provider with whom the patient can communicate and trust

Other barriers to health care include:

| High cost of care | Lack of availability of services |
| Inadequate or no insurance coverage | Lack of culturally competent care |

4 Healthy People 2020
The percentage of adults in McHenry County who have delayed needed medical care because of cost is 19.4 percent, which is less favorable than the Illinois (11.6 percent) and U.S. (13.0 percent) findings. In addition, women are more likely to have delayed needed medical care because of cost. The percentage of adults in McHenry County who have delayed needed medical care because of cost decreases with age. Those with low incomes as well as those who are from a race other than White are more likely to have delayed medical care because of cost.

Note: Low Income includes respondents with household incomes below 200 percent of the Federal Poverty Level; Mid/High Income includes respondents with household incomes at 200 percent or more of the Federal Poverty Level.5

---

5 McHenry County Healthy Community Study 2020
The most frequent reason other than cost given by adults in McHenry County why they delayed getting needed medical care in the past year was that they could not get an appointment soon enough. Among adults in McHenry County who self-reported that they are more likely to have delayed needed medical care because they could not get an appointment soon enough, 28.9 percent were Hispanic.\textsuperscript{6}

**Housing**

Housing instability encompasses a number of challenges, such as trouble paying rent, overcrowding, moving frequently, staying with relatives, or spending of household income on housing expenses.

Households are considered to be cost burdened if they spend more than 30 percent of their income on housing and severely burdened if they spend more than 50 percent of their income on housing. Cost-burdened households have little left over each month to spend on other necessities, such as food, clothing, utilities and health care.\textsuperscript{7}

Survey respondents in McHenry County that are Hispanic (7.1 percent) are less likely to select access to affordable housing as a strength of McHenry County.\textsuperscript{8}

\textsuperscript{6} McHenry County Healthy Community Study 2020
\textsuperscript{7} Healthy People 2020
\textsuperscript{8} McHenry County Healthy Community Study 2020
## Preventive Health Services Received in the Past Year According to Housing Security, Food Security and Health Insurance Coverage

<table>
<thead>
<tr>
<th></th>
<th>Housing Secure</th>
<th>Housing Insecure</th>
<th>Food Secure</th>
<th>Food Insecure</th>
<th>Insured</th>
<th>Uninsured</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wellness Visit(s)</td>
<td>74.5%</td>
<td>62.2%</td>
<td>74.9%</td>
<td>60.7%</td>
<td>76.2%</td>
<td>66.0%</td>
</tr>
<tr>
<td>Dental Cleaning</td>
<td>71.1%</td>
<td>54.7%</td>
<td>73.7%</td>
<td>46.3%</td>
<td>69.2%</td>
<td>70.8%</td>
</tr>
<tr>
<td>Preventative Screening</td>
<td>62.2%</td>
<td>40.0%</td>
<td>61.4%</td>
<td>45.4%</td>
<td>63.8%</td>
<td>29.8%</td>
</tr>
<tr>
<td>Flu Shot of Vaccination</td>
<td>58.1%</td>
<td>36.5%</td>
<td>59.3%</td>
<td>41.7%</td>
<td>58.9%</td>
<td>31.3%</td>
</tr>
<tr>
<td>Mental Health Education/Screening</td>
<td>20.7%</td>
<td>22.9%</td>
<td>16.3%</td>
<td>38.5%</td>
<td>21.6%</td>
<td>14.3%</td>
</tr>
<tr>
<td>Other Annual Vaccination</td>
<td>14.8%</td>
<td>11.0%</td>
<td>14.8%</td>
<td>12.1%</td>
<td>16.0%</td>
<td>2.1%</td>
</tr>
</tbody>
</table>

Less likely to have received preventative health service
**Caregiver Support**

The percentage of adults in McHenry County who provide care for individuals who are aged, infirm, or frail is the same as the national findings. However, the percentages of adults in McHenry County who provide care for individuals with a mental health illness, developmental disabilities, or arthritis or rheumatism are higher than the national findings. The percentages of adults in McHenry County who provide care for individuals with dementia or other cognitive impairment disorder, heart disease or hypertension are lower than the national findings.\(^9\)

### Main Health Problem, Long-Term Illness, or Disability of Person Cared For Comparison of McHenry County With U.S.

<table>
<thead>
<tr>
<th>Main Health Problem/Long-Term Illness/Disability</th>
<th>McHenry County</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Old Age/Infirmity/Frailty</td>
<td>13.0%</td>
<td>13.0%</td>
</tr>
<tr>
<td>Mental Health Illness</td>
<td>12.1%</td>
<td>5.6%</td>
</tr>
<tr>
<td>Injuries, Including Broken Bones</td>
<td>8.5%</td>
<td>7.7%</td>
</tr>
<tr>
<td>Arthritis/Rheumatisim</td>
<td>7.9%</td>
<td>3.3%</td>
</tr>
<tr>
<td>Developmental Disabilities</td>
<td>7.3%</td>
<td>4.7%</td>
</tr>
<tr>
<td>Cancer</td>
<td>6.6%</td>
<td>8.5%</td>
</tr>
<tr>
<td>Chronic Respiratory Condition</td>
<td>4.3%</td>
<td>3.7%</td>
</tr>
<tr>
<td>Dementia/Other Cognitive Impairment Disorders</td>
<td>4.2%</td>
<td>9.6%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>3.4%</td>
<td>3.9%</td>
</tr>
<tr>
<td>Other Organ Failure or Diseases</td>
<td>3.0%</td>
<td>2.2%</td>
</tr>
<tr>
<td>Heart Disease/Hypertension</td>
<td>2.6%</td>
<td>7.9%</td>
</tr>
<tr>
<td>Asthma</td>
<td>0.0%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Substance Abuse</td>
<td>0.0%</td>
<td>0.2%</td>
</tr>
<tr>
<td>HIV</td>
<td>0.0%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Other</td>
<td>27.1%</td>
<td>26.8%</td>
</tr>
</tbody>
</table>

\(^9\) McHenry County Healthy Community Study 2020
**Chronic Disease**

Chronic disease is a serious problem in the U.S. More people than ever are being diagnosed with a chronic disease, which affects people of every age, race and income level. Chronic disease affects every person differently. Some chronic diseases are disabling or require major lifestyle changes. Other diseases can be managed over time. In most cases, a chronic disease affects every aspect of a person’s life, including physical and mental health, family, social life, finances and employment. Chronic diseases can also shorten a person’s life. This is especially true if the disease is not diagnosed and treated properly.

**Arthritis**

There are more than 100 types of arthritis and they can have major effects on quality of life, the ability to work and basic activities of daily living. Arthritis affects one in five adults and continues to be the most common cause of disability.\(^{10}\)

Among respondents in the McHenry County Healthy Community Study, 28.7 percent self-reported that they had been told by a doctor, nurse or health professional they had arthritis.\(^{11}\)

**Asthma**

The prevalence of asthma has increased since 1980. However, deaths from asthma have decreased since the mid-1990s.

Risk factors for asthma currently being investigated include:

- Having a parent with asthma
- Respiratory infections during childhood
- Sensitization to irritants and allergens
- Overweight
- Overweight

Asthma affects people of every race, sex and age. However, significant disparities in asthma morbidity and mortality exist, particularly for low-income and minority populations.

\(^{10}\) Healthy People 2020
\(^{11}\) McHenry County Healthy Community Study 2020
Populations with higher rates of asthma include:

- Children
- Women (among adults) and boys (among children)
- Black Americans
- Puerto Ricans
- People living below the Federal Poverty Level
- Employees with certain exposures in the workplace

While there is currently no cure for asthma, diagnoses and treatment guidelines are available to help all people with asthma live full and active lives.\(^{12}\)

According to the McHenry County Community Study 2020, 14.6 percent of McHenry County residents have been told by their physician that they have asthma. Additionally, 10.8 percent of McHenry County residents with asthma are age 17 or younger.

**Cardiovascular Disease**

Heart disease is the leading cause of death in the U.S. and in McHenry County. Controlling risk factors for heart disease continues to be a challenge. Risk factors like high blood pressure and cholesterol, smoking, diabetes, unhealthy diet and excess weight cause changes in heart and blood vessels that can lead to a heart attack, heart failure or stroke.\(^{13}\)

### Prevalence of Physical and Mental Health Conditions/Diseases

**McHenry County Compared With Illinois and U.S.**

<table>
<thead>
<tr>
<th>Physical or Mental Health Condition/Disease</th>
<th>McHenry County</th>
<th>Illinois</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Blood Pressure</td>
<td>37.3%</td>
<td>33.2%</td>
<td>33.4%</td>
</tr>
<tr>
<td>Arthritis</td>
<td>28.7%</td>
<td>24.8%</td>
<td>25.7%</td>
</tr>
<tr>
<td>Mental Health Disorder</td>
<td>17.8%</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Asthma</td>
<td>14.6%</td>
<td>13.1%</td>
<td>14.5%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>11.8%</td>
<td>10.0%</td>
<td>11.4%</td>
</tr>
<tr>
<td>Dental disease</td>
<td>11.7%</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Cancer</td>
<td>9.1%</td>
<td>10.7%</td>
<td>11.7%</td>
</tr>
</tbody>
</table>

12 Healthy People 2020
13 Healthy People 2020
Prevalence of Physical and Mental Health Conditions/Diseases  (continued)
McHenry County Compared With Illinois and U.S.

<table>
<thead>
<tr>
<th>Condition</th>
<th>McHenry County (%)</th>
<th>Illinois (%)</th>
<th>U.S. (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angina/Coronary Heart Disease</td>
<td>7.6%</td>
<td>3.4%</td>
<td>4.3%</td>
</tr>
<tr>
<td>Autoimmune Disease</td>
<td>6.4%</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>COPD, Emphysema or Chronic Bronchitis</td>
<td>5.8%</td>
<td>6.6%</td>
<td>6.8%</td>
</tr>
<tr>
<td>Kidney Disease</td>
<td>4.9%</td>
<td>3.6%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Heart Attack/Myocardial Infarction</td>
<td>4.5%</td>
<td>4.1%</td>
<td>4.6%</td>
</tr>
<tr>
<td>Stroke</td>
<td>4.3%</td>
<td>3.5%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Sexually Transmitted Infection</td>
<td>3.8%</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Other</td>
<td>19.1%</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

Diabetes
Diabetes mellitus occurs when the body cannot produce or respond appropriately to insulin. Insulin is a hormone that the body needs to absorb and use glucose (sugar) as fuel for the body’s cells. Without a properly functioning insulin signaling system, blood glucose levels become elevated and other metabolic abnormalities occur, leading to the development of serious, disabling complications. In McHenry County, 11.8 percent of residents have been diagnosed with diabetes.\(^{14}\)

Effective therapy can prevent or delay diabetic complications. Diabetes:

- Lowers life expectancy by up to 15 years
- Increases the risk of heart disease by two to four times
- Is the leading cause of kidney failure, lower limb amputations and adult-onset blindness

People from minority populations are more frequently affected by Type 2 diabetes. Minority groups constitute 25 percent of all adult patients with diabetes in the U.S. and represent the majority of children and adolescents with Type 2 diabetes. Lifestyle change has been proven effective in preventing or delaying the onset of Type 2 diabetes in high-risk individuals.\(^{15}\)

14 McHenry County Healthy Community Study 2020
15 Healthy People 2020
Hypertension
Blood pressure is determined both by the amount of blood your heart pumps and the amount of resistance to blood flow in your arteries. The more blood your heart pumps and the narrower the arteries, the higher the blood pressure. High blood pressure generally develops over many years, and it affects nearly everyone eventually. High blood pressure is easily detected and can be controlled. According to the McHenry County Healthy Community Study, 37.3 percent self-reported that they had been told by a health care provider they had high blood pressure.

Obesity
Obesity is a growing problem throughout the population. According to the McHenry County Healthy Community Study, 34.8 percent of the population is considered obese. Among adults, the prevalence is highest for middle-aged people and for non-Hispanic Black and Mexican-American women. Among children and adolescents, the prevalence of obesity is highest among older and Mexican-American children and non-Hispanic Black girls. The association of income with obesity varies by age, gender and race/ethnicity. Interventions that promote opportunities for physical activity can help prevent unhealthy weight gain or facilitate weight loss among obese people. They can be delivered in multiple settings, including healthcare settings, worksites or schools.

Prevalence of Physical and Mental Health Conditions/Diseases

<table>
<thead>
<tr>
<th>Condition/Disease</th>
<th>Percent Told Had Condition/Disease</th>
</tr>
</thead>
<tbody>
<tr>
<td>High blood pressure</td>
<td>37.3%</td>
</tr>
<tr>
<td>Arthritis</td>
<td>28.7%</td>
</tr>
<tr>
<td>Mental health disorder</td>
<td>17.8%</td>
</tr>
<tr>
<td>Asthma</td>
<td>14.6%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>11.8%</td>
</tr>
<tr>
<td>Dental disease</td>
<td>11.7%</td>
</tr>
<tr>
<td>Cancer</td>
<td>9.1%</td>
</tr>
<tr>
<td>Angina/coronary heart disease</td>
<td>7.6%</td>
</tr>
<tr>
<td>Autoimmune disease</td>
<td>6.4%</td>
</tr>
<tr>
<td>COPD, emphysema or chronic bronchitis</td>
<td>5.8%</td>
</tr>
<tr>
<td>Kidney disease</td>
<td>4.9%</td>
</tr>
<tr>
<td>Heart attack/myocardial infarction</td>
<td>4.5%</td>
</tr>
<tr>
<td>Stroke</td>
<td>4.3%</td>
</tr>
<tr>
<td>Sexually transmitted infection</td>
<td>3.8%</td>
</tr>
<tr>
<td>Other condition</td>
<td>19.1%</td>
</tr>
</tbody>
</table>

16 Healthy People 2020
**Maternal Child Health**

Infant and child health are similarly influenced by socio-demographic factors, such as family income, but are also linked to the physical and mental health of parents and caregivers. There are racial and ethnic disparities in mortality and morbidity for mothers and children, particularly for Blacks. These differences are likely the result of many factors, including social determinants (such as racial and ethnic disparities in infant mortality, family income, educational attainment among household members, and health insurance coverage) and physical determinants (i.e., the health, nutrition, and behaviors of the mother during pregnancy and early childhood).

Nearly three out of ten (28 percent) respondents listed screening, early intervention, and developmental services as a top health concern for resident 0-4 years of age. Immunizations were another commonly cited concern, listed by 22 percent of respondents.\(^\text{17}\)

**Infectious Disease**

McHenry County residents were asked if they have ever been tested for HIV. Of the respondents surveyed, 76.5 percent had not been tested. Which is lower than the Illinois average of 33.1 percent and national average of 38.9 percent.\(^\text{18}\)
McHenry County residents that responded to the question if they have ever been experienced an HIV Risk Situation.

![McHenry County Respondents that have experienced a HIV Risk Situation](image)

**Sexually Transmitted Infections**
The spread of Sexually Transmitted Infections (STIs) is directly affected by social, economic, and behavioral factors. Such factors may cause serious obstacles to STI prevention due to their influence on social and sexual networks, access to and provision of care, willingness to seek care, and social norms regarding sex and sexuality. Among certain vulnerable populations, historical experience with segregation and discrimination exacerbates these factors. Social, economic, and behavioral factors that affect the spread of STIs include: racial and ethnic disparities, poverty and marginalization, access to healthcare, substance abuse, sexuality and secrecy (stigma and discomfort discussing sex) and sexual networks (persons “linked” by sequential or concurrent sexual partners). (Source: Healthy People 2020)

In 2016, the chlamydia incidence rate in McHenry County was 231 cases per 100,000 population. Additionally, the county gonorrhea incidence rate was 29.3 cases per 100,000 population. Each rate was significantly below state and national rates.19

**Injury & Violence**
McHenry County residents’ perspectives on injury and violence concerns in the community. Hispanics (30.0 percent) are more likely to select accidental injuries as an important health concern in McHenry County. According to The County Health Rankings there were fifty-eight deaths in McHenry County reported from 2014-2018 due to injury, lower than the Illinois and national averages.20

19 CDC, National Center for HIV/AIDS/STD Prevention
20 County Health Rankings 2019
Food Insecurity and Food Access

Food insecurity is defined as a disruption of food intake or eating patterns because of lack of money and other resources. Food insecurity may be long term or temporary, and it may be influenced by many factors including income, employment, underemployment, unemployment, race/ethnicity and disability.

In some instances, where individuals live may affect physical access to food. For example, people living in urban, rural and low-income areas may have limited access to full-service grocery stores. Communities that lack affordable and nutritious food are commonly known as “food deserts.”

The adults in McHenry County who are more likely to have worried often or sometimes that their food would run out before they got money to buy more include women, those with low household incomes and Hispanic residents.

Mental Health

Anxiety

An estimated 19.1 percent of U.S. adults had an anxiety disorder in the past year. In McHenry County, 20.4 percent of residents, self-reported having felt worried, tense or anxious on 14 or more days in the past month. Anxiety disorders can interfere with daily activities such as job performance, school work and relationships.

In McHenry County, 24.9 percent of adults self-reported that they have been told they had anxiety. A total of 17.1 percent self-reported that they have been told they had depressive disorder, and 10.9 percent have been told they had panic disorder.

21 Healthy People 2020
22 McHenry County Healthy Community Study 2020
23 National Institute on Mental Health
24 McHenry County Healthy Community Study 2020
Depression
Depression is a common but serious mood disorder. It causes severe symptoms that affect how a person feels, thinks and handles daily activities, such as sleeping, eating, or working. Nearly sixteen percent of McHenry County residents self-reported having felt sad, blue or depressed on 14 or more days in the past month.25

When asked how many people in their household other than themselves have been told by a doctor, nurse, or other health professional they had any of the 13 mental health, substance abuse and developmental disabilities, conditions or disorders, anxiety was the highest reported.26

<table>
<thead>
<tr>
<th>Mental Health, Substance Abuse or Developmental Disabilities Condition/Disorder</th>
<th>All Ages</th>
<th>0-17 Years of Age</th>
<th>18-64 Years of Age</th>
<th>65+ Years of Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>21.9%</td>
<td>12.6%</td>
<td>25.1%</td>
<td>18.6%</td>
</tr>
<tr>
<td>Depressive Disorder</td>
<td>11.4%</td>
<td>5.6%</td>
<td>13.5%</td>
<td>8.8%</td>
</tr>
<tr>
<td>ADD or ADHD</td>
<td>9.0%</td>
<td>12.3%</td>
<td>9.3%</td>
<td>2.8%</td>
</tr>
<tr>
<td>Panic Disorder</td>
<td>6.9%</td>
<td>1.9%</td>
<td>9.1%</td>
<td>2.7%</td>
</tr>
<tr>
<td>Obsessive-Compulsive Disorder</td>
<td>4.2%</td>
<td>1.8%</td>
<td>4.5%</td>
<td>8.0%</td>
</tr>
<tr>
<td>Developmental Delay or Disabilities</td>
<td>3.9%</td>
<td>6.3%</td>
<td>3.5%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Alcohol or Substance Abuse</td>
<td>3.5%</td>
<td>0.0%</td>
<td>4.6%</td>
<td>2.2%</td>
</tr>
<tr>
<td>Bipolar Disorder</td>
<td>3.4%</td>
<td>2.0%</td>
<td>3.6%</td>
<td>4.0%</td>
</tr>
<tr>
<td>Post-Traumatic Stress Disorder</td>
<td>3.2%</td>
<td>0.4%</td>
<td>3.9%</td>
<td>2.5%</td>
</tr>
<tr>
<td>Autism Spectrum Disorder</td>
<td>1.9%</td>
<td>3.8%</td>
<td>1.7%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Eating Disorder</td>
<td>1.7%</td>
<td>0.0%</td>
<td>2.0%</td>
<td>2.8%</td>
</tr>
<tr>
<td>Phobias</td>
<td>0.9%</td>
<td>1.1%</td>
<td>1.0%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Schizophrenia</td>
<td>0.4%</td>
<td>0.0%</td>
<td>0.5%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Other</td>
<td>1.3%</td>
<td>0.7%</td>
<td>1.5%</td>
<td>0.9%</td>
</tr>
</tbody>
</table>

25 National Institute on Mental Health
26 McHenry County Healthy Community Study 2020
Racial and Ethnic Disparities
Disparity is often defined as a difference in which individuals have persistently experienced disadvantage or discrimination based on race, ethnicity, gender identity, geographic location, culture and socioeconomic status.

Half of survey respondents identified socioeconomic status as being of most concern for McHenry County, followed by racial, ethnic, language and cultural disparities (46 percent).  

Substance Use Disorders
Survey respondents were asked to rate how much of a problem each of the six types of lifestyle issues are in McHenry County. More than half (55 percent) of respondents stated that e-cigarette use and vaping are major problems in McHenry County, the highest of the six types of lifestyle issues asked about. The second highest issue of concern was alcohol use, named by 38 percent of respondents.
Among residents age 18 to 29, 61 percent reported substance abuse is the biggest health concern, the most frequently mentioned health concern for this age group.

Alcohol and Drugs
In 2018, an estimated 164.8 million people (60.2 percent) age 12 or older in the U.S. used tobacco, alcohol or illicit drugs in the last month. Substance use affects millions of adolescents and adults, and contributes heavily to the burden of disease.29

The percentage of adults who indicate alcohol/drug abuse is an important health concern in McHenry County decreases as age increases.30

- Age 18 to 39, 53 percent
- Age 40 to 64, 35 percent
- Age 65 or older, 17 percent

29 Substance Abuse and Mental Health Services Administration
30 McHenry County Healthy Community Study 2020
Tobacco and e-cigarettes

Tobacco use is the largest preventable cause of death and disease in the U.S. Smoking-related illnesses in the U.S. cost more than $300 billion each year, including nearly $170 billion for direct medical care for adults and more than $156 billion in productivity. Many risk factors influence tobacco use: race/ethnicity, age, education and socioeconomic status.

In McHenry County, 6.9 percent of adults currently use e-cigarettes. This is higher than the national findings (3.8 percent).  

31 McHenry County Healthy Community Study 2020
Interpreting and prioritizing health needs

A planned and structured process was used to facilitate prioritization of the identified health needs. The McHenry County Healthy Community Study was the primary data utilized in the process, along with a review of organizational guiding principles for response to community need.

Organizational guiding principles included:

Is there a demonstrated community need?
Will action impact vulnerable populations?
Does the identified health concern impact other community issues?

Availability of tested approaches or existing resources to address the issues

Can actionable goals be defined to address the health need?
Does the defined solution have specific and measurable goals that are achievable in a reasonable timeframe?

Opportunity for collective impact

Can the need be addressed in collaboration with community partners to achieve significant, long-term outcomes?
Are organizations already addressing the health concern?

Applicability of NM NWR Hospitals as a change agent (such as a partner, researcher or educator, or in a position to share knowledge or funding)

Do NM NWR Hospitals have the research or education expertise/resources that address the identified health concern?
Do NM NWR Hospitals have clinical services or other expertise/resources that address the identified health concern?
Estimated resources, timeframe and size of impacted populations

NM NWR Hospitals developed a timeline and process to engage the Community Health Council (CHC) and community stakeholders in prioritizing community needs. Based on the McHenry County Healthy Community Study and additional secondary data analysis, 19 top community health needs were identified.

1. Access to Health Care (Delayed Care Due to Cost)
2. Access to Health Care (No Available Appointments)
3. Affordable Housing
4. Caregiver Support
5. Chronic Disease (Arthritis)
6. Chronic Disease (Asthma)
7. Chronic Disease (Cardiovascular Disease)
8. Chronic Disease (Diabetes)
9. Chronic Disease (Hypertension)
10. Chronic Disease (Obesity)
11. Food Security and Food Access
12. Mental Health (Anxiety)
13. Mental Health (Depression)
15. Substance Use Disorders (Alcohol)
16. Substance Use Disorders (Drugs)
17. Substance Use Disorders (E-Cigarettes)
18. Substance Use Disorders (Tobacco)
19. Transportation

For each top community health need, an infographic was created that detailed the prevalence of the condition/issue, its morbidity and its mortality, making for easy comparison across needs. These infographics were distributed to the CHC with the following instructions for objective analysis:

**Magnitude**: How many people in the community are/will be impacted?

**Seriousness and Impact**: How does the identified need impact health and quality of life?

**Feasibility**: What capacity/assets currently exist to address the need?

**Consequences of Inaction**: What impact would inaction have on the population health of the community?

**Trend**: How has the need been changing over time?

Community Stakeholder Input in Prioritization

NM NWR Hospitals developed a survey tool to formally solicit input from organizations who are representative of the assessed community area, including those who serve medically underserved, low-income and minority populations, to begin the process of ranking priority health needs (defined as health needs that could be impacted the most by the work of NM NWR Hospitals and partner organizations).
Pairwise Survey I
May 21, 2020 through June 1, 2020, the survey tool (Pairwise Survey) was distributed to the following organizations:

- Advocate Aurora Health
- American Cancer Society
- AMITA Health
- Association for Individual Development
- Cary Police Department
- Cary School District 26
- Clearbrook
- Crystal Lake Food Pantry
- Epilepsy Foundation of North Central Illinois
- Family Health Partnership Clinic
- Fox River Fire District
- Fox River Grove School District 3
- Harvard Area Community Health Center
- Harvard Community School District 50
- Harvard Senior Center
- Home of the Sparrow
- Huntley Community School District 158
- In Sync Systems, Inc.
- Independence Health & Therapy
- Johnsburg School District 12
- League of United Latin American Citizens
- McHenry County Department of Health
- McHenry County Dental Society
- McHenry County Government
- McHenry County Housing Authority
- McHenry County Mental Health Board
- McHenry County Office of Special Projects
- McHenry County Planning & Development
- McHenry County School District 15
- McHenry County School District 154
- McHenry County School District 156
- McHenry County Sheriff
- McHenry County Substance Abuse Coalition
- Northern Illinois Special Recreation Association
- Northwest Center Against Sexual Assault
- Options and Advocacy
- PFLAG
- Pioneer Center for Human Services
- Prairie Grove School District 46
- Riley School District 18
- Rosecrance
- Sage YMCA
- Salvation Army Extension Unit
- Senior Care Volunteer Network
- Senior Services, Inc.
- The Mathers Clinic
- Turning Point
- United Way of Greater McHenry County
- Village of Bull Valley
- Village of Lake in the Hills
- Village of Port Barrington
- Village of Spring Grove
- Volunteer Center of McHenry County

The survey utilized a comparison technique that is the process of comparing needs in pairs to judge which need is preferred. By June 1, 2020, NM NWR Hospitals received more than 2,829 responses from key stakeholders representing 46 different community organizations. The results from the initial Pairwise Survey allowed for the 19 identified priorities to be further narrowed down to 12 for further consideration.
**Pairwise Survey II**

From June 2-4, 2020, the Pairwise Survey II consisted of 12 priorities for the CHC to consider. The 502 responses were compared to the McHenry County Key Stakeholder and the Modified Hanlon survey results to help prioritize potential needs.

**Modified Hanlon Method**

To objectively compare community health needs, NM NW Region Hospitals utilized a modified Hanlon method to assign scores to each need. The traditional Hanlon method considers four criteria of individual health problems:

- Size of the problem
- Seriousness of the problem
- Estimated effectiveness of the solution
- PEARL (propriety, economic feasibility, acceptability, resource availability and legality) factors

The modified method focuses only on the first two criteria (size and seriousness). To remove as much subjectivity as possible from the “seriousness” criteria, specific values are enumerated. Morbidity, mortality and equity were deemed to be the values that drive seriousness, allowing health equity to be incorporated into all future decisions throughout the process. A score value is assigned to the prevalence of the need, its morbidity, its mortality, health equity factors and its geographic comparability. At the end, an objective score is assigned and needs can be ranked.

<table>
<thead>
<tr>
<th>Northwest Region CHNA Needs ( Ranked)</th>
<th>Hanlon</th>
<th>Pairwise Survey I</th>
<th>Pairwise Survey II</th>
<th>Total</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to Care (Delayed Care Due to Cost)</td>
<td>8</td>
<td>6</td>
<td>10</td>
<td>24</td>
<td>3</td>
</tr>
<tr>
<td>Affordable Housing</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>Chronic Disease - Angina/Cardiovascular Disease</td>
<td>7</td>
<td>7</td>
<td>5</td>
<td>19</td>
<td>6</td>
</tr>
<tr>
<td>Chronic Disease - Diabetes</td>
<td>12</td>
<td>5</td>
<td>7</td>
<td>24</td>
<td>3</td>
</tr>
<tr>
<td>Chronic Disease - Hypertension</td>
<td>10</td>
<td>4</td>
<td>6</td>
<td>20</td>
<td>5</td>
</tr>
<tr>
<td>Chronic Disease - Obesity</td>
<td>11</td>
<td>9</td>
<td>4</td>
<td>24</td>
<td>3</td>
</tr>
<tr>
<td>Food Security and Food Access</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Mental Health - Anxiety</td>
<td>6</td>
<td>11</td>
<td>8</td>
<td>25</td>
<td>2</td>
</tr>
<tr>
<td>Mental Health - Depression</td>
<td>5</td>
<td>12</td>
<td>11</td>
<td>28</td>
<td>1</td>
</tr>
<tr>
<td>Racial and Ethnic Disparities</td>
<td>9</td>
<td>3</td>
<td>1</td>
<td>13</td>
<td>7</td>
</tr>
<tr>
<td>Substance Abuse - Alcohol</td>
<td>4</td>
<td>8</td>
<td>12</td>
<td>24</td>
<td>3</td>
</tr>
<tr>
<td>Substance Abuse - Drugs</td>
<td>2</td>
<td>10</td>
<td>9</td>
<td>21</td>
<td>4</td>
</tr>
</tbody>
</table>

*Hanlon Method Scale = 12 being high priority (most votes) and 1 being low priority (least votes)*

*Pairwise Survey Scale = 12 being high priority (most votes) and 1 being low priority (least votes)*

*Rank Results = Compilation of Hanlon and Pairwise Surveys, 1 being highest priority (most votes compiled) and 12 being lowest priority (least votes compiled)*
Ranking of Needs
On June 4, 2020, the NM NWR Community Health Council (CHC) was asked to review the information collected in the McHenry County Healthy Community Study, the infographics, the Pairwise surveys, the modified Hanlon method and group discussions to rank the needs into priorities.

An identified need is not addressed if NM NWR Hospitals are not best positioned to help due to the following situations:

- NM NWR Hospitals have limited expertise, services or resources in the identified area of need
- Public health or other organizations typically address the need
- Other organizations have infrastructure and plans already in place to better meet the need
- Broader initiatives in the Implementation Plan will address or significantly impact the need

Additional Resources Available to Address the Significant Health Needs
A key component of the prioritization and planning process involves identifying existing healthcare resources that may already be offering programs designed to target a community need. This minimizes the risk of duplication of services and provides opportunities for partnership with other organizations that may be best suited to take the lead in programming. For example, McHenry County has three Federally Qualified Health Centers and one free clinic that provide comprehensive primary care to underserved individuals and families. This provides an opportunity to work collaboratively with these organizations.
The following list represents potential measures and resources (such as programs, organizations and facilities in the community) identified by key informants as available to address the significant health needs identified in this report. This list only reflects input from participants in the Online Key Informant Survey and should not be considered to be exhaustive nor an all-inclusive list of available resources.

<table>
<thead>
<tr>
<th>A New Way of Life</th>
<th>Lifetime Fitness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advantage Group Foundation</td>
<td>Live4Lali</td>
</tr>
<tr>
<td>Advocate Aurora Health</td>
<td>Mathers Clinic</td>
</tr>
<tr>
<td>AID Community Mental Health Center</td>
<td>McHenry County Department of Health</td>
</tr>
<tr>
<td>American Cancer Society</td>
<td>McHenry County Mental Health Board</td>
</tr>
<tr>
<td>American Heart Association</td>
<td>McHenry County Parks and Recreation</td>
</tr>
<tr>
<td>Aunt Martha’s</td>
<td>McHenry County State’s Attorney</td>
</tr>
<tr>
<td>Behavioral Services</td>
<td>McHenry County Substance Abuse Coalition</td>
</tr>
<tr>
<td>Center for Emotional Wellness</td>
<td>Mercy Health McHenry</td>
</tr>
<tr>
<td>Community Education</td>
<td>National Alliance on Mental Illness</td>
</tr>
<tr>
<td>Community Health Clinic</td>
<td>New Directions Addictions Recovery Services</td>
</tr>
<tr>
<td>Community Health Partnership</td>
<td>Northern Illinois Rehab</td>
</tr>
<tr>
<td>Family Health Partnership Clinic</td>
<td>Northwestern Medicine</td>
</tr>
<tr>
<td>Farmers Markets</td>
<td>Northwestern Medicine Gavers Breast Center</td>
</tr>
<tr>
<td>Federally Qualified Health Centers</td>
<td>QPR Suicide Prevention Programming</td>
</tr>
<tr>
<td>Fire Services/EMS</td>
<td>Rosecrance McHenry County</td>
</tr>
<tr>
<td>Gavers Community Cancer Foundation</td>
<td>Veterans Services</td>
</tr>
<tr>
<td>Good Shepherd Cancer Center</td>
<td>Workforce Development</td>
</tr>
<tr>
<td>Home of the Sparrow</td>
<td>School Systems</td>
</tr>
<tr>
<td>Horizons Behavioral Health</td>
<td>Senior Services</td>
</tr>
<tr>
<td>Illinois Migrant Council</td>
<td>Sober Living Homes</td>
</tr>
<tr>
<td>Illinois Tobacco Quitline</td>
<td>Substance Abuse Coalition</td>
</tr>
<tr>
<td>Independence Health &amp; Therapy</td>
<td></td>
</tr>
</tbody>
</table>
Priority needs identified

Access to health care and providers is an important contributor to health, yet 80 percent of what makes people healthy occurs outside of a physician visit. This assessment embraces the social, cultural and environmental factors that collectively have a tremendous impact on health. When these factors are properly addressed and enhanced using an approach that focuses on health equity, we can ensure that all residents have a fair opportunity to achieve a high quality of life.

NM NWR has identified the priority health needs below that will enable us and our community partners to maximize the health benefits generated by our collective resources over the next few years. In selecting these priorities, we considered the degree of community health need, capacity and available resources of other agencies to meet the need, and the suitability of our own expertise and resources to address the need. We identified health needs that would be addressed through a coordinated response from a range of healthcare and community resources. We believe these health needs will be impacted through the integrated efforts of our organization and our community partners. NM NWR added a Social Determinant of Health subcategory, “Employment,” to the list. Given that NM NwR Hospitals combined are a leading employer in McHenry County, it seemed reasonable that we include this as a subcategory to be addressed.
Priorities identified and to be addressed

Access to Care

Leveraging relationships and resources to address access to care
• Through FQHC, free and residency clinic relationships, charity care
• Addressing chronic diseases through specialty care (cardiovascular disease, diabetes, hypertension and obesity)

Behavioral Health

Mental health – anxiety and depression
Substance use disorders – alcohol and drugs

Social Determinants of Health

Employment
Housing
Food security and food access
Racial and ethnic disparities
Priority health needs not addressed

It was decided that NM NWR Hospitals would eliminate Arthritis, Asthma, Caregiver Support, E-Cigarette and Tobacco Use, and Transportation from the list of priorities that we will address. We recognize that there are other community resources better positioned to address these priorities. We are available to support to these programs and services in the community as needed.
CHNA review and approval process

It is the policy of Northwestern Medicine to thoroughly review the completed CHNA. The approval process includes:

- Review and approval by NM Community Affairs Department
- Review and approval by local NM hospital president(s)
- Review and approval by NM CEO
- Review and approval by NM Regional Board of Directors

Key Dates

- Made available to the Public on August 31, 2020.
Development of Implementation Plan

NM NWR Hospitals will continue to work with the Community Health Council to develop a comprehensive Community Health Implementation Plan (CHIP) that addresses each priority health need. NM and its community health partners share a vision of a healthy community and are committed to working together to address significant health needs.

Through our affiliation with Northwestern Memorial HealthCare and sister organizations within Northwestern Medicine, we can support efforts to positively change the health status of our community by taking on a number of roles:

- A direct clinical service provider, through application of our clinical research and education expertise
- An educator, by sharing our knowledge of health literacy, quality improvement and information technology
- A supporter, by providing indirect support to organizations that can impact health
- A funder, by funding initiatives undertaken by others
Availability of CHNA to the community

A copy of the 2020 CHNA is available to the community online by August 31, 2020.

https://www.nm.org/about-us/community-initiatives/community-health-needs-assessment

Paper copies of the CHNA will be available upon request by contacting the Director of Community Health for NM NWR Hospitals and is available without charge. Additionally, the 2017 and 2019 Community Health Needs Assessment reports for Northwestern Medicine McHenry Hospital, Northwestern Huntley Hospital and Northwestern Medicine Woodstock are available upon request without charge.
Access to Healthcare Services

Access to comprehensive, quality healthcare services is important for the achievement of health equity and for increasing the quality of a healthy life for everyone. It impacts overall physical, social and mental health status; prevention of disease and disability; detection and treatment of health conditions; quality of life; preventable death; and life expectancy.

Improving healthcare services depends in part on ensuring that people have a usual and ongoing source of care. This is also known as having a medical home. People with a medical home have better health outcomes, and fewer disparities and costs.

Goal: Improve access to comprehensive, quality healthcare services.

Strategy: NMHH, NMMH and NMWH will offer financial assistance policies that are easily accessible, user-friendly and respectful, and meet all regulatory requirements. NMHH, NMMH and NMWH staff will track and report the number of individuals receiving financial assistance annually.

Outcome: NMHH, NMMH and NMWH approved Financial Assistance applications (1,769) plus the number of presumptive eligibility Financial Assistance recipients (1,445), or 3,214 total.
**Strategy:** NMHH, NMMH and NMWH leadership will continue representation on various task forces and workgroups related to the collaborative work occurring on access-to-care issues.

**Outcome:**
- NMHH, NMMH and NMWH leadership participates in monthly meeting with Aunt Martha’s FQHC, which provides health care to McHenry County’s most vulnerable populations. During these meetings, the joint committees discuss patient volumes, barriers to care, patient satisfaction results and any other issues that may arise during the year. In 2019, there were 1,233 primary care visits and 1,366 behavioral health visits at Aunt Martha’s.
- NMHH, NMMH and NMWH leadership receives an annual update from The Family Health Partnership Clinic (FHPC), specifically related to the number of referrals to NM NWR Hospitals. In 2019, 54 referrals were made to NM physicians and hospitals. Additionally, biweekly calls are in place for Patient Access to assist FHPC staff with enrollment in NM Financial Assistance programs.

---

**Strategy:** NMHH, NMMH and NMWH will provide operational grants to Aunt Martha’s and FHPC in support of their coordination of care for patients without insurance.

**Outcome:** Provision of an operational grant to Aunt Martha’s and FHPC will enable low-income McHenry County residents to afford and receive needed care.

---

**Strategy:** NMHH, NMMH and NMWH will serve as training centers for nursing and other allied health professions. Serving as a training center demonstrates an ongoing commitment towards the provision of a highly competent, culturally sensitive, future workforce.

**Outcome:** Local nursing and allied health professions training programs resulted in more than 30,000 clinical hours provided to students in training.

---

**Strategy:** NMHH, NMMH and NMWH will provide office space and support to the Senior Health Insurance Program (SHIP).

**Outcome:** SHIP will provide elderly people with Medicare counseling and support to facilitate their use of the healthcare system. During 2019, 650 individuals received counseling and enrollment assistance.
Chronic Disease

Cancer
Cardiovascular Disease
Diabetes

Chronic diseases are defined broadly as conditions that last one year or more and require ongoing medical attention, limit activities of daily living or both. Chronic diseases such as heart disease, cancer and diabetes are the leading causes of death and disability in the United States.

Goals:

- Reduce the number of new cancer cases, as well as disability and death caused by cancer.
- Improve cardiovascular health and quality of life through prevention, detection and treatment of risk factors for heart attack and stroke.
- Reduce the disease burden of diabetes mellitus (DM) and improve the quality of life for all persons who are at risk for DM.

Strategy: NMHH, NMMH and NMWH will host/offer evidence-based community health and wellness programming in the areas of cardiovascular and peripheral vascular disease, and diabetes. Program venues include clinician-led educational offerings, self-help groups, rehabilitation services programs and support groups.

Outcome: Conducted Heart Age Screenings and prevention education to McHenry County and regional area residents at the following locations:

- Marian Central High School Mobile Food Pantry: 10 staff hours and 18 people served
- Provided information to the under-30 population on healthy lifestyle/measures to prevent heart disease at the Health Care Career Fair at Woodstock High School: 1,400 people served
- Provided education on cardiac conditions and cardiovascular disease prevention to the community: 79 staff hours and 349 people served
- American Heart Association Instructor Training: 85 staff hours, 111 people served
- Emergency Medical Services Provider Continuing Education: 850 staff hours and 1,450 people served
- Provided free blood pressure screenings to the community
  - Huntley Chamber Expo: 28 staff hours, 1,000 people served and 26 blood pressure screenings performed
  - McHenry Chamber Expo: 18 staff hours, 1,500 people served and 32 blood pressure screenings performed
  - Crystal Lake Chamber Expo: 27 staff hours, 1,500 people served and 17 blood pressure and glucose screenings performed
  - Woodstock Chamber Expo: 18 staff hours, 170 people served and 21 blood pressure and glucose screenings performed
  - Del Webb Sun City Huntley monthly screenings: 125 people served
- Provided blood glucose screenings in the community
  - Crystal Lake Chamber Expo: 1,500 people served and 17 blood pressure and glucose screenings performed
  - Woodstock Chamber Expo: 170 people served and 21 blood pressure and glucose screenings performed
  - Glucose screening: 40 people served
- Del Webb Sun City Huntley screenings: 53 people served
  • Provided access to free educational and supportive group activities that are focused on healthy weight and healthy lifestyle for people living with diabetes
- Diabetes support group: 40 staff hours and 130 people served
- Community presentations on diabetes in April and May 2019: 60 people served
- School trainings for teachers and school nurses in February, April and August 2019: 56 people served
- Glucagon training: 30 people served
- Mental health and nutrition lecture: 5 staff hours and 60 people served
- IT lecture: 200 people served

Strategy: NMHH, NMMH and NMWH will host/offer evidence-based community health and wellness programming in cancer including, but not limited to, the topics of breast and colon cancer, brain tumors, proton therapy, yoga for patients with cancer, palliative care and hospice. Program venues include clinician-led educational offerings, self-help groups, rehabilitation services programs and support groups.

Outcome:
• Provided access points for distribution of free FOBT FIT Kits: 197 people served
• Conducted educational activities on skin cancer prevention at outdoor recreational areas and provided free sunscreen (SPF 15 or higher) to adults and children
  - 8 people served at Northwestern Medicine Crystal Lake Health & Fitness Center
  - 19 people served at the McHenry pool
  - 24 people served at the Woodstock pool
  - 27 people served at Northwestern Medicine Huntley Health & Fitness Center
• Provided sun protection brochures and posters using American Cancer Society Slip Slop Slap educational approach at community pools

Strategy: NMHH, NMMH and NMWH will offer the nationally recognized ThinkFirst Injury Prevention Program. NMHH, NMMH and NMWH staff will provide the community with an evidence-based program focusing on bike/helmet safety, child safety classes and car seat safety.

Outcome:
• Conducted 16 programs in McHenry County
• Reached 2,102 people
• Distributed 194 bicycle helmets
• Checked 17 car seats
• Distributed 1 car seat
Mental Health and Substance Abuse

Mental health is a state of successful performance of mental function, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt to change and cope with challenges. Mental health is essential to personal well-being, family and interpersonal relationships, and the ability to contribute to community or society.

Mental health and physical health are closely connected. Mental health plays a major role in people's ability to maintain good physical health. Mental illnesses, such as depression and anxiety, affect people's ability to participate in health-promoting behaviors. In turn, problems with physical health, such as chronic diseases, can have a serious impact on mental health and decrease a person's ability to participate in treatment and recovery.

Substance abuse has a major impact on individuals, families and communities. The effects of substance abuse are cumulative, significantly contributing to costly social, physical, mental and public health problems.

<table>
<thead>
<tr>
<th>These problems include:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teenage pregnancy</td>
</tr>
<tr>
<td>Human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS)</td>
</tr>
<tr>
<td>Other sexually transmitted infections (STIs)</td>
</tr>
<tr>
<td>Domestic violence</td>
</tr>
<tr>
<td>Child abuse</td>
</tr>
<tr>
<td>Motor vehicle crashes</td>
</tr>
<tr>
<td>Physical fights</td>
</tr>
<tr>
<td>Crime</td>
</tr>
<tr>
<td>Homicide</td>
</tr>
<tr>
<td>Suicide</td>
</tr>
</tbody>
</table>

Substance abuse refers to a set of related conditions associated with the consumption of mind- and behavior-altering substances that have negative behavioral and health outcomes. Social attitudes, and political and legal responses to the consumption of alcohol and illicit drugs make substance abuse one of the most complex public health issues. In addition to the considerable health implications, substance abuse has been a flashpoint in the criminal justice system and a major focal point in discussions about social values: People argue over whether substance abuse is a disease with genetic and biological foundations or a matter of personal choice.

Goals:
• Improve mental health through prevention and by ensuring access to appropriate, quality mental health services.
• Reduce substance abuse to protect the health, safety and quality of life for all, especially children.

Strategy: Increase awareness of existing mental health and substance abuse services in McHenry County.

Outcome:
• Provided information on mental health and substance abuse services at the Health Care Career Fair at Woodstock High School: 1,400 people served
• Mental health education at the People In Need Forum: 900 people served
• Miscellaneous community engagement and outreach: 200 people served
• Served on the McHenry County State of Addiction panel: 60 people served
• E-cigarette presentations: 1,415 people served
  - Prairie Grove Middle School
  - People in Need Forum
  - Alden/Hebron Middle and High School
  - Woodstock North High School
  - Evergreen Academy
  - Harvard High School
  - Marlowe Middle School
  - St. John's Church

**Strategy:** Partner with the McHenry County Mental Health Board to help reduce the number of deaths by suicide in McHenry County through an increase in the number of QPR trainings and attendees. Increase the number of support groups and attendees related to suicide and/or survivors of suicide.

**Outcome:**
• Provided monthly Question Persuade Refer (QPR) Training sessions from March to October 2019: 200 people served
• Participated in Suicide Day of Remembrance Event: 20 people served

**Strategy:** Help to support community-wide initiative to reduce the number of opioid-/heroin-related overdose deaths and adverse events.

**Outcome:**
• Participated in Suicide and Mental Health Recovery Conference: 317 people served
• Provided community presentations: 95 people served
• Presented at District 47 Parent University presentation on drug use signs, symptoms and types of drugs: 40 people served
Nutrition, Physical Activity and Weight

A healthy diet and active lifestyle are the best approach to preventing chronic disease and obesity. Among adults, physical activity can lower the risk of early death, coronary heart disease, stroke, high blood pressure, Type 2 diabetes, breast and colon cancer, falls and depression. Among children and adolescents, physical activity can improve bone health, improve cardiorespiratory and muscular fitness, decrease levels of body fat, and reduce symptoms of depression. For people who are inactive, even small increases in physical activity and increased access to fresh fruits and vegetables are associated with health benefits.

Goal: Increase access to fresh fruits and vegetables, increase physical activity and reduce obesity rates for McHenry County residents.

Strategy: NMHH, NMMH and NMWH will foster collaborations among McHenry County Department of Health, Family Health Partnership Clinic and area Farmers Market vendors. Individuals in these agencies will be screened for food insecurity and, when positively identified, will receive vouchers to purchase fresh fruits and vegetables at area Farmers Markets.

Outcome:
• Increased access to fresh fruits and vegetables for individuals screened positive for food insecurity through the NM NWR Hospitals Farmers Market Voucher Program.
  - 5,500 coupons distributed to McHenry County residents

Strategy: NMHH, NMMH and NMWH will support opportunities to promote physical activity kits to area schools and park districts to promote physical activity in youth ages 3 to 18.

Outcome: Funding provided to supply physical activity kits to area schools, including Marengo School District, consisting of three schools and 1,100 students, and Harvard School District, consisting of five schools and 2,500 students, during the 2019 - 2020 academic school year.
References

The following is a comprehensive list of the charts and displays included in this report, including data sources, years and accompanying notes.

**Key Informants: Relative Position of Health Topics as Problems in the Community**
(Key Informants, 2020)
Sources: Northern Illinois University Center for Governmental Studies Key Community Survey, Key Informant Survey, an Online Qualitative Survey of Teens and Adults and a Community Analysis.
Notes: Asked of all respondents.

**Total Population**
(Estimated Population, 2019)
Sources: U.S. Census Bureau Quick Facts
Retrieved April 2020 from [https://census.gov/quickfacts](https://census.gov/quickfacts)

**Change in Total Population**
(Percentage between 2000 and 2010)
Sources: U.S. Census Bureau Decennial Census (2000 - 2010).
Retrieved April 2020 from [https://census.gov](https://census.gov)
Notes: A significant positive or negative shift in the total population over time impacts healthcare providers and the utilization of community resources.

**Total Population by Age Groups, Percent**
Sources: U.S. Census Bureau American Community Survey 5-Year Estimates from CARES Engagement Network
Retrieved April 2020 from [https://engagementnetwork.org](https://engagementnetwork.org)
**Total Population by Race Alone, Percent**  
Sources: U.S. Census Bureau American Community Survey 5-Year Estimates from CARES Engagement Network  
Retrieved April 2020 from https://engagementnetwork.org

**Hispanic Population**  
Sources: U.S. Census Bureau American Community Survey 5-Year Estimates from CARES Engagement Network  
Retrieved April 2020 from https://engagementnetwork.org  
Notes: Origin can be viewed as the heritage, nationality group, lineage or country of birth of the person or the person’s parents or ancestors before their arrival in the United States. People who identify their origin as Hispanic, Latino or Spanish may be of any race.

**Linguistically Isolated Population**  
Sources: U.S. Census Bureau American Community Survey 5-Year Estimates from CARES Engagement Network  
Retrieved April 2020 from https://engagementnetwork.org  
Notes: This indicator reports the percentage of the population age 5 and older who live in a home in which no person age 14 or older speaks only English, or in which no person age 14 or older speaks a non-English language and speaks English “not very well.”

**Population in Poverty**  
(Populations Living Below the Poverty Level, 2013 - 2017)  
Sources: U.S. Census Bureau American Community Survey 5-Year Estimates from CARES Engagement Network  
Retrieved April 2020 from https://engagementnetwork.org  
Notes: Poverty is considered a key driver of health status. This indicator is relevant because poverty creates barriers to accessing health services, healthy food, and other necessities that contribute to poor health status.

**Population With No High School Diploma**  
(Population Age 25 and older Without a High School Diploma or Equivalent, 2013 - 2017)  
Sources: U.S. Census Bureau American Community Survey 5-Year Estimates from CARES Engagement Network  
Retrieved April 2020 from https://engagementnetwork.org  
Notes: This indicator is relevant because educational attainment is linked to positive health outcomes.

**Unemployment Rate**  
(Percent of Non-institutionalized Population Age 16+ Unemployed, Not Seasonally Adjusted)  
Sources: U.S. Department of Labor, Bureau of Labor Statistics, from CARES Engagement Network  
Retrieved April 2020 from https://engagementnetwork.org  
Notes: This indicator is relevant because unemployment creates financial instability and barriers to access including
insurance coverage, health services, healthy food and other necessities that contribute to poor health status.

**Housing Costs Exceed 30 Percent of Household Income**
Sources: U.S. Census Bureau, American Community Survey, from CARES Engagement Network
Retrieved April 2020 from https://engagementnetwork.org
Notes: This indicator reports the percentage of households where housing costs exceed 30 percent of total household income. This indicator provides information on the cost of monthly housing expenses for owners and renters. The information offers a measure of housing affordability and excessive shelter costs. The data also serve to aid in the development of housing programs to meet the needs of people at different economic levels.

**Access to Health Care**
(Percentage Who Have Delayed Needed Medical Care Because of Cost by Demographics)
Sources: McHenry County Healthy Community Study 2020
Notes: Low Income includes respondents with household incomes below 200 percent of the Federal Poverty Level; Mid/High Income includes respondents with household incomes at 200 percent or more of the Federal Poverty Level.

**Housing Instability**
Sources: Healthy People 2020, McHenry County Healthy Community Study 2020
Notes: Housing instability encompasses a number of challenges, such as trouble paying rent, overcrowding, moving frequently, staying with relatives, or spending of household income on housing expenses.

**Preventive Health Services**
(Services Received in the Past Year by Housing Security, Food Security and Health Insurance Coverage)
Sources: McHenry County Healthy Community Study 2020

**Caregiver Support**
(Main Health Problem, Long-Term Illness, or Disability of Person Cared For Comparison of McHenry County with U.S.)
Sources: McHenry County Healthy Community Study 2020

**Prevalence of Arthritis**
Sources: Healthy People 2020, McHenry County Healthy Community Study 2020
Notes: There are more than 100 types of arthritis, and they have major effects on quality of life, the ability to work and basic activities of daily living.

**Prevalence of Asthma**
Sources: Healthy People 2020, McHenry County Healthy Community Study 2020
Notes: While there is currently no cure for asthma, diagnoses and treatment guidelines can help all people with asthma live full and active lives.
Cardiovascular Disease
Sources: Healthy People 2020, McHenry County Healthy Community Study 2020
Notes: Risk factors like high blood pressure and cholesterol, smoking, diabetes, unhealthy diet and excess weight cause changes in the heart and blood vessels that can lead to heart attack, heart failure or stroke.

Physical and Mental Health Conditions/Diseases
(In Comparison with Illinois and U.S.)
Sources: McHenry County Healthy Community Study 2020

Prevalence of Diabetes
Sources: Healthy People 2020, McHenry County Healthy Community Study 2020
Notes: This indicator is relevant because diabetes is prevalent in the U.S.; it may indicate an unhealthy lifestyle and puts individuals at risk for further health issues.

Prevalence of Hypertension
Sources: McHenry County Healthy Community Study 2020
Notes: This indicator is relevant because coronary heart disease is a leading cause of death in the U.S. and is also related to high blood pressure, high cholesterol and heart attacks.

Prevalence of Obesity
Sources: Healthy People 2020, McHenry County Healthy Community Study 2020
Notes: Interventions that promote opportunities for physical activity can help prevent unhealthy weight gain or facilitate weight loss as well.

Food Insecurity and Food Access
(Worried Often or Sometimes Food Would Run Out Before Got Money to Buy More by Demographics)
Sources: Healthy People 2020, McHenry County Healthy Community Study 2020
Notes: This indicator reports the percentage of the population with low food access. Low food access is defined as living more than a half mile from the nearest supermarket, supercenter or large grocery store. This indicator is relevant because it highlights populations and geographies facing food insecurity.

Prevalence of Anxiety
(Percentage of McHenry County Residents Self-Reporting Having Felt Worried, Tense or Anxious)
Sources: McHenry County Healthy Community Study 2020, National Institute on Mental Health
Notes: Anxiety disorders can interfere with daily activities such as job performance, schoolwork and relationships.

Prevalence of Depression
(Percentage of McHenry County Residents Self-Reporting Having Sad, Blue or Depressed Days)
Sources: McHenry County Healthy Community Study 2020, National Institute on Mental Health
Notes: Depression can cause severe symptoms that affect how a person feels, thinks and handles daily activities, such as sleeping, eating or working.
Prevalence of Mental Health, Substance Abuse and Developmental Disabilities
(Percentage for All Individuals in Households by Age)
Sources: McHenry County Healthy Community Study 2020
Notes: Asked of all respondents.

Racial and Ethnic Disparities
(Health Disparities of Most Concern)
Sources: McHenry County Healthy Community Study 2020
Notes: Disparity is often defined as a difference in which individuals have persistently experienced disadvantage or discrimination based on race, ethnicity, gender identity, geographic location, culture or socioeconomic status.

Substance Use Disorders
(Lifestyle Issues in McHenry County)
Sources: McHenry County Healthy Community Study 2020
Notes: The six types of lifestyle issues that were asked about included e-cigarette use, alcohol use, lack of physical activity, cigarette smoking, marijuana use and chewing tobacco/snuff/snus use.

Perceptions of Health Concerns
(Residents Age 18 – 29)
Sources: McHenry County Healthy Community Study 2020
Notes: Asked of all respondents.

Alcohol and Drugs
Sources: McHenry County Healthy Community Study 2020, Substance Abuse and Mental Health Services Administration
Notes: Substance use or abuse affects millions of adolescents and adults, and contributes heavily to the burden of disease.

Tobacco and E-Cigarettes
(Percentage Currently Using E-Cigarettes by Demographics)
Sources: McHenry County Healthy Community Study 2020
Notes: Tobacco use is the largest preventable cause of death and disease in the U.S. Smoking-related illnesses in the U.S. cost more than $300 billion each year, including nearly $170 billion for direct medical care for adults and more than $156 billion in productivity. Many factors influence tobacco use, including race/ethnicity, age, education and socioeconomic status.