2021 Community Health Needs Assessment

Northwestern Medicine Delnor Hospital

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Priorities and key dates

2021 – 2023 Priorities:

- Access to Health Care and Community Resources
- Mental Health and Substance Use Disorders
- Chronic Disease
- Social Determinants of Health

Key dates

Adopted by the Northwestern Medicine Delnor Hospital Board of Directors on July 15, 2021*

Tax year 2020

Fiscal year 2021

Assessment time frame: September 2020-February 2021

Prioritization time frame: April 2021-May 2021

Open comment time frame: May 2021-June 2021

Made available to the public on August 31, 2021

*Note: A copy of the minutes documenting Board approval of the CHNA is available upon request.

Executive summary

Since 2007 Northwestern Medicine Delnor Hospital (NMDH) has formally completed a comprehensive Community Health Needs Assessment (CHNA) every three years, in accordance with federal IRS regulations §1.501(r)-3, thus allowing the hospital to better understand the population it serves as well as the health issues that are of greatest concern within its community. The goal of the CHNA is to assess the health needs of residents within the defined Community Service Area (CSA), identify and prioritize those needs, and identify resources potentially available to address priority health needs.

In 2020, NMDH partnered with Conduent Healthy Communities Institute (HCI) to conduct a systematic, data-driven approach to provide a CHNA that incorporated data from both quantitative and qualitative sources. After data collection and analysis, NMDH took additional steps to review and interpret findings, by soliciting community input and engaging community partners.

This process identified areas of opportunity for community health improvement. Significant health needs were identified across all socioeconomic groups, races and ethnicities, ages (over 18 years old) and genders. The assessment highlighted health disparities and needs that disproportionately impact people who are medically underserved and uninsured.

While many health needs were identified through the CHNA process, NMDH prioritized health needs of the largest magnitude, seriousness and trend, as well as those that would be best addressed through a coordinated response from a partnership of healthcare and community resources. Through the CHNA process, the 2021 NMDH prioritized significant health needs were identified as follows:

- Access to Health Care and Community Resources
- Chronic Disease
- Mental Health and Substance Use Disorders
- Social Determinants of Health

In collaboration with dedicated healthcare, social service, public health and policy organizations, NMDH will develop a three-year implementation plan, drawing on collective resources to make a positive impact on some of the most critical health needs of residents in its defined CSA. Information identified during the CHNA process will help NMDH determine how to best commit resources to address priority health needs that improve the health of its community.

Introduction

About Northwestern Memorial HealthCare

Northwestern Memorial HealthCare (NMHC) is committed to its mission to:

1. Provide quality medical care, regardless of the patient's ability to pa;
2. Transform medical care through clinical innovation, breakthrough research and academic excellence
3. Improve the health of the communities we serve

NMHC is a not-for-profit, integrated academic health system committed to serving a broad community. NMHC provides world-class care at 11 hospitals, three medical groups, and more than 200 diagnostic and ambulatory locations in communities throughout Chicago and the south, north, west and northwest suburbs, *one patient at a time*. NMHC hospitals are pillars in their respective communities and lead efforts to positively impact the health of the populations they serve. From facilitating collaborations with community partners to serving as major economic drivers, NMHC strengthens our communities.

About Northwestern Medicine

Working together as 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. Whether directly providing patient care or supporting those who do, every NM employee has an impact on the quality of the patient experience and the level of excellence we collectively achieve. This knowledge, expressed in our shared commitment to a single, patient-focused mission, unites us.

NM is a premier integrated academic health system where the patient comes first.

We are all caregivers or someone who supports a caregiver.

We are here to improve the health of our community.

We have an essential relationship with Feinberg.

We integrate education and research to continually improve excellence in clinical practice.

We serve a broad community and bring the best in medicine closer to where patients live and work.

About Northwestern Medicine Delnor Hospital

Northwestern Medicine Delnor Hospital (NMDH) is an acute-care, 159-bed community hospital in Geneva, Illinois. NMDH continues its longstanding commitment to provide quality clinical and patient-centered care to patients in Kane County and the Fox Valley region. NMDH provides comprehensive care through a medical staff of more than 600 physicians in 80 specialties. NMDH joined the health system in 2014, greatly expanding access to specialty care for its patients, including breakthrough clinical trials, all in the comfort of a community hospital setting. In FY20, NMDH treated patients through more than 8,000 inpatient admissions and nearly 38,000 emergency department visits.

NMHC's commitment to academic medicine has now brought expansion of medical education to the western suburbs. In 2019, NMDH welcomed the first class of physician trainees to the Northwestern McGaw Family Medicine Residency at Delnor. In FY20, the health system launched its second Pharmacy Residency Program at NMDH, which is the only program of its kind within 25 miles of the hospital. NMDH has established key partnerships to best serve the needs of its community and provided critical community support and leadership throughout the COVID-19 pandemic.

To best serve its community, NMDH often collaborates with local health and social service organizations on community-based initiatives. These collaborations were especially valuable in enabling NMDH to quickly respond to the community's need for personal protective equipment (PPE) and food during the onset of the COVID-19 pandemic. Together with its public health and community partners, NMDH continually works to meet the needs of its community by helping to address the social determinants of health and providing critically needed resources.

To best address the needs of our patients and community, NMDH collaborates with trusted community-based organizations throughout Kane County. Healthy communities are strong communities, and facilitating collaboration among organizations allows us to maximize the positive impact on our communities. We collaborate to identify and respond to priority health needs within our community and systematically reduce barriers to patient care services. Together, we have developed important initiatives to promote healthy lifestyles and minimize risk factors for heart disease, stroke and other chronic disease in addition to providing access to care for patients in our community who are disproportionately affected. NMDH has a longstanding history of caring for our community, and we are committed to upholding our promise to meaningfully improve access to high-quality health care and implement targeted programs that address significant health needs of the community.

To that end, NMDH has completed a comprehensive Community Health Needs Assessment (CHNA) to identify the significant health needs of residents in our community and will use this information to guide new initiatives and enhance existing efforts that improve the health of our community. As described in detail in this report, the goal of the CHNA was to implement a structured, data-driven approach to determine the health status, behaviors and needs of all residents in the NMDH Community Service Area. (The definition of this geographical boundary is described in depth in this report.) Through this assessment, we identified health needs that are prevalent among residents across all socioeconomic groups, races and ethnicities, as well as issues that highlight health disparities that disproportionately impact people who are medically underserved and uninsured.

Collective assets

Northwestern Memorial HealthCare, Northwestern Medicine and all West Region hospitals, including NMDH, work collaboratively to address the significant needs identified within our respective CHNAs. Leading-edge clinical care, a commitment to research, academic excellence and a commitment to the communities we serve provide the resources to address the identified health needs.

Acknowledgements

NMDH collaborated with Conduent Healthy Communities Institute (HCI) to support report development for its 2021 CHNA. HCI works with clients across the nation to drive community health improvement outcomes by assessing needs, developing focused strategies, identifying appropriate intervention programs, establishing monitoring systems and implementing performance evaluation processes. To learn more about Conduent HCI, please visit conduent.com/community-population-health/. The information contained within this report is extracted from the HCI *2021 Community Health Needs Assessment for Northwestern Medicine Delnor Hospital*. All analyses conducted by HCI for this CHNA report are presented without citations. Data presented from other sources is cited as footnotes throughout the CHNA report.

NMDH gratefully acknowledges the participation of a dedicated group of organizations that gave generously of their time and expertise to help guide this CHNA report. This group formed the basis for our External Community Health Council and were vital in assisting us in the community health needs prioritization process.

External Stakeholders	Populations Served and Social Determinants Addressed
Ravenswood Health and Wellness Center, and Advance Performance Pain & Wellness Center	General population
Rush Copley Medical Center	Health care, underserved populations, access to care
American Cancer Society	General population – cancer
Nutrition and wellness educator at University of Illinois	General population – nutrition
Professor, Health Studies, Nutrition and Dietetics, Northern Illinois University	Education, nutrition, health

External Stakeholders	Populations Served and Social Determinants Addressed
Kane County Department of Transportation (KDOT), Deputy Chief of Staff, Special Projects, Traffic Manager	Transportation, health and wellness
Northern Illinois Food Bank	Food insecurity
Visiting Nurse Association	Care for underserved populations
Kane County Health Department	General population, underserved populations, health and fitness, chronic disease, wellness
Aunt Martha's Youth Services	Federally Qualified Health Center (FQHC), care for underserved populations
Greater Elgin Family Care Center	FQHC, care for underserved populations
AMITA Health, Provena Mercy Medical Center	Health care, underserved populations, access to care, nutrition
Elgin Community College	Education
AMITA Health	Faith community nursing, health and wellness
KDOT Planning and Programming	Transportation, health and wellness
Waubonsee Community College	Education, wellness
Association for Individual Development	Behavioral health, developmental disabilities
Active Medical Center	Health care, access to care
Community Harvest Educational Foundation	Education
Advocate Health	Health care, underserved populations, access to care
American Heart Association	Heart disease and wellness
Fox Valley Park District	Physical activity, fitness, health
Kane County Bicycle and Pedestrian Coordinator	Health, fitness, exercise
Center for Diabetic Wellness, AMITA Health	Diabetes, underserved populations
Northern Illinois University	Population-focused care, education

External Stakeholders	Populations Served and Social Determinants Addressed
Upward Bound	Education program, GED completion
PADS Program, Elgin	Homeless population

Kane Health Counts

In 2011, Kane County Health Department (KCHD) implemented a collaborative Community Health Assessment (CHA) and Community Health Improvement Plan (CHIP) process. This process aimed to identify health priorities in the community and strategies to address them. Since then, KCHD has joined forces with five local hospitals—AMITA Health Mercy Medical Center, AMITA Health Saint Joseph Hospital, Northwestern Medicine Delnor Hospital, Rush Copley Medical Center, and Advocate Aurora Sherman—along with the INC Board, a mental health “708 Board” serving the southern part of Kane County and several community partners. With a mutual interest in improving the health of Kane County residents, this collaborative group was given the name Kane Health Counts in 2014. The comprehensive community health assessment process is conducted every three years to identify the top health priorities in Kane County. As a part of the Kane Health Counts collaborative, NMDH partnered with Conduent HCI to conduct their 2021 CHNA.

Identification of the NMDH Community Service Area

Defining the community is a key component of the CHNA process as it determines the scope of the assessment and implementation strategy. Stakeholders from NMHC Community Affairs and Government Relations met to discuss the NMDH CSA definition. To define the NMDH CSA for the current CHNA, the following factors were considered:

- Geographic area served by NMDH
- Principal functions of NMDH
- Areas of high hardship (for example, differences in unmet socioeconomic needs across the county, such as education, housing, income, poverty, unemployment and dependents)
- Location of existing NM assets (such as NM-supported clinics and programs) that serve Chicago communities
- Defined hospital service areas of other local hospitals
- Any existing initiatives addressing community needs in Kane County

NMDH Community Service Area

The NMDH CSA is located about 40 miles west of Chicago. The geographical boundary of the hospital's CSA is defined by nine ZIP codes and is home to an estimated 235,547 residents. The nine ZIP codes that define the NMDH CSA are noted in the map in Figure 1. The ZIP codes and corresponding area names that comprise the NMDH CSA are listed in Table 1.

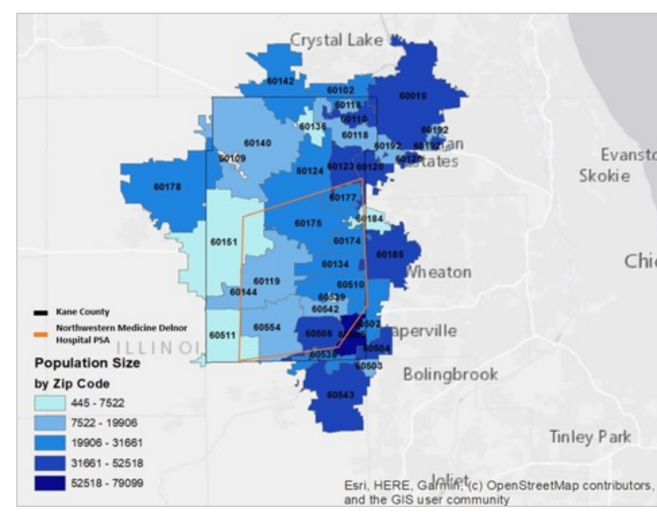

Figure 1. Northwestern Medicine Delnor Hospital Community Service Area

Table 1. ZIP Codes in NMDH Community Service Area

ZIP Code	City or Area Name
60119	Elburn
60134	Geneva
60174	St. Charles, Wayne, Valley View
60175	Campton Hills, Lily Lake, South Elgin
60177	South Elgin, Elgin, Bartlett
60506	Aurora, Montgomery
60510	Batavia, Geneva, West Chicago
60542	North Aurora, Aurora
60554	Sugar Grove, Yorkville, Prestbury

Principal function and target population

NMDH provides comprehensive, acute, emergent and specialty care for persons living in Kane County. Care is provided for all persons across the life span, including but not limited to adults, children, women, seniors and people with disabilities. Special consideration is given to underserved and disproportionately affected populations.

Non-exclusion of medically underserved, low-income or minority populations

NMDH is committed to improving the health of the community we serve, including all populations within our community. When developing our CSA, NMDH considered all populations within our CSA, regardless of payor status, and did not exclude medically underserved, low-income or minority populations. When disseminating the community survey, special attention was given to the distribution of survey information to include homeless, senior, LGBTQ, and migrant and refugee populations. No exclusions were made based on whether or how much patients or their insurers pay for the care received or whether patients are eligible for assistance under NMDH’s financial assistance program.

The Community Health Needs Assessment: Process and methodology

Background

As noted previously, NMDH collaborated with Conduent HCI to support report development for its 2021 CHNA. This was done in collaboration with the Kane Health Counts initiative. Data developed and presented in this report is specific to the NMDH service area.

CHNA goals

The NMDH CHNA serves as a tool for reaching three related goals:

1. **Improve residents' health status, increase life spans and elevate 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.** By gathering demographic information along with health status and behavior data, it is possible to identify population segments who are most at risk for various diseases and injuries. Intervention plans targeting these segments may then combat some of the socioeconomic factors that have historically had a negative impact on residents' health.

3. **Increase accessibility to preventive services for all residents.** Access to preventive services may improve health status, life spans and overall quality of life, and impact the cost associated with care for late-stage diseases resulting from a lack of preventive care.

Collaboration

The CHNA process consisted of a systematic, data-driven approach to determine the health status, behaviors and needs of residents in the NMDH CSA. The CHNA provided information to enable hospital leadership and key community stakeholders to collaboratively identify health issues of greatest concern among all residents and decide how best to commit the hospital's resources to those areas, thereby achieving the greatest possible impact on the community's health status.

Methodology

Two types of data were analyzed for this CHNA: primary and secondary data. Each type of data was analyzed using a unique methodology. Findings were organized by health topics. These findings were then synthesized for a comprehensive overview of the health needs in the NMDH CSA.

Mobilizing for Action through Planning and Partnership (MAPP)

In partnership with the Kane County Health Department, NMDH participated in the county's CHNA. The Mobilizing for Action through Planning and Partnership (MAPP) process was utilized to conduct the county's needs assessment. The development of the Mobilizing for Action through Planning and Partnerships (MAPP) model and its conceptual framework was a joint project of the non-profit National Association of County and City Health Officials (NACCHO) and the Centers for Disease Control and Prevention (CDC). MAPP embraces the belief that health is not simply a matter of medical treatment or the absence of disease, but must be viewed from a community perspective. The MAPP process is a participatory process and includes input from local health and social service organizations (key stakeholders). There are six phases of the MAPP process, including:

1. Organizing for Success/Partnership Development
2. Visioning
3. Four Community Assessments:
   - Community Themes and Strength Assessment (asks residents to identify resources that already exist)
   - Local Public Health System Assessment (examines all elements of the public health system)
   - Community Health Status Assessment (looks at the health of community members and of the community)
   - Forces of Change Assessment (examines what is happening or might happen in the future that will have an impact on community health)
4. Identification of Strategic Issues
5. Setting Goals and Strategies

Information obtained as the result of the county's MAPP process has been integrated into our CHNA.

Secondary data sources and analysis

Secondary data used for this assessment were collected and analyzed with the Conduent Healthy Communities Institute (HCI) Community Dashboard—a web-based community health platform developed by Conduent Community Health Solutions. It brings together more than 219 indicators related to community, hospitalization, emergency room and

behavioral health, covering more than 25 topics in the areas of health, determinants of health and quality of life. The data is primarily derived from state and national public secondary data sources. The value for each of these indicators is compared to other communities, nationally or locally set targets, and previous time periods. A comprehensive overview of secondary data findings and health indicators is presented in Appendix A.

Secondary data scoring

HCI's Data Scoring Tool® was used to systematically summarize multiple comparisons to rank indicators based on highest need. For each indicator, the Kane County value was compared to a distribution of Illinois and U.S. counties, state and national values, Healthy People 2020 targets, and significant trends. Each indicator was then given a score based on the available comparisons. These comparison scores range from 0 to 3, where 0 indicates the best outcome and 3 indicates the worst outcome. Availability of each type of comparison varies by indicator and is dependent on the data source, comparability with data collected from other communities, and changes in methodology over time. These indicators were grouped into topic areas for a higher-level ranking of community health needs.

Table 2 shows the health and quality-of-life topic scoring results for Kane County, with Other Chronic Diseases as the poorest-performing topic area, followed by Environment. The top 11 topic areas were those that scored over the 1.25 threshold in data scoring. Health topic areas with fewer than three indicators were considered a data gap. Data gaps were specifically assessed as a part of the key informant interviews to ensure that, where the secondary data fell short, primary data could provide a more accurate picture of that particular health topic area.

Table 2: Secondary Data Topic Scoring Results

Health and Quality-of-Life Topics	Score
Other Chronic Diseases	1.86
Environment	1.45
Transportation	1.43
Older Adults & Aging	1.40
Access to Health Services	1.38
Immunizations & Infectious Diseases	1.36
Substance Abuse	1.35
Maternal, Fetal & Infant Health	1.32
Education	1.29
Teen & Adolescent Health	1.27
Public Safety	1.25

Primary data collection and analysis

To expand on the information gathered from the secondary data, HCI collected community input. The needs assessment was further informed by:

Focus groups hosted virtually with community members who have a fundamental understanding of Kane County's health needs and represent the broader interests of the community

An online community survey distributed digitally throughout Kane County in English and Spanish

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Given this CHNA was conducted during the COVID-19 pandemic, primary data collection was conducted in a way to maintain social distancing and protect the safety of participants by eliminating in-person data collection.

Existing community resources

As a critical aspect of the primary data collection, community input participants were asked to list and describe resources available in the community. Although not reflective of every resource available, the list can help NMDH build partnerships so as not to duplicate, but rather support existing programs and resources. This resource list is available in Appendix B.

Focus groups and key community stakeholders

The purpose of holding focus groups during the CHNA process was to gain more in-depth information on perceptions, insights, attitudes, experiences and beliefs from community stakeholders. The data collected through the focus group process provides adjunct information to the quantitative data collection methods in a mixed-methods approach. While the data collected is useful in gaining insight into a topic that may be more difficult to gather through other data collection methods, it is important to note that the information collected in an individual focus group is not necessarily representative of other groups.

The project team developed a focus group guide made up of a series of questions and prompts about the health and well-being of residents in Kane County (focus group survey template available on request). Community members and stakeholders were asked to speak to barriers and assets to their health and access to health care. Virtual focus groups were hosted across Kane County during October and November 2020. They lasted approximately 60 minutes and were conducted via video conference with a phone-only option for people with limited or no access to a reliable device or internet.

Trained facilitators implemented techniques to ensure that everyone was able to participate in the discussion. Some focus groups were specifically hosted in Spanish for the Hispanic/Latino community in Kane County. These focus groups were facilitated by bilingual facilitators leveraging the same tool implemented in English-only focus groups.

Participants were recruited for the focus group sessions through the Kane Health Counts network of community partner organizations. Specific efforts were made to recruit participants from African American, Hispanic/Latino and senior segments of the Kane County population. Ten focus group sessions were organized between October and November 2020, and although registration was initially strong, sessions had varying levels of attendance. COVID-19 likely had an impact on resident participation in the focus group sessions. Table 3 provides an overview of the individual sessions as well as number of participants for each of the focus groups.

Table 3: Kane County Focus Group Discussions

Focus Group Discussion	Number of Sessions*	Facilitation Language	Total Community Participants
African American Health	2	English	14
Older Adult/Senior Health	3	English	33
Hispanic/Latino Health	1	Spanish	12

*Ten focus groups were held; six sessions had attendees present.

The project team captured detailed transcripts of the focus group sessions. The text from these transcripts were analyzed using the qualitative analysis program Dedoose.[1] Text was coded using a predesigned codebook, organized by themes and analyzed for significant observations. The findings from the qualitative analysis were combined with the findings from other data sources and incorporated into the data synthesis and prioritized health needs of this report.

Table 4 contains a list of a community stakeholders invited to participate in the focus group sessions. Participants were invited to serve as NMDH's External Community Health Council and participate in the selection process of prioritized health needs.

Table 4: Key Informant Organizations

External Stakeholders and Key Informant Organizations	
Ravenswood Health and Wellness Center, and Advance Performance Pain & Wellness Center	AMITA Health
Rush Copley Medical Center	KDOT Planning and Programming
American Cancer Society	Waubonsee Community College
Nutrition and wellness educator at University of Illinois	Association for Individual Development
Professor, Health Studies, Nutrition and Dietetics, Northern Illinois University	Active Medical Center
Kane County Department of Transportation (KDOT), Deputy Chief of Staff, Special Projects, Traffic Manager	Community Harvest Educational Foundation
Northern Illinois Food Bank	Advocate Health
Visiting Nurse Association	American Heart Association
Kane County Health Department	Fox Valley Park District
Aunt Martha's Youth Services	Kane County Bicycle and Pedestrian Coordinator
Greater Elgin Family Care Center	Center for Diabetic Wellness, AMITA Health
AMITA Health, Provena Mercy Medical Center	Northern Illinois University
Elgin Community College	Upward Bound
	PADS Program, Elgin

1. Dedoose Version 8.0.35, web application for managing, analyzing and presenting qualitative and mixed method research data (2018). Los Angeles, CA: SocioCultural Research Consultants, LLC, dedoose.com.

Themes across all focus groups

Table 5 summarizes the main themes and topics that trended across all or almost all focus group conversations.

Table 5: Kane County Focus Group Theme Summary

Main Theme	Subtopics	Contributing Focus Groups
Exercise, Nutrition and Weight	• Education for parents/families • Children's sedentary lifestyles and nutrition in schools • Health behavior and social environment influence on eating habits, cultural influences	African American and Hispanic/Latino focus groups
Access to Healthcare Services	• Language barriers • Underinsured and affordability (costs associated with services) • Preventative care for older adults, how to avoid emergent situations by intervening earlier (includes access to medications) • Navigation and education for minority racial or ethnic groups - Lack of focus on men's health in the African American community	All focus groups
Substance Use Disorders	• Focus on COVID-19 has diverted attention from drug use issues in the community (such as heroin/opioid misuse) • Teen and adolescent use of substances, social pressure, connection to bullying and self-esteem	Older Adults and Hispanic/ Latino focus groups
Mental Health	• Anxiety and stress for parents/families with children • Mental health for older adults, impacts of social isolation due to aging issues • Resources in the community, lack of availability and navigation/education about available services	All focus groups

Online community survey

NMDH conducted an online community survey that was available in English and Spanish from October 3, 2020, through November 13, 2020. HCI partnered with Claritas to digitally market, distribute and collect responses for the community survey. The survey consisted of 47 questions related to top health needs in the community, individuals' perception of their overall health, individuals' access to healthcare services, and social and economic determinants of health.

Survey respondents engaged with the community survey through three distinct channels:

Online panels executed by Claritas

A social media campaign executed by Claritas

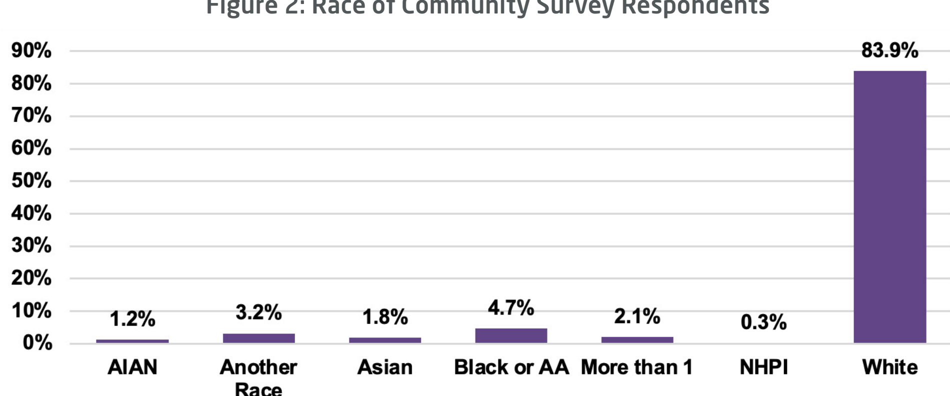
Email invites and marketing flyers distributed by Kane Health Counts members and its partner organizations to Kane County residents

The community survey was promoted across Kane County from October 3, 2020, to November 13, 2020. A total of 1,543 responses were collected. The following charts and graphs illustrate the demographics of community survey respondents.

Demographic profile of survey respondents

As shown in Figure 2, white or Caucasian community members comprised the largest percentage of survey respondents at 83.9%, followed by Black/African American community members at 4.7%.

Figure 2: Race of Community Survey Respondents



Nearly 12.5% of survey respondents identified as Hispanic/Latino, while the majority, 85.6%, identified as non-Hispanic/ Latino (Figure 3).

Figure 3: Ethnicity of Community Survey Respondents

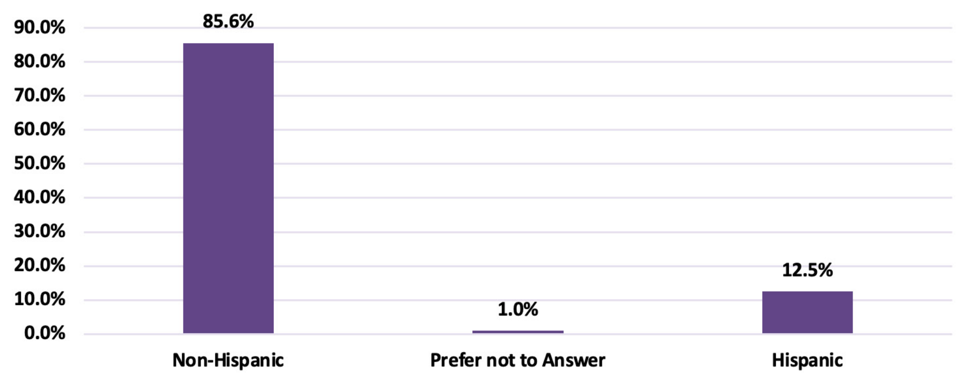
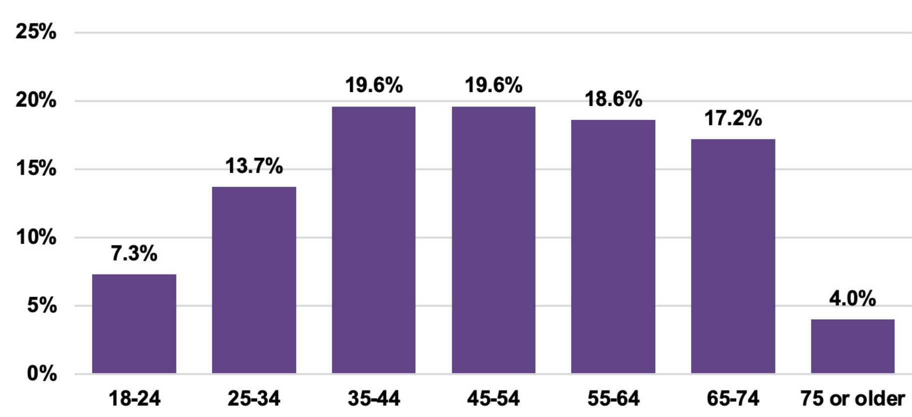


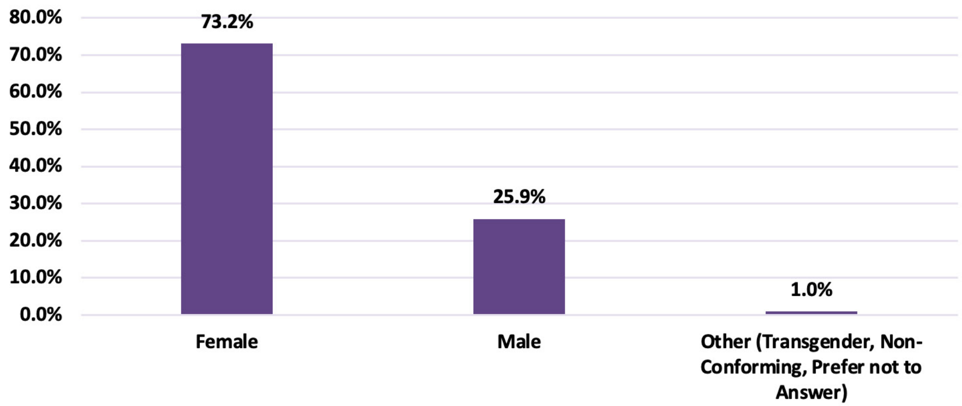
Figure 4 shows the age breakdown of survey respondents. The 35-44 and 45-54 age groups comprised the largest portions of survey respondents, at 19.6% each.

Figure 4: Age of Community Survey Respondents



The majority of survey respondents identified as female, at 73.2%. An additional 25.9% identified as male, and 1.0% as other (transgender, non-conforming or prefer not to answer), as shown in Figure 5.

Figure 5: Sexual Identity of Community Survey Respondents



As shown in Figure 6, survey respondents were more likely to have a bachelor's degree or higher (62.6%).

Figure 6: Education of Community Survey Respondents

Less than 9th grade	Some High school, no diploma	High School Grad	Some College, No Degree	College Degree	Advanced Degree	Other
0.3%	1.1%	12.4%	23.1%	29.9%	32.7%	0.4%

Post-stratification weighting procedure for online community survey

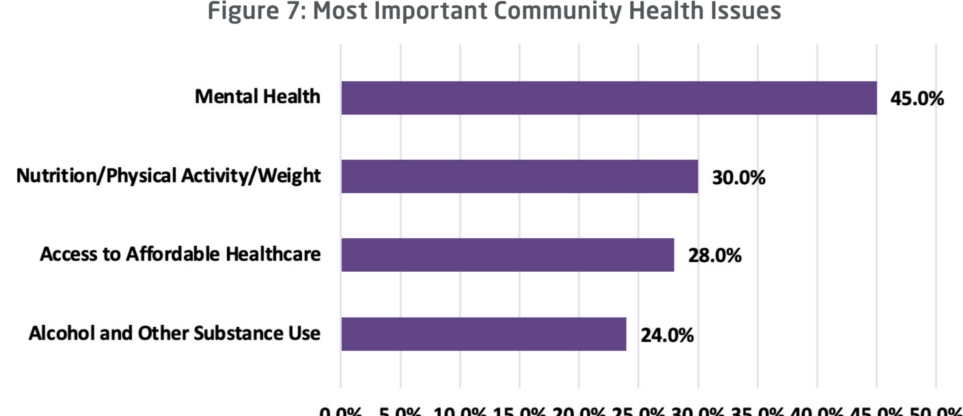
To ensure the survey was more representative of the population of Kane County, a weighting procedure was applied. Statistical analysis software (SAS® 9.4) was used for the analysis. A sample-balancing procedure was used to give each respondent a weight based on respondent-reported demographics within the survey compared to the overall proportion in Kane County. Respondent answers were weighted based on age, education level, sex and race/ethnicity, resulting in 1,515 respondents. Survey findings in this report are based on the weighted survey answers (N = 1,515).

Community survey findings

In the survey, participants were asked about important health issues in the community and the most important quality-of-life issues to address in Kane County. The top responses for these questions are shown in Figure 7 and Figure 8.

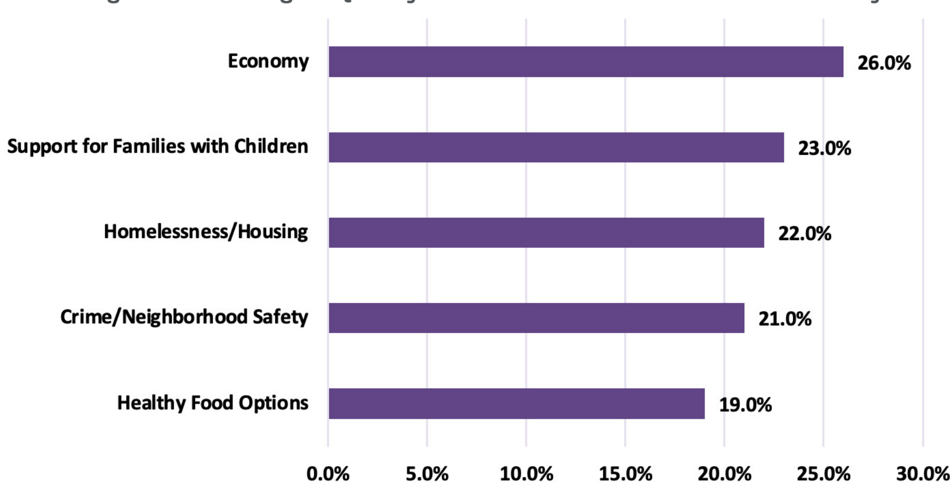
As shown in Figure 7, Mental Health was ranked by survey respondents as the most pressing health problem (45.0% of respondents), followed by Nutrition, Physical Activity and Weight (30.0%), Access to Affordable Health Care (28.0%) and Alcohol and Other Substance Use (24.0%).

Figure 7: Most Important Community Health Issues



As shown in Figure 8, Economy was ranked by survey respondents as the most urgent quality-of-life issue in Kane County (26.0% of survey respondents), followed by Support for Families with Children (23.0%), Homelessness/Housing (22.0%), Crime/Neighborhood Safety (21.0%) and Healthy Food Options (19.0%).

Figure 8. Most Urgent Quality-of-Life Issues to Address in Kane County



Information gaps and data considerations

HCI and NMDH made substantial efforts to comprehensively collect and analyze CHNA data. However, several limitations of the data should be considered when reviewing the findings in this report. Although there is a wide range of health and health-related areas, there may be varying scope and depth of secondary data indicators and findings within each topic.

Regarding the secondary data, some health topic areas have a robust set of indicators, but for others there may be a limited number of indicators for which data is available. The Index of Disparity, used to analyze the secondary data, is also limited by data availability from data sources. In some instances, there are no subpopulation data for some indicators, and for others there are only values for a select number of racial/ethnic groups.

For the primary data, the breadth of findings is dependent on who was selected to be a key informant. In addition, the community survey was a convenience sample, which means results may be vulnerable to selection bias and make the findings less generalizable. To make the survey more representative, a weighting procedure was performed in SAS 9.4. This statistical procedure assigned a weight to each participant based on their unique combination of age, education, sex, race, ethnicity and income. A smaller weight was given to participants who responded more frequently than expected, while larger weights were given to those who were underrepresented, based on the Claritas Pop-Facts® 2020 population estimates.

For all data, every effort was made to include a wide range of secondary data indicators and community member expertise areas. NMDH is committed to investigating strategies for addressing data system gaps for future assessment and implementation processes.

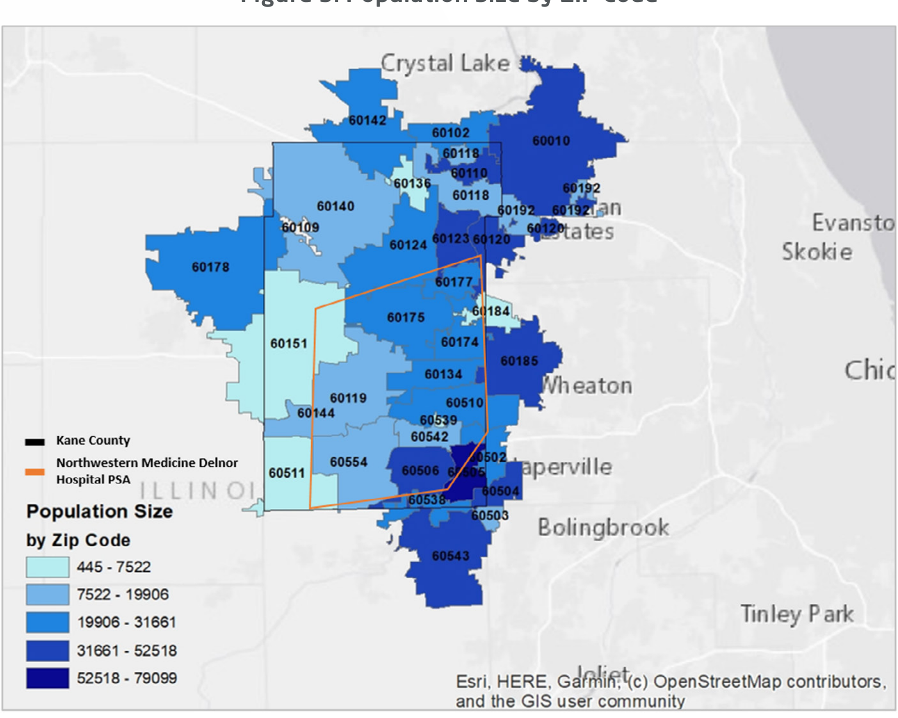
The Community Health Needs Assessment:
Comprehensive findings and analysis – demographics

The following section explores the demographic profile of the NMDH CSA. The demographics of a community significantly impact its health profile. Different racial, ethnic, age and socioeconomic groups may have unique needs and require varied approaches to health improvement efforts. All demographic estimates are sourced from Claritas Pop-Facts (2020 population estimates) and American Community Survey one-year (2019) or five-year (2014-2018) estimates unless otherwise indicated.

Demographic profile – population

According to the 2020 Claritas Pop-Facts population estimates, the NMDH CSA has an estimated population of 235,547 persons. Figure 9 shows the population size by each ZIP code, with the darkest color representing the ZIP codes with the largest population.

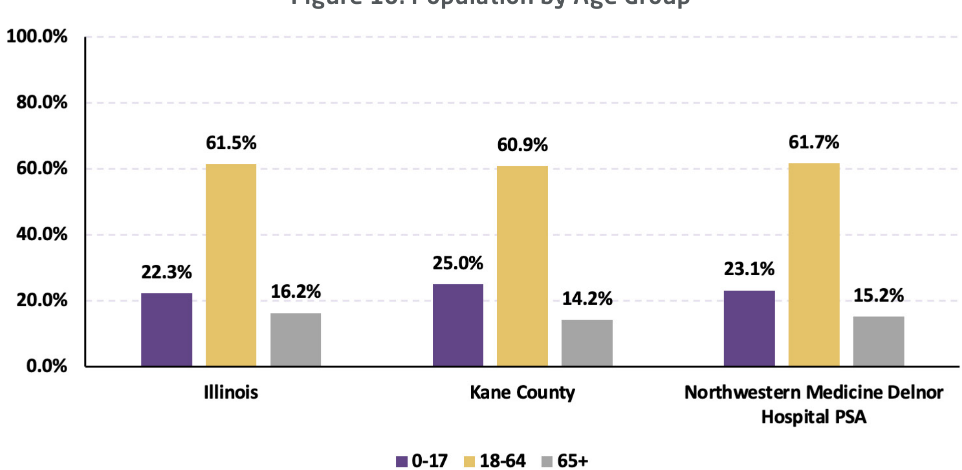
Figure 9. Population Size by ZIP Code



Demographic profile—age

Figure 10 shows the NMDH CSA population by age group along with Kane County and the Illinois state value. In the NMDH CSA, 23.1% of the population are infants, children or adolescents (age 0-17); another 61.7% are in the age group 18-64, while 15.2% are 65 and older. The population of NMDH CSA skews slightly older in comparison to the county.

Figure 10. Population by Age Group

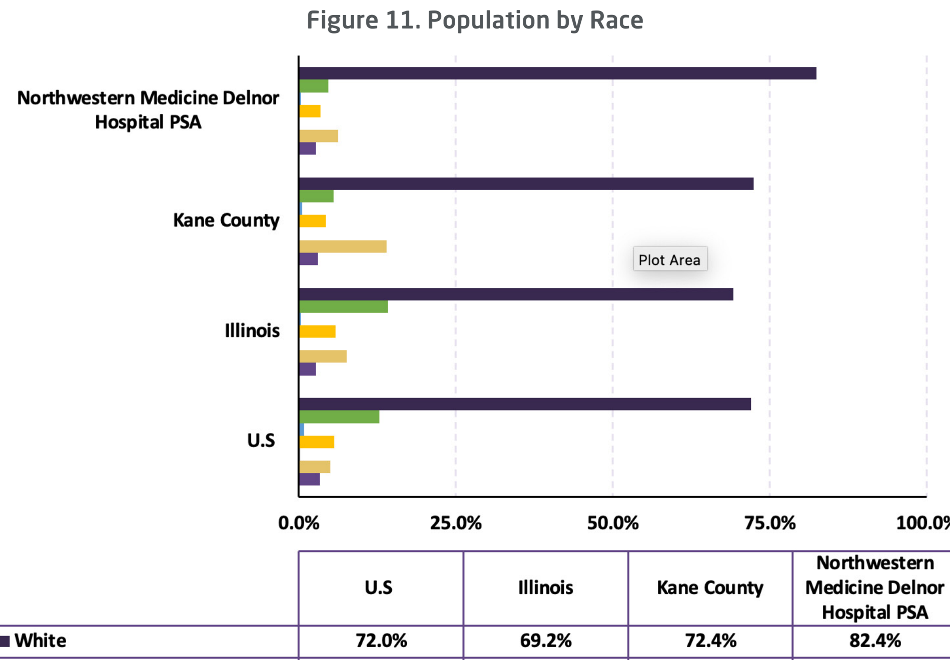


Demographic profile—race

The race and ethnicity composition of a population is important in planning for future community needs, particularly for schools, businesses, community centers, health care and child care. Race and ethnicity data are also useful for identifying and understanding disparities in housing, employment, income and poverty.

As shown in Figure 11, the majority of the population in the NMDH CSA identifies as White (82.4%). The Black/African American community makes up 4.7%, followed by Asian people, comprising 3.5% of the population. In comparison to Kane County, Black/African American people in the NMDH CSA make up a smaller proportion of the population.

Figure 11. Population by Race

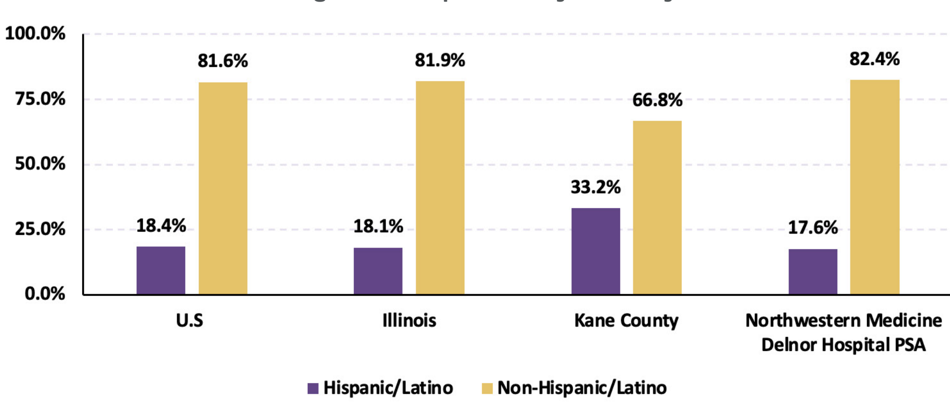


	U.S	Illinois	Kane County	Northwestern Medicine Delnor Hospital PSA
White	72.0%	69.2%	72.4%	82.4%
Black/African American	12.8%	14.2%	5.6%	4.7%
American Indian/Alaskan Native	0.9%	0.4%	0.6%	0.3%
Asian	5.7%	5.8%	4.3%	3.5%
Native Hawaiian/Pacific Islander	0.2%	0.0%	0.0%	0.1%
Some Other Race	5.0%	7.6%	14.0%	6.3%
2+ Races	3.4%	2.8%	3.0%	2.8%

Demographic profile– ethnicity

As shown in Figure 12, 17.6% of the population of the NMDH CSA identifies as Hispanic/Latino. This is a smaller proportion of the population compared to Kane County as whole, where 33.2% of the population identifies as Hispanic/Latino.

Figure 12. Population by Ethnicity



Demographic profile–gender

As shown in Figure 13, the gender breakdown is relatively evenly matched at 49.77% male and 50.23% female. This breakdown is also similar at the state level (source: HCI, Kane Health Counts website).

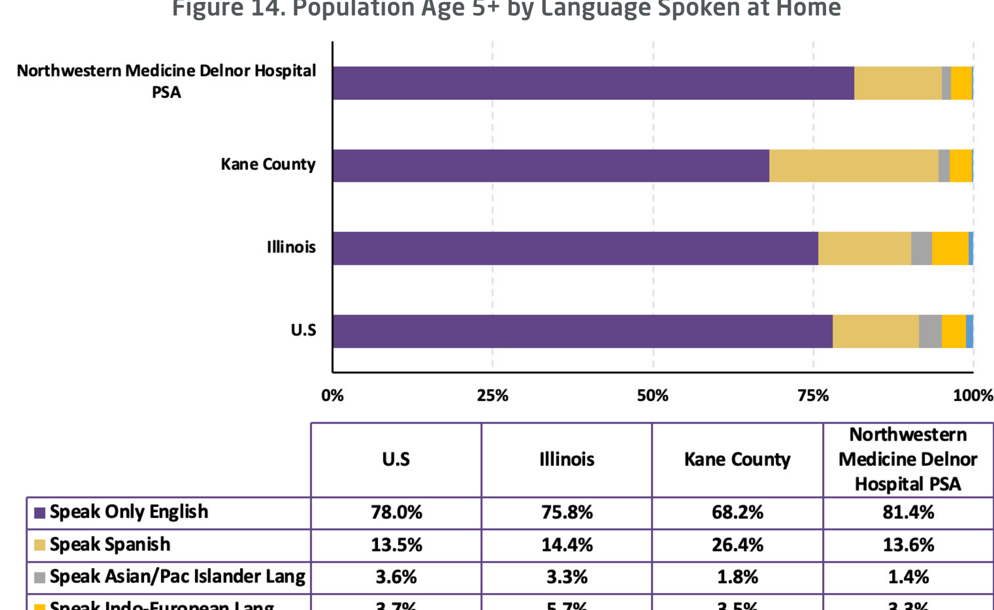
Figure 13: Demographic Profile by Gender

Popluation by Sex	County: Kane		State: Illinois	
	Persons	% of Population	Persons	% of Population
Male	265,604	49.77%	6,198,209	49.17%
Female	268,106	50.23%	6,408,631	50.83%

Demographic profile—language

Language is an important factor to consider for outreach efforts to ensure that community members are aware of available programs and services. Figure 14 shows the population 5 years and older by language spoken at home. The proportion of the population who speaks English in the NMDH CSA is 81.4%. Spanish is the second most spoken language in the CSA at 13.6%. It is important to note that the percentage of Spanish spoken in Kane County as a whole (26.4%) is comparatively higher than in the state of Illinois (14.4%) and the U.S. (13.5%).

Figure 14. Population Age 5+ by Language Spoken at Home



	U.S	Illinois	Kane County	Northwestern Medicine Delnor Hospital PSA
Speak Only English	78.0%	75.8%	68.2%	81.4%
Speak Spanish	13.5%	14.4%	26.4%	13.6%
Speak Asian/Pac Islander Lang	3.6%	3.3%	1.8%	1.4%
Speak Indo-European Lang	3.7%	5.7%	3.5%	3.3%
Speak Other Lang	1.2%	0.7%	0.2%	0.2%

The Community Health Needs Assessment:

Comprehensive findings and analysis—social and economic determinants of health

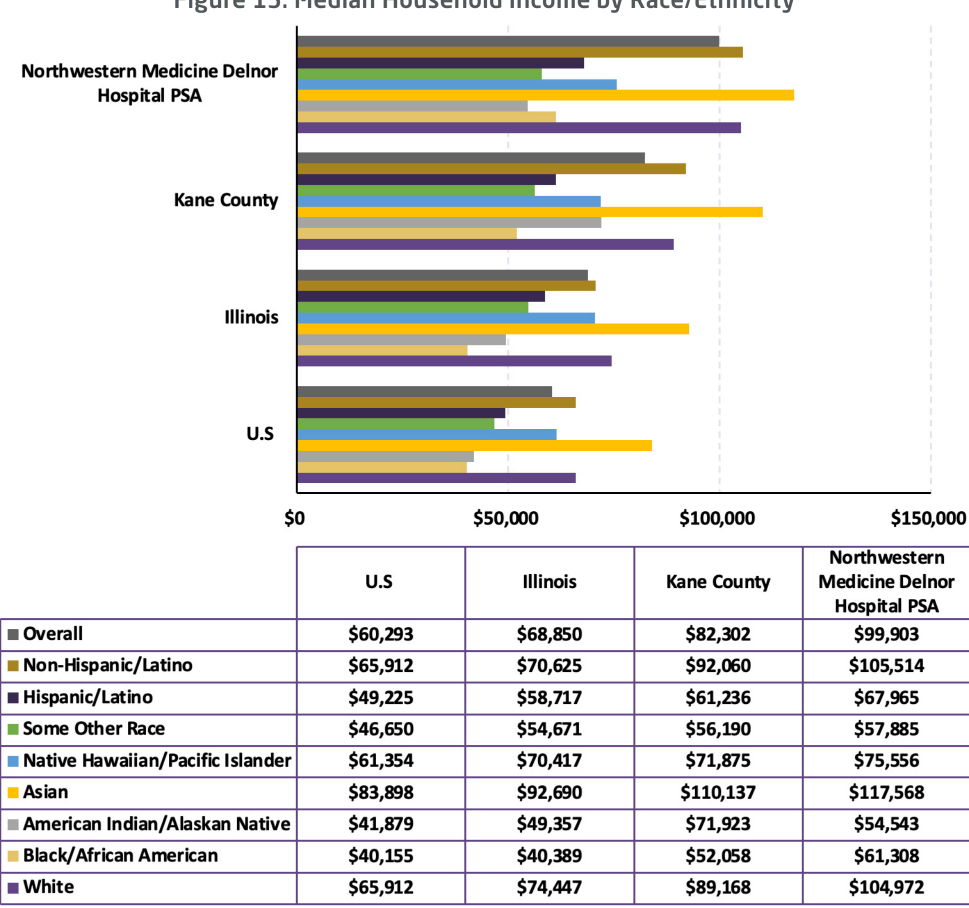
This section explores the economic, environmental and social determinants of health of the NMDH CSA. Social determinants are the conditions in which people are born, grow, work, live and age, and the wider set of forces and systems shaping the conditions of daily life. It should be noted that county-level data can sometimes mask what could be going on at the ZIP code level in many communities. While indicators may be strong at the county level, ZIP code-level analysis can reveal disparities.

Social and economic determinants—income

Median household income reflects the relative affluence and prosperity of an area. Areas with higher median household incomes are likely to have a greater share of educated residents and lower unemployment rates. Areas with higher median household incomes also have higher home values, and their residents enjoy more disposable income.

Figure 15 compares the median household income values for each race in the NMDH CSA. The overall median household income for the CSA is $99,903, which is higher than the median household income in Illinois and the U.S. Both white and Asian populations have median household incomes above the overall median value. All other racial groups have incomes below the overall value.

Figure 15. Median Household Income by Race/Ethnicity



	U.S	Illinois	Kane County	Northwestern Medicine Delnor Hospital PSA
Overall	$60,293	$68,850	$82,302	$99,903
Non-Hispanic/Latino	$65,912	$70,625	$92,060	$105,514
Hispanic/Latino	$49,225	$58,717	$61,236	$67,965
Some Other Race	$46,650	$54,671	$56,190	$57,885
Native Hawaiian/Pacific Islander	$61,354	$70,417	$71,875	$75,556
Asian	$83,898	$92,690	$110,137	$117,568
American Indian/Alaskan Native	$41,879	$49,357	$71,923	$54,543
Black/African American	$40,155	$40,389	$52,058	$61,308
White	$65,912	$74,447	$89,168	$104,972

Social and economic determinants—poverty

Federal poverty thresholds are set every year by the U.S. Census Bureau and vary by size of family and ages of family members. A high poverty rate is both a cause and a consequence of poor economic conditions. A high poverty rate indicates that local employment opportunities are not sufficient to provide for the local community. Through decreased buying power and decreased taxes, poverty is associated with lower-quality schools and decreased business survival.

Figure 16 shows the percentage of families living below the poverty level by ZIP code. The darker colors represent a higher percentage of families living below the poverty level. ZIP codes 60506 and 60177, both of which fall in the NMDH CSA, have the highest percentages for the service area. In comparison to Illinois state (9.2%), the percentage of families living below the poverty level in Kane County is lower at 7.2%.

Figure 16. Families Living Below Poverty Level by ZIP Code

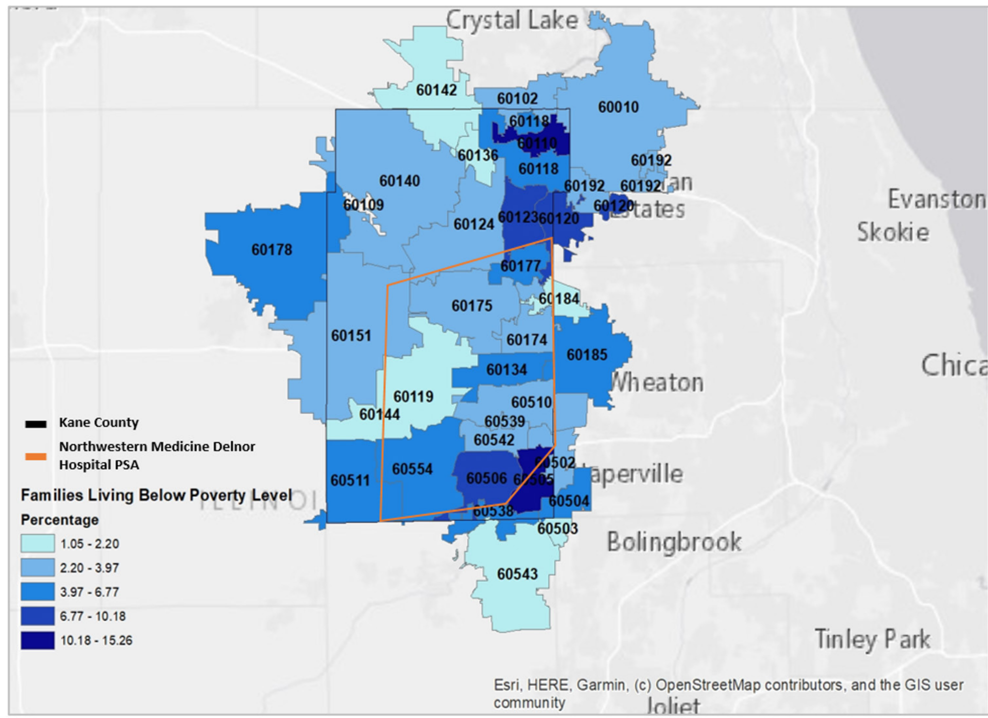


Figure 17 shows the percentage of the population in Kane County by age who are living below the poverty level. Children and adolescents who are younger than 18 comprise the largest group living in poverty at 44.9%.

Figure 17. People Living Below Poverty Level by Age

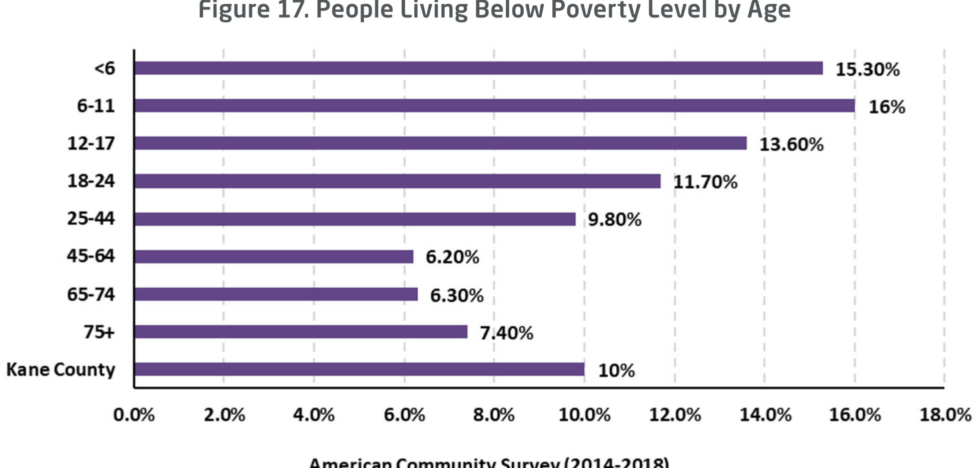


Figure 18 shows the percentage of the population in Kane County by gender who are living below the poverty level. Females make up a larger percentage of the population in Kane County who are living in poverty (11.1%).

Figure 18. People Living Below Poverty Level by Gender

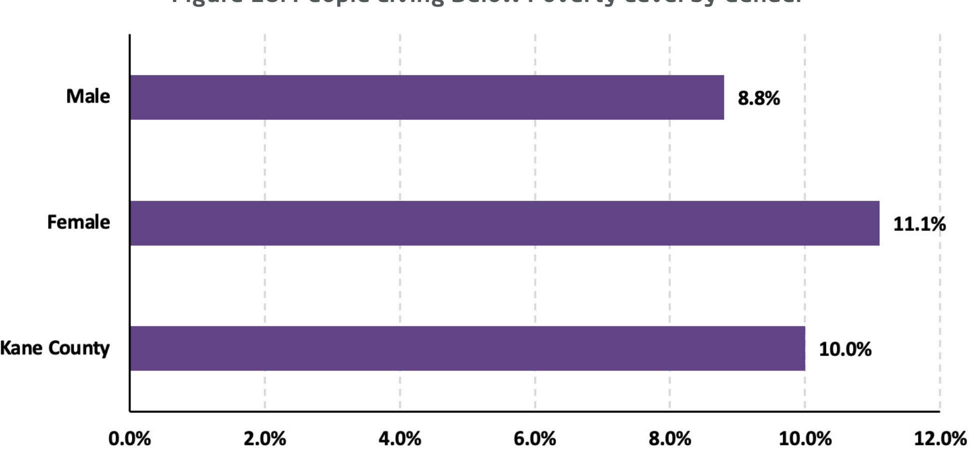
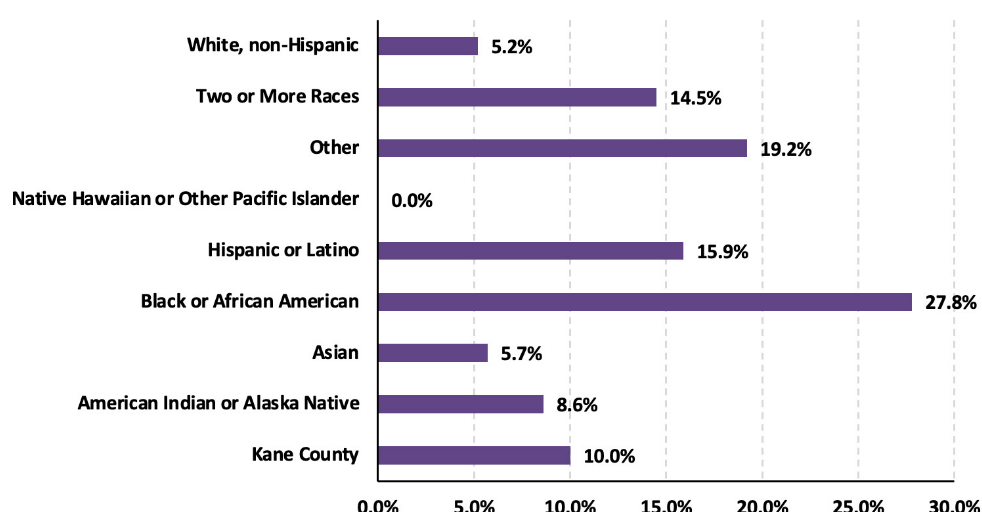


Figure 19 shows the percentage of the population in Kane County by race/ethnicity who are living below the poverty level. The largest racial/ethnic group in Kane County living below the poverty level are those identifying as Black/African American at 27.8%, followed by those identifying as an “other” race at 19.2%. Those identifying as Black/African American, other race, Hispanic/Latino or multiracial all experience poverty at a higher percentage compared to Kane County at 10.0%.

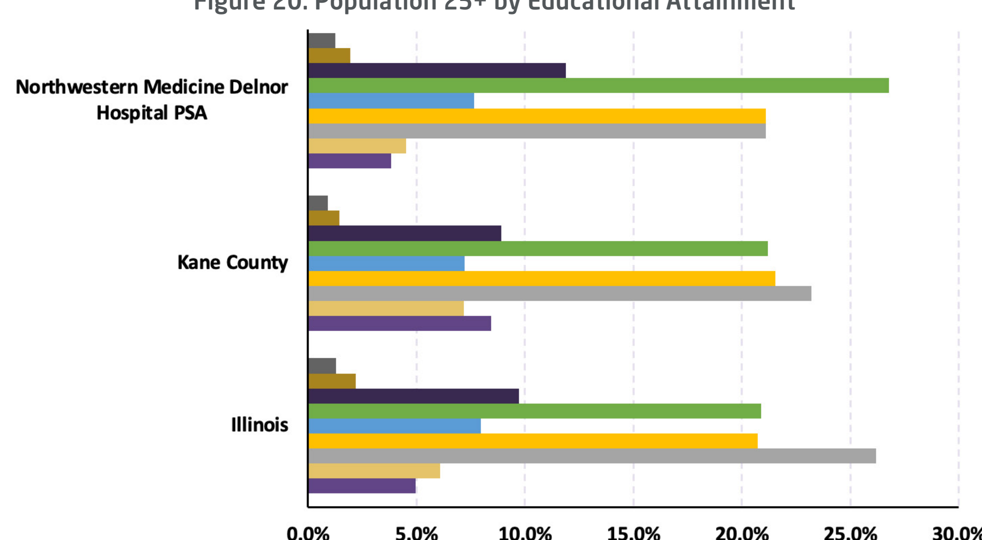
Figure 19. People Living Below Poverty Level by Race/Ethnicity



Social and economic determinants—education

Graduating from high school is an important personal achievement and is essential for an individual's social and economic advancement. Graduation rates can also be an important indicator of the performance of an educational system. Having a bachelor's degree or higher opens career opportunities in a variety of fields and is often a prerequisite for higher-paying jobs. Figure 20 shows that the NMDH CSA has a higher percentage of people 25 years or older with a bachelor's degree or higher (41.9%) compared to Kane County (32.4%) or Illinois (34.1%).

Figure 20. Population 25+ by Educational Attainment



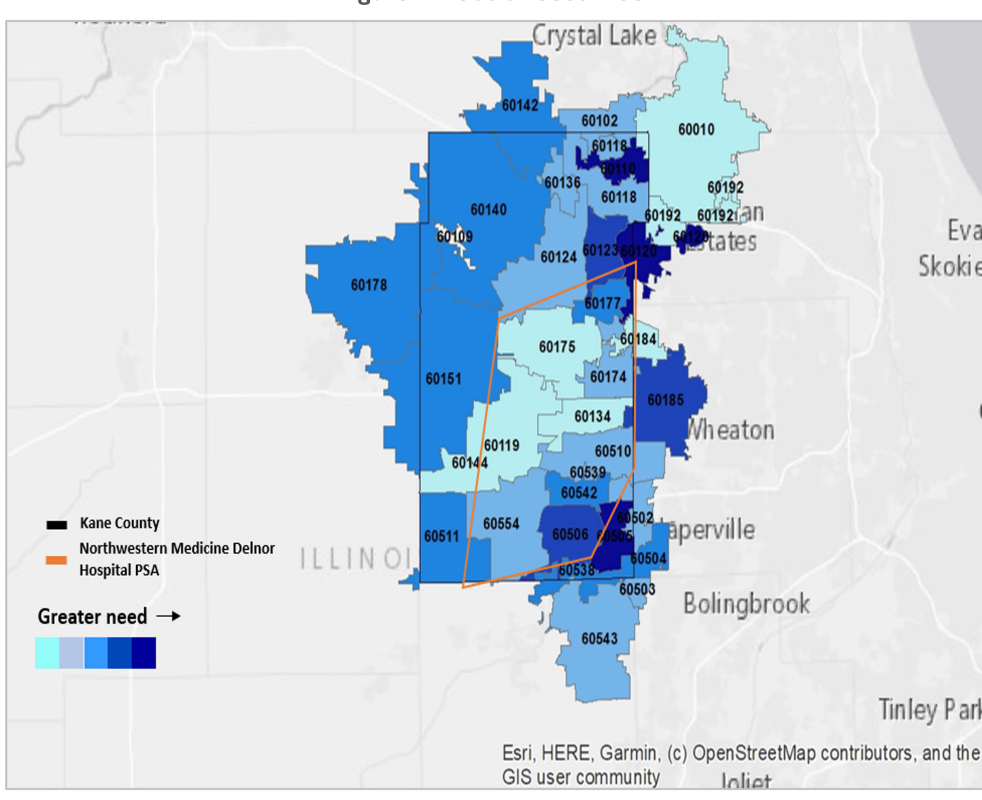
	Illinois	Kane County	Northwestern Medicine Delnor Hospital PSA
Doctorate Degree	1.3%	0.9%	1.3%
Professional Degree	2.2%	1.4%	1.9%
Master's Degree	9.7%	8.9%	11.9%
Bachelor's Degree	20.9%	21.2%	26.8%
Associate Degree	8.0%	7.2%	7.7%
Some College, No Degree	20.7%	21.5%	21.1%
High School Grad	26.2%	23.2%	21.1%
Some High School, No Diploma	6.1%	7.2%	4.5%
Less than 9th Grade	5.0%	8.4%	3.8%

Social and economic determinants—SocioNeeds Index

Conduent HCI developed the SocioNeeds Index® to easily identify areas of high socioeconomic need. This index incorporates estimates for six different social and economic determinants of health that are associated with poor health outcomes. The data, which covers income, poverty, unemployment, occupation, educational attainment and linguistic barriers, are then standardized and averaged to create one composite index value for every ZIP code in the U.S. with a population of at least 200. ZIP codes have index values ranging from zero to 100, where higher values are estimated to have the highest socioeconomic need and are correlated with poor health outcomes, including preventable hospitalizations and premature death.

Within Kane County, ZIP codes are ranked based on their index value to identify the relative levels of need, as illustrated by the map in Figure 21. ZIP code 60506 has the highest level of socioeconomic need among all ZIP codes within the NMDH CSA. Understanding where there are communities with high socioeconomic need, and associated poor health outcomes, is critical to targeting prevention and outreach activities.

Figure 21. SocioNeeds Index



Barriers to care and disparities

Community health barriers and disparities for Kane County were identified as part of the primary data collection. Community survey respondents and focus group participants were asked to identify any barriers to health care or disparities observed or experienced across the community.

Barriers to care—transportation

Transportation, while not selected as a prioritized health need by Kane Health Counts through this joint CHA/CHNA process, was still an identified significant health need that scored a 1.43 in the secondary data analysis. Indicators of concern from the secondary data analysis included the number of solo drivers who have a long commute to work, the mean travel time to work, and the number of workers commuting by public transportation. Further, 33% of community survey respondents disagreed or strongly disagreed that public transportation is easily accessible if they needed it. Focus group participants mentioned that access to transportation was a specific barrier for the elderly population in Kane County.

Barriers to care—cost, literacy and language

In general, accessing affordable health care was a common barrier that was discussed, whether due to overall cost or due to being underinsured or uninsured. For community survey respondents who did not receive the care they needed, 35% selected cost as a barrier to seeking the care they needed; 28% noted that their providers or healthcare facilities being closed due to COVID-19 was a barrier to their care. Focus group participants were concerned that low-income community members do not have access to affordable healthcare providers. Focus group participants added that even when health insurance is available, health literacy issues and language barriers make seeking or renewing healthcare coverage difficult, especially for older adults and immigrant populations.

Disparities—racial and ethnic disparities

Community health disparities were assessed in both the primary and secondary data collection processes. Table 6 shows secondary data indicators with statistically significant race/ethnicity, age or gender disparity for Kane County Index of Disparity analysis. Disparities should be recognized and considered for implementation planning to mitigate the challenges and barriers often faced along gender, racial, ethnic or cultural lines.

Table 6. Indicators With Significant Race/Ethnicity, Age or Gender Disparities

Health Indicator	Group Negatively Impacted
Age-Adjusted Hospitalization Rate due to Adult Mental Health	American Indian/Alaska Native, Black/African American
Age-Adjusted Hospitalization Rate due to Adult Suicide and Intentional Self-Inflicted Injury	American Indian/Alaska Native, Black/African American
Age-Adjusted Death Rate due to Suicide	Male
Age-Adjusted Drug and Opioid-Involved Overdose Death Rate	Male
Age-Adjusted Hospitalization Rate due to Opioid Use	Black/African American and Male
Age-Adjusted Hospitalization Rate due to Substance Use	Black/African American and Male
Age-Adjusted Death Rate due to Kidney Disease	Male
People 65+ Living Below Poverty Level	American Indian/Alaska Native, Black/African American, Hispanic/Latino, Other

Race and age proved to be barriers to care among community survey respondents. Among survey respondents, a higher percentage of respondents identifying as Native American, Black/African American, or Hispanic/Latino reported not being able to access care when needed. Higher percentages of respondents aged 18-54 also reported not being able to access care when needed. When asked about accessing care in the emergency room (ER), a higher percentage of Black/African American people, Native American people, and people identifying as more than one race reported accessing care in the ER in the last year. A higher percentage of respondents identifying as Native American, Black/African American, multiracial, other race and Hispanic/Latino reported not being able to access dental care when needed.

When specifically considering access to mental health services among community survey respondents, a higher percentage of respondents identifying as Black/African American, American Indian/Alaskan Native, multiracial, and Hispanic/Latino reported not being able to access mental health care when needed. Higher percentages of respondents aged 18-54 reported not being able to access mental health care when needed as well.

Focus group participants mentioned that the health system navigation and health education access for minority racial or ethnic groups was a barrier to equitable care. They also specifically spoke to the lack of focus on men's health topics within the African American community. Older adults were the age group that focus group participants mentioned the most as having more barriers to accessing health care and services compared to younger populations. They also mentioned low-income families struggling to access services.

Disparities—geographic

Geographic disparities were identified using the SocioNeeds Index (refer to Figure 21). Within Kane County, the following ZIP codes were identified as having highest socioeconomic need (as indicated by the darkest shading): 60505 (South planning area), 60120 (North planning area), 60110 (North planning area). ZIP code 60506 has the highest level of socioeconomic need among all ZIP codes within the NMDH CSA. Areas of highest socioeconomic need potentially indicate poorer health outcomes for residents in those areas. Because these areas were identified as having the highest socioeconomic need, understanding the population demographics of these communities is equally as important.

The Community Health Needs Assessment:
Primary and secondary data synthesis

Findings from the primary and secondary data were analyzed and synthesized to identify the significant community health needs in the NMDH CSA.

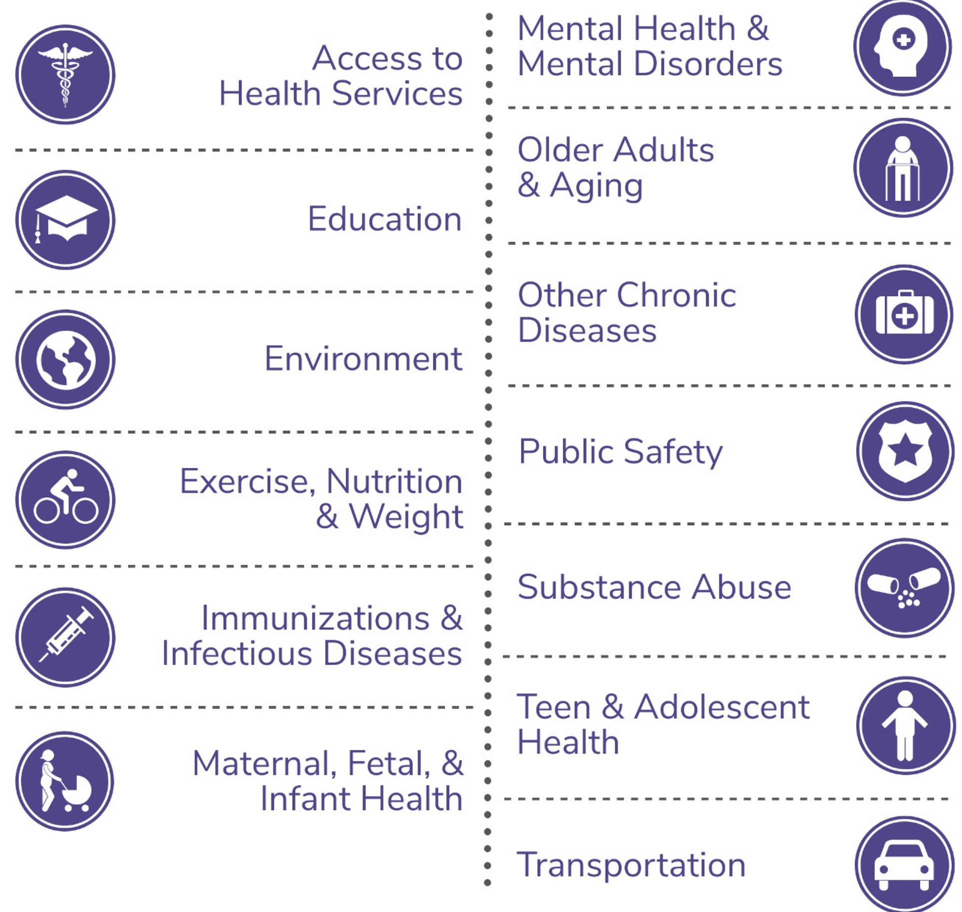
Criteria for determining significant health needs

All forms of data have strengths and limitations. This assessment used three separate sources of data to help identify community health needs: secondary data, key informant interviews and a community survey. Health needs were determined to be significant if they met certain criteria in at least one of the three data sources. Figure 22 summarizes the criteria that were set for each data source to determine whether a need was considered significant.

Figure 22. Criteria Used to Determine Significant Health Needs

Overall, 13 needs emerged as significant. Figure 23 illustrates the final 13 significant health needs, listed in alphabetical order, that were included for prioritization based on the findings of all forms of data collected for the NMDH 2021 CHNA.

Figure 23: Significant Health Needs



The Community Health Needs Assessment:
Analysis of significant health needs

The following section provides a detailed description of each significant health need. An overview is provided for each health topic, followed by a table highlighting the poorest-performing indicators and a description of key themes that emerged from primary data.

Note: As a reminder to the reader, a comprehensive explanation of the secondary data scoring methodology was discussed earlier in this report. HCI's Data Scoring Tool was used to systematically summarize multiple comparisons to rank indicators based on highest need. For each indicator, the Kane County value was compared to a distribution of Illinois and U.S. counties, state and national values, Healthy People 2020 targets and significant trends. Each indicator was then given a score based on the available comparisons. These comparison scores range from 0 to 3, where 0 indicates the best outcome and 3 indicates the worst outcome.

Prioritized Health Topic: Behavioral Health (Mental Health & Substance Use Disorders)

Behavioral Health: Mental Health

Secondary Data Score: **1.19**

Key Themes from Community Input

- Top priority from Community Survey, Focus Group, and Forces of Change Assessment participants
- Mental health care, resources, and available providers are disproportionate to community need

Warning Indicators

- Poor Mental Health Days
- Age-Adjusted Hospitalization Rate due to Pediatric Mental Health

Behavioral Health: Substance Abuse

Secondary Data Score: **1.35**

Key Themes from Community Input

- Alcohol and substance abuse were priorities from the Community Survey, Focus Group and Forces of Change Assessment participants

Warning Indicators

- Teens who use Alcohol
- Alcohol-Impaired Driving Deaths
- Age-Adjusted ER and Hospitalization Rate due to Adult Alcohol Use
- Liquor Store Density
- Teens who use Marijuana
- Adults who use E-Cigarettes (past 30 days)

Secondary data

From the secondary data scoring results, Behavioral Health was identified as a top health need in Kane County. This health topic includes mental health, mental health disorders and substance use disorders. Using HCI's secondary data scoring technique, mental health had the 11th highest data score, and substance use disorders ranked fifth. The overall topic scores were 1.19 and 1.35, respectively. Further analysis was done to identify specific indicators of concern across the county. Individual indicators with high data scores within a topic area were categorized as indicators of concern and are listed in Table 7 and Table 8.

Table 7: Data Scoring Results for Mental Health & Mental Disorders

SCORE	MENTAL HEALTH & MENTAL DISORDERS	KANE COUNTY	ILLINOIS	U.S.	IL COUNTIES	U.S. COUNTIES	TREND
1.75	Poor Mental Health Days *(% Adults)* *2010-2014*	40.5					
1.50	Age-Adjusted Hospitalization Rate due to Pediatric Mental Health *(hospitalizations/10,000 population)* *2017-2019*	61.6	67.5				
1.44	Alzheimer's Disease or Dementia: Medicare Population *(%)* *2017*	10	10.7	10.9			
1.44	Depression: Medicare Population *(%)* *2017*	16.4	16.4	17.9			

Table 8: Data Scoring Results for Substance Use Disorders

SCORE	SUBSTANCE ABUSE	KANE COUNTY	ILLINOIS	U.S.	IL COUNTIES	U.S. COUNTIES	TREND
2.11	Teens who Use Alcohol *(%)* *2018*	46	40				
1.89	Alcohol-Impaired Driving Deaths *(% of MVC deaths)* *2014-2018*	32	32	28			
1.83	Age-Adjusted ER Rate due to Adult Alcohol Use *(hospitalizations/10,000 population)* *2017-2019*	88	87				
1.69	Liquor Store Density *(stores/100,000 population)* *2018*	11.6	10.8	10.6			
1.67	Age-Adjusted Hospitalization Rate due to Adult Alcohol Use *(hospitalizations/10,000 population)* *2017-2019*	29	29.5				
1.56	Teens who Use Marijuana *(%)* *2018*	24.4	26				

From the secondary data results, there are several indicators in these topic areas that raise concern for Kane County. Compared to other counties in Illinois, Kane County has higher rates of hospitalizations and ER visits due to adult alcohol use. Teen alcohol and marijuana use, although decreasing in recent years, is also higher than most other counties in Illinois. In addition, Kane County has higher liquor store density than most Illinois and U.S. counties.

Primary data

Mental Health & Mental Disorders

Mental Health & Mental Disorders was a top health need described by community survey, focus group, and Forces of Change assessment participants. Mental health care, mental health resources and the availability of mental health providers were frequently cited as disproportionate to community need. Figure 24 shows the percentage of respondents in the North, Central and South Kane County planning areas who reported not being able to access needed mental health services in the past 12 months compared to all respondents from Kane County. The Central and South Kane County planning areas had a higher percentage of respondents who were unable to access these services (12.8% and 15.0%, respectively) compared to Kane County at 12.0%. Overall, respondents reported the cost and affordability of receiving care as their biggest barrier to care.

Figure 24: Community Survey Respondents Reporting Inability to Access Mental Health Services in the Last 12 Months

Kane: 12.0%

North: 9.6%

Central: 12.8%

South: 15.0%

(N_{Kane}=1,515, N_{North}=500, $N_{Central}$=415, N_{South}=601)

Focus group participants emphasized the impact of anxiety and stress that parents and families with children are experiencing presently because of COVID-19 restrictions and the ever-evolving options for schooling. Social isolation was another common topic discussed during these conversations, specifically mentioning the impact on children, youth and older adults. Separation from routines and social networks are greatly impacting mental health for these groups. Further, focus group participants discussed the challenge of accessing mental health services in the community. Cost, availability of appointments, and navigation and knowledge about available services were all mentioned as barriers to care.

Disparities (Access to Mental Health)

Survey responses were also analyzed to identify disparities along race/ethnicity, gender and age. Table 9 lists respondent groups where a higher percentage of a particular group experienced a greater barrier to mental health care compared to overall Kane County community survey respondents. Higher percentages of respondents identifying as Native American, Black/African American, Native Hawaiian or Pacific Islander, multiracial and Hispanic/Latino reported not being able to access mental health care when needed. Higher percentages of respondents aged 18-54 reported not being able to access mental health care when needed.

This analysis was conducted for the three Kane County planning areas as well, but the percentage of the population within each planning area who experienced a barrier to care were insufficient in size to generate meaningful results.

Table 9. Kane County Community Survey Respondent Groups With Significant Race/Ethnicity, Age or Gender Disparities for Accessing Mental Health Services*

Racial Groups	American Indian/Alaskan Native (AIAN), Black/African American, Native Hawaiian/Pacific Islander (NHPI), multiracial, Hispanic/Latino
Age Groups	45-54, 35-44, 25-34, 18-24

*Groups are presented in the order of decreasing disparity, with the group experiencing greater disparity listed first.

> The cases of people suffering from anxiety have increased, it is important to pay attention to mental health. With problems like education, lack of parental care, financial problems and now with the pandemic, people are suffering from more stress and mental problems like anxiety, depression.
> - Focus Group Participant

Alcohol and Substance Use Disorders

Alcohol and Substance Use Disorders were top priorities from the community survey, focus group and Forces of Change assessment participants. Focus group participants discussed that the focus on COVID-19 has diverted attention from drug use issues that had been and continue to be present in the community, particularly issues with heroin and opioids. Focus group participants discussed teen and adolescent use and misuse of illegal substances and the interconnectedness to peer pressure, bullying and self-esteem.

> Bullying in schools, the sense of belonging of young people. Everyone tries to be like the rest of the other young people and this brings drug addiction problems, alcoholism and many problems for youth.
> - Focus Group Participant

Prioritized Health Topic: Access to Health Services

Access to Health Services

Secondary Data Score: **1.38**

Key Themes from Community Input

- Top priority Community Survey, Focus Groups, Forces of Change Assessment as well as Public Health System Assessment participants
- Cost of care is a barrier as well as closings due to Covid
- Lack of funds for needed medication

Warning Indicators

- Primary Care Provider Rate
- Clinical Care Ranking
- Adults with Health Insurance
- Children with Health Insurance

Secondary data

From the secondary data scoring results, Access to Health Services was identified to be a top health need in Kane County. It had the third highest data score of all health topic areas using the data scoring technique, with a score of 1.38. Further analysis was done to identify specific indicators of concern across the county. Individual indicators with high data scores within a topic area were categorized as indicators of concern and are listed in Table 10.

Table 10. Data Scoring Results for Access to Health Services

SCORE	ACCESS TO HEALTH CARE	KANE COUNTY	ILLINOIS	U.S.	IL COUNTIES	U.S. COUNTIES	TREND
2.03	Primary Care Provider Rate *(providers/100,000 population)* *2017*	40.8	80				
1.75	Clinical Care Ranking *2020*	83					
1.67	Adults with Health Insurance (%) *2018*	88.2	90.1	87.5 *HP2020: 100			
1.56	Children with Health Insurance (%) *2018*	95.1	96.6	94.8 *HP2020: 100			

*HP2020 - Healthy People provides science-based, 10-year national objectives for improving the health of all Americans. HP2020 represents a Healthy People target to be met by 2020.

Although Kane County's overall score in this area is relatively low, Kane County falls behind Illinois and other counties for primary care provider rates, clinical care ranking and adults with health insurance. Of note, the primary care provider rate is decreasing, and the percentage of adults with health insurance is below both the Illinois value and the Healthy People 2020 objective.

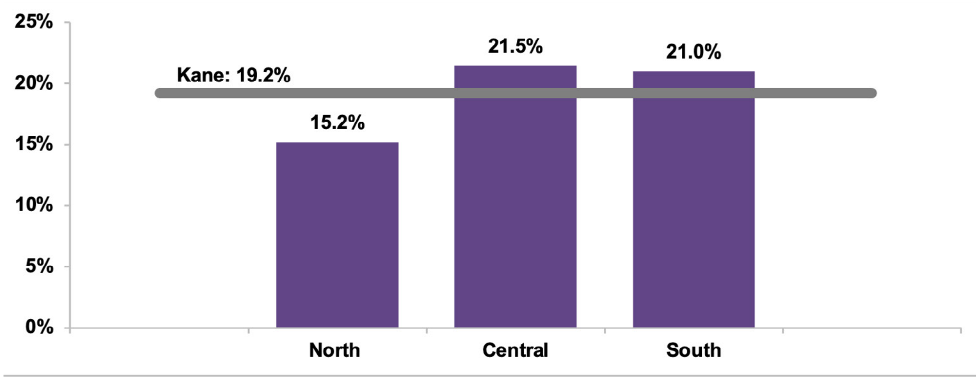
Primary data

Access to Health Services was a top health need identified from community survey, focus group, Forces of Change assessment participants, and Public Health System assessment participants. Cost of care was a common barrier mentioned across these primary data sources. This included general cost to access care, lack of funds for purchasing needed medication, and being uninsured or underinsured. Recent health facility closings and delays due to COVID-19 were also specifically mentioned as barriers to accessing care. The need for improved/increased culturally competent, accessible health care offered in languages that are spoken in the community was a theme that surfaced in the primary data as well.

Barriers and disparities: Access to Health Services

Figure 25 shows the percentage of respondents in the North, Central and South planning areas who reported not being able to access needed health services in the past 12 months compared to all respondents from Kane County. The Central and South planning areas had a higher percentage of respondents who were unable to access these services (21.5% and 21.0%, respectively) compared to Kane County at 19.2%. The North planning area fell slightly under the Kane County value at 15.2%. Overall, respondents reported cost and affordability of receiving care as their biggest barrier to care. Respondents reported that health providers and offices/facilities being closed due to COVID-19 as being a barrier to care as well.

Figure 25: Community Survey Respondents Reporting Inability to Access Health Services in the Last 12 Months



(N_{Kane}=1,515, N_{North}=500, $N_{Central}$=415, N_{South}=601)

Table 11 lists respondent groups where a higher percentage of a particular group experienced a greater barrier to health care compared to overall Kane County community survey respondents. Higher percentages of respondents identifying as Native American, Black/African American or Hispanic/Latino reported not being able to access care when needed. Higher

percentages of respondents aged 18-54 reported not being able to access care when needed.

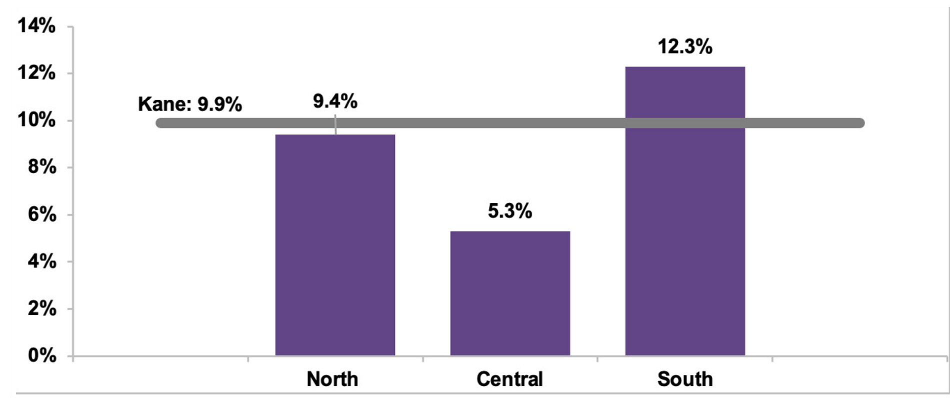
Table 11. Kane County Community Respondent Groups With Significant Race/Ethnicity, Age or Gender Disparities for Accessing Health Services*

Racial Groups	American Indian/Alaska Native, Black/African American, Hispanic/Latino
Age Groups	35-44, 45-54, 25-34, 18-24

*Groups are presented in the order of decreasing disparity, with the group experiencing greater disparity listed first.

Figure 26 shows the percentage of respondents in the North, Central and South planning areas who reported not having health insurance or being unsure if they were covered by health insurance compared to all community survey respondents from Kane County. The South planning area had a higher percentage of respondents who were uninsured (12.3%) compared to Kane County at 9.9%. The North and Central planning areas were lower than the Kane County value at 9.4% and 5.3%, respectively.

Figure 26: Community Survey Respondents Self-Reported Health Insurance Coverage: No Coverage or Unsure if Insured



(N_{Kane}=1,515, N_{North}=500, $N_{Central}$=415, N_{South}=601)

Barriers and disparities: Access to Care in the ER

Figure 27 shows the percentage of respondents in the North, Central and South planning areas who reported having accessed care in the ER in the past 12 months compared to all community survey respondents from Kane County. The South planning area had a higher percentage of respondents who accessed care in the ER (26.8%) compared to Kane County at 24.0%. The North and Central planning areas were lower than the Kane County value at 20.2% and 23.6%, respectively. While the majority of respondents reporting accessing care in the ER did so for an emergency or life-threatening situation (55.6%), a good proportion of respondents reported accessing care in the ER because of their need for care outside of clinic hours or on the weekend, when they were unable to access care elsewhere (27.3%).

Figure 27: Community Survey Respondents Self-Reported Emergency Room Utilization: Have Accessed the ER in the Past 12 Months

30%
25%
20%
15%
10%
5%
0%
Kane: 24.0%
20.2%
23.6%
26.8%
North
Central
South

(N_{Kane}=1,515, N_{North}=500, $N_{Central}$=415, N_{South}=601)

Table 12 lists respondent groups where a higher percentage of a particular group accessed care in the ER in the last 12 months compared to overall Kane County community survey respondents. A higher percentage of respondents who were Black/African American, Native American, and identifying as multiracial reported accessing care in the ER in the last year.

Table 12. Kane County Community Survey Respondent Groups With Significant Race/Ethnicity, Age or Gender Disparities for Accessing Care in the ER*

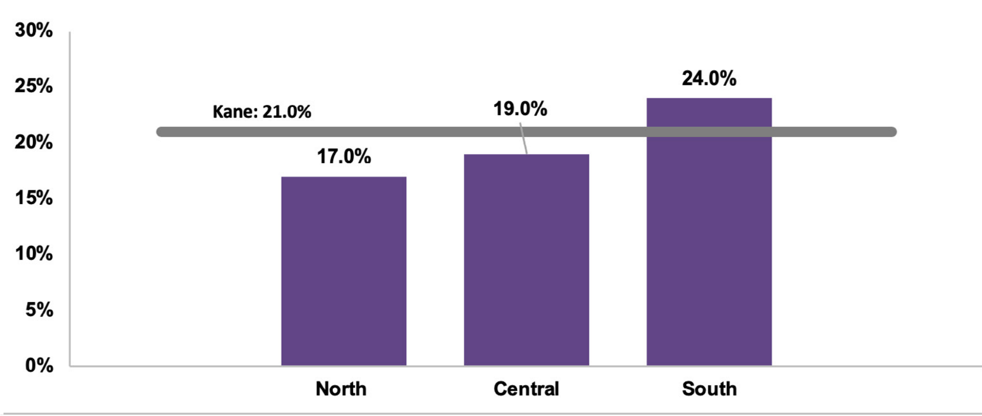
Racial Groups	American Indian/Alaska Native, Black/African American, multiracial

*Groups are presented in the order of decreasing disparity, with the group experiencing greater disparity listed first.

Barriers and disparities: Access to Dental Health Services

Figure 28 shows the percentage of respondents in the North, Central and South planning areas who reported not being able to access needed dental health services in the past 12 months compared to all respondents from Kane County. The South planning area had a higher percentage of respondents who were unable to access these services (24.0%) compared to Kane County at 21.0%. The North and Central planning areas were lower than the Kane County value at 17.0% and 19.0%, respectively. Overall, respondents reported that cost and affordability of receiving dental care was their biggest barrier to care. Respondents also reported that health providers and offices/facilities being closed due to COVID-19 as being a barrier to care. Further, having no dental insurance was another common barrier to care that was identified.

Figure 28: Community Survey Respondents Reporting Inability to Access Dental Health Services in the Last 12 Months



(N_{Kane}=1,515, N_{North}=500, $N_{Central}$=415, N_{South}=601)

Table 13 lists respondent groups where a higher percentage of a particular group experienced a greater barrier to dental health services compared to overall Kane County community survey respondents. Higher percentages of respondents identifying as Native American, Black/African American, multiracial, another race, and Hispanic/Latino reported not being able to access dental care when needed.

Table 13. Kane County Community Survey Respondent Groups With Significant Race/Ethnicity, Age or Gender Disparities for Accessing Dental Health Services*

Racial Groups	American Indian/Alaskan Native, Black/African American, multiracial, another race, Hispanic/Latino

*Groups are presented in the order of decreasing disparity, with the group experiencing greater disparity listed first.

> Lack of health insurance, it is very expensive. There are not many clinics where they charge less or there is more help for the community.
> - Focus Group Participant

Prioritized Health Topic: Immunizations and Infectious Disease

Immunizations & Infectious Diseases

Secondary Data Score: **1.36**

Warning Indicators

- COVID-19 Daily Average Case-Fatality Rate
- HIV Diagnosed Cases
- Overcrowded Households
- Adults with Pneumonia Vaccine
- Chlamydia Incidence Rate
- Syphilis Incidence Rate

Secondary data

From the secondary data scoring results, Immunizations & Infectious Diseases was identified to be a top health need in Kane County. It had the fourth highest data score of all health topic areas using the data scoring technique, with a score of 1.36. Further analysis was done to identify specific indicators of concern across the county. Individual indicators with high data scores within a topic area were categorized as indicators of concern and are listed in Table 14.

Table 14. Data Scoring Results for Immunizations & Infectious Diseases

SCORE	IMMUNIZATIONS & INFECTIOUS DISEASES	KANE COUNTY	ILLINOIS	U.S.	IL COUNTIES	U.S. COUNTIES	TREND
2.50	COVID-19 Daily Average Incidence Rate *(cases/100,000 population)* *Nov 6,2020*	84.2	79.9	47.5			
1.83	HIV Diagnosed Cases *(# cases)* *2018*	32					
1.67	Overcrowded Households *(% of households)* *2014-2018*	3.7	2.5				
1.58	Adults with Pneumonia Vaccination *(%)* *2010-2014*	24.4					
1.50	Chlamydia Incidence Rate *(cases/100,000 population)* *2018*	407.7	604	539.9			
1.50	Syphilis Incidence Rate *(cases/100,000 population)* *2018*	3.9	11	10.8			

The secondary data reveal that rates of sexually transmitted infections, specifically syphilis and chlamydia, are on the rise in Kane County. Kane County's vaccination rates for pneumonia among adults are among the worst in Illinois. This is particularly worrisome for 2019-2020 and beyond, as COVID-19 cases are increasing in Kane County and throughout the U.S. Overcrowding in households, which has been shown to ease transmission of infectious diseases like COVID-19, is of concern in Kane County as well.

Primary data

Concerns related to mental health, health communication, access to care and resources, and other barriers to care related to the COVID-19 pandemic were common topics that trended across this Kane County CHNA. Further exploration of the key primary data findings related to COVID-19 are covered fully in the Kane County Community Feedback section of the COVID-19 Impact Snapshot later in this report.

> People now are very nervous about going to get their flu shots. There has been a big push for home health care to do in-home flu shots.
> - Focus Group Participant

Prioritized Health Topic: Exercise, Nutrition & Weight

Exercise, Nutrition & Weight

Secondary Data Score: **1.19**

Key Themes from Community Input

- Top priority from Community Survey and Focus Groups
- Food security; access to healthy foods and poor nutrition
- Obesity and contribution to chronic disease
- Lack of exercise

Warning Indicators

- SNAP Certified Stores
- Children with Low Access to a Grocery Store
- Farmers Market Density
- Fast Food Restaurant Density
- Grocery Store Density
- People with Low Access to a Grocery Store

Secondary data

From the secondary data scoring results, Exercise, Nutrition & Weight was identified as a top health need in Kane County. It had the twelfth highest data score of all health topic areas using the data scoring technique, with a score of 1.19. Further analysis was done to identify specific indicators of concern across the county. Individual indicators with high data scores within a topic area were categorized as indicators of concern and are listed in Table 15.

Table 15. Data Scoring Results for Exercise, Nutrition & Weight

SCORE	EXERCISE, NUTRITION, & WEIGHT	KANE COUNTY	ILLINOIS	U.S.	IL COUNTIES	U.S. COUNTIES	TREND
2.11	SNAP Certified Stores *(stores/1,000 population)* *2017*	84.2	79.9	47.5			
1.67	Children with Low Access to a Grocery Store *(%)* *2015*	32					
1.67	Farmers Market Density *(markets/1,000 population)* *2018*	3.7	2.5				
1.67	Fast Food Restaurant Density *(restaurants/1,000 population)* *2016*	24.4					
1.67	Grocery Store Density *(stores/1,000 population)* *2016*	0.14					
1.50	People with Low Access to a Grocery Store *(%)* *2015*	18.5					

Access to grocery stores and healthy foods are important for decreasing risk of chronic diseases, such as obesity and heart disease, and can also help improve mental health. Although the overall topic score for Exercise, Nutrition & Weight was low for Kane County, Kane County falls behind in some important indicators under this topic. Namely, Kane County is among the worst in Illinois and the U.S. for SNAP certified stores, children with access to grocery stores, and grocery store density.

Primary data

Exercise, Nutrition & Weight was a top health need identified from community survey and focus group participants. Existing and increasing food insecurity due to COVID-19, access to healthy foods and poor nutrition were all nutritional themes from primary data. Obesity and its contribution to chronic disease among residents in Kane County was of concern as well. Sedentary lifestyles and lack of exercise were also common points of discussion.

Figure 29 shows the percentage of respondents in the North, Central and South planning areas who reported having worried about whether their food would run out before they got money to buy more sometime during the last 12 months, compared to all respondents from Kane County. The South planning area had a higher percentage of respondents who reported this food insecurity challenge (34.0%) compared to Kane County at 30.6%. The North and Central planning areas fell under the Kane County value at 27.2% and 27.0%, respectively.

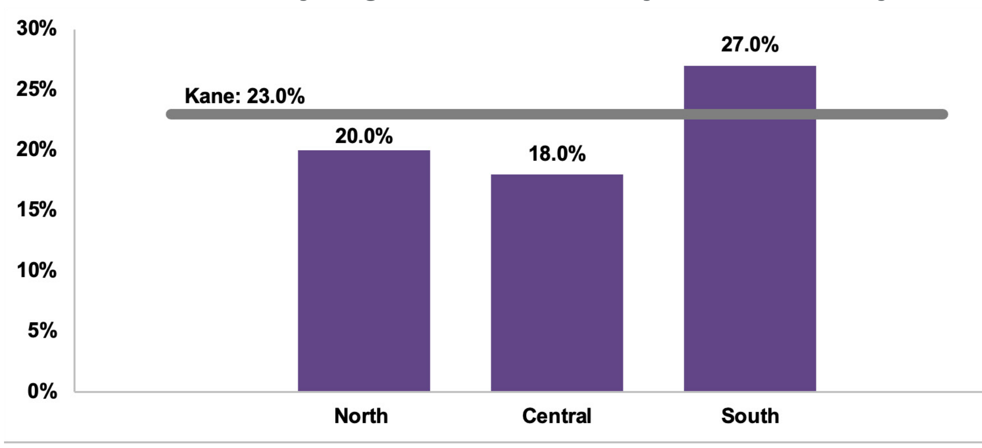
Figure 29: Community Survey Respondents Reporting Having Worried About Whether Their Food Would Run Out Before They Got Money to Buy More Sometime During the Last 12 Months

40%
35%
30%
25%
20%
15%
10%
5%
0%
Kane: 30.6%
27.2%
27.0%
34.0%
North
Central
South

(N_{Kane}=1,515, N_{North}=500, $N_{Central}$=415, N_{South}=601)

Figure 30 shows the percentage of respondents in the North, Central and South planning areas who reported that there was a time during the past 12 months when the food they bought did not last and they did not have money to get more, compared to all respondents from Kane County. The South planning area had a higher percentage of respondents who reported this food insecurity challenge (27.0%) compared to Kane County at 23.0%. The North and Central planning areas fell under the Kane County value at 20.0% and 18.0%, respectively.

Figure 30: Community Survey Respondents Reporting That There Was a Time During the Past 12 Months When the Food They Bought Did Not Last and They Did Not Have Money to Get More



(N_{Kane}=1,515, N_{North}=500, $N_{Central}$=415, N_{South}=601)

Figure 31 shows the percentage of respondents in the North, Central and South planning areas who reported that they or someone living in their home received emergency food from a church, food pantry or food bank, or ate in a soup kitchen in the past 12 months compared to all respondents from Kane County. The South planning area had a higher percentage of respondents who accessed these support services (27.0%) compared to Kane County at 19.0%. The North and Central planning areas fell under the Kane County value at 12.0% and 18.0%, respectively.

Figure 31: Community Survey Respondents Reporting That They or Someone Living in Their Home Received Emergency Food from a Church, Food Pantry or Food Bank, or Ate in a Soup Kitchen in the Past 12 Months

	North	Central	South
Percentage	12.0%	18.0%	27.0%

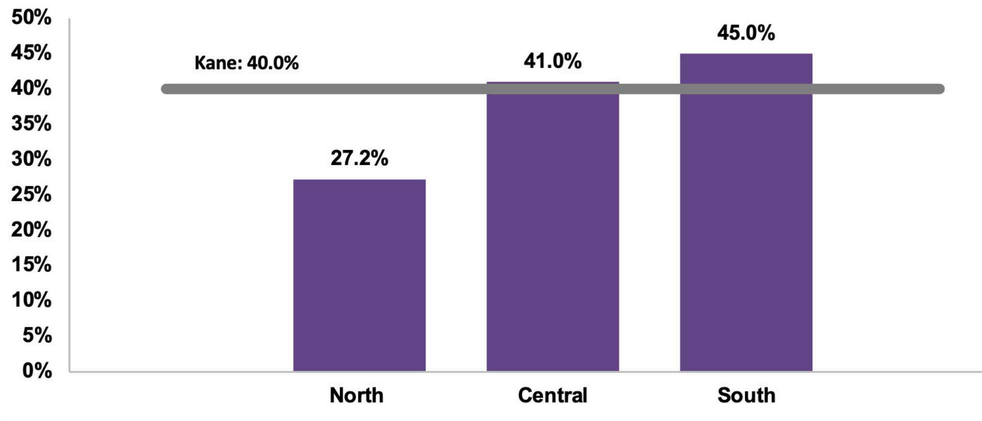
Kane: 19.0%

(N_{Kane}=1,515, N_{North}=500, $N_{Central}$=415, N_{South}=601)

Responses from the community survey indicate that food insecurity impacts a greater number of families living in Kane County who have children living in their home, compared to those who did not have children in their home. Figure 31, Figure 32 and Figure 33 highlight food insecurity among community survey respondents with children in their home by Kane County planning areas (North, Central and South) compared to all survey respondents from Kane County with children in their home.

Figure 32 shows the percentage of respondents with children in their home in the North, Central and South planning areas who reported having worried about whether their food would run out before they got money to buy more sometime during the last 12 months compared to all respondents from Kane County. The Central and South planning areas had a higher percentage of respondents who reported this food insecurity challenge (41.0% and 45.0%, respectively) compared to Kane County at 40.0%. The North planning area fell under the Kane County value at 27.2%.

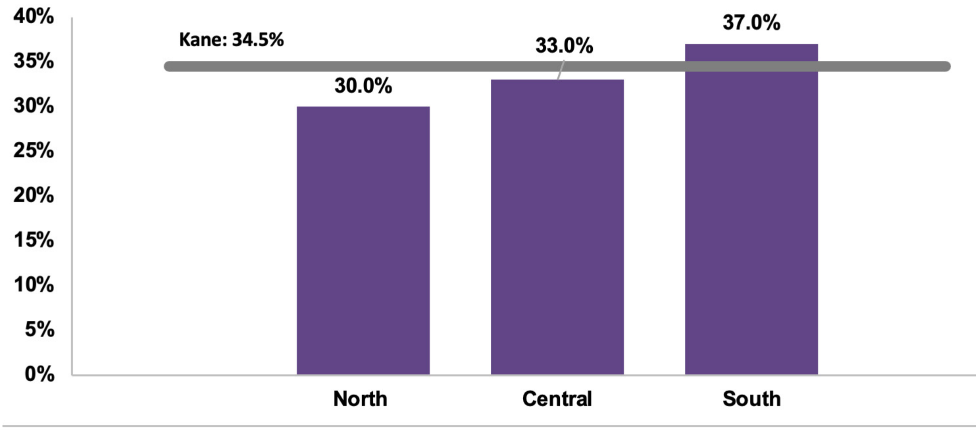
Figure 32: Community Survey Respondents With Children in Their Home Who Reported Having Worried About Whether Their Food Would Run Out Before They Got Money to Buy More Sometime During the Last 12 Months



N_{Kane}=677, N_{North}=210, $N_{Central}$=181, N_{South}=293

Figure 33 shows the percentage of respondents with children in their home in the North, Central and South planning areas who reported that there was a time during the past 12 months when the food they bought did not last and they did not have money to get more, compared to all respondents from Kane County. The South planning area had a higher percentage of respondents who reported this food insecurity challenge (37.0%) compared to Kane County at 34.5%. The North and Central planning areas fell under the Kane County value at 30.0% and 33.0%, respectively.

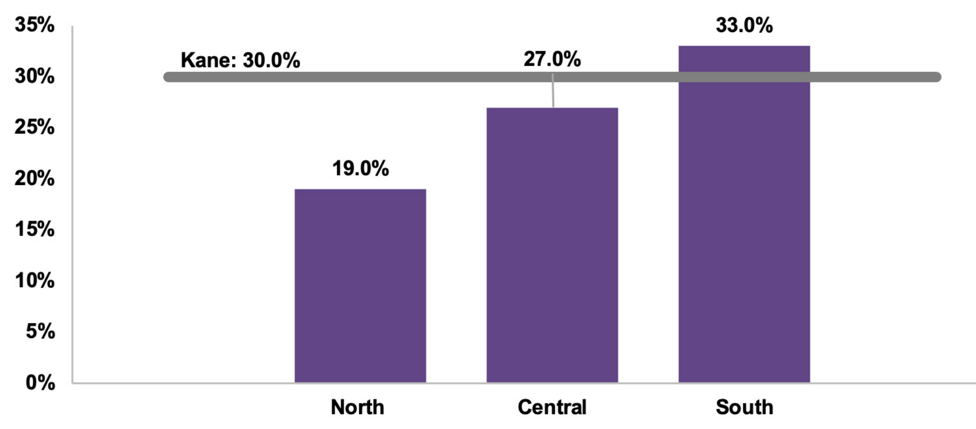
Figure 33: Community Survey Respondents With Children in Their Home Who Reported That There Was a Time During the Past 12 Months When the Food They Bought Did Not Last and They Did Not Have Money to Get More



N_{Kane}=677, N_{North}=210, $N_{Central}$=181, N_{South}=293

Figure 34 shows the percentage of respondents with children in their home in the North, Central and South planning areas who reported that they or someone living in their home received emergency food from a church, food pantry or food bank, or ate in a soup kitchen in the past 12 months, compared to all respondents from Kane County. The South planning area had a higher percentage of respondents who accessed these support services (33.0%) compared to Kane County at 30.0%. The North and Central planning areas fell under the Kane County value at 19.0% and 27.0%, respectively.

Figure 34: Community Survey Respondents With Children in Their Home Who Reported That They or Someone Living in Their Home Received Emergency Food From a Church, Food Pantry or Food Bank, or Ate in a Soup Kitchen in the Past 12 Months



N_{Kane}=677, N_{North}=210, $N_{Central}$=181, N_{South}=293

> If you have limited resources, you'll just go to McDonalds. Exercise is another area. Being closed in and moved in very close to each other and not having a broader community really makes the virtual community more of a lifeline and more of an influence.
> - Focus Group Participant

Prioritized Health Topic: Education

Education

Secondary Data Score: **1.29**

Key Themes from Community Input

- Top priority in Forces of Change Assessment
- Impact due to Covid-19
- Unequal access to broadband and technology

Warning Indicators

- Student-to-Teacher Ratio
- People 25+ with a High School Degree or Higher

> I agree with the problem of feeding children at school. The solution is to stay on top of school surveys, raise our voice as parents and go talk to the district and talk about the type of food, education, bullying.
> - Focus Group Participant

Prioritized Health Topic: Environment

Environment

Secondary Data Score: **1.45**

Warning Indicators

- SNAP Certified Stores
- Recognized Carcinogens Released into the Air
- Annual Ozone Air Quality
- Liquor Store Density
- Children with Low Access to a Grocery Store
- Farmers Market Density
- Fast Food Restaurant Density
- Grocery Store Density
- Overcrowded Households
- Severe Housing Problems

> Health, no exercise. They do not dedicate themselves fully to that. It would be ideal if there were more parks with equipment for sports and exercise.
> - Focus Group Participant

Prioritized Health Topic: Maternal, Fetal & Infant Health

Maternal, Fetal & Infant Health

Secondary Data Score: **1.32**

Warning Indicators

- Preterm Births
- Preterm Labor and Delivery Hospitalizations

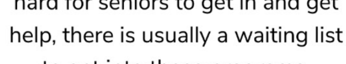
Prioritized Health Topic: Older Adults & Aging

Older Adults & Aging

Secondary Data Score: **1.40**

Warning Indicators

- Atrial Fibrillation: Medicare Population
- Cancer: Medicare Population
- Osteoporosis: Medicare Population
- Rheumatoid Arthritis or Osteoarthritis: Medicare Population
- Stroke: Medicare Population
- Hypertension: Medicare Population
- Hyperlipidemia: Medicare Population



"Mental health issues which go hand and hand with isolation. It's hard for seniors to get in and get help, there is usually a waiting list to get into these programs.
- Focus Group Participant"

Prioritized Health Topic: Other Chronic Diseases

Other Chronic Diseases

Secondary Data Score: **1.86**

Warning Indicators

- Osteoporosis: Medicare Population
- Rheumatoid Arthritis or Osteoarthritis: Medicare Population

Prioritized Health Topic: Public Safety

Public Safety

Secondary Data Score: **1.25**

Warning Indicators

- Alcohol Impaired Driving Deaths

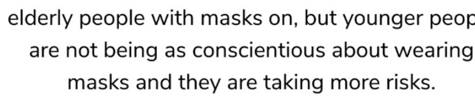
Prioritized Health Topic: Teen & Adolescent Health

Teen & Adolescent Health

Secondary Data Score: **1.27**

Warning Indicators

- Teens Who use Alcohol
- Teens Who use Marijuana



> Younger people are on COVID-19 burn out, some are taking precautions, but some are not. I see elderly people with masks on, but younger people are not being as conscientious about wearing masks and they are taking more risks.
> - Focus Group Participant

Prioritized Health Topic: Transportation

Transportation

Secondary Data Score: **1.43**

Warning Indicators

- Solo Drivers with a Long Commute to Work
- Mean Travel Time to Work
- Workers Commuting by Public Transportation

> Transportation issue has always been huge. It's a blackhole for money, Riding Kane has worked on it and we have worked on it, but we are a large county; there is a lot of distance between us. It is hard to get around.
> - Focus Group Participant

Prioritization of community need: Process and methodology

Following the assessment period, NMDH conducted a systematic, data-driven evaluation and prioritization process of the identified significant health needs. The prioritization process was conducted from April 2021 to May 2021 and involved the establishment of an Internal and External Community Health Council (CHC). The External CHC was comprised of members from the community stakeholders (including representatives from public health and medically underserved, low-income and minority populations).

Internal Community Health Council

Following completion of the CHNA, NMDH leadership convened the Internal CHC to review the findings. This multidisciplinary committee was made up of key internal stakeholders who were selected based on strong administrative/clinical expertise along with an organizational commitment to improve the health of the community, including medically underserved, minority and low-income populations. The varied backgrounds of the committee members provided diverse insight into the process of prioritizing identified health needs. Departments represented and rationale for inclusion are outlined in Table 16.

Table 16. Internal Community Health Council Members

Internal Community Health Council Members

Department	Rationale	Member	Postion
External Affairs	Community relationships, knowledge, data and hospital resources	Ann Hall	Vice president
		Karin Podolski	Director
		Sandy Alvarado	Lead outreach specialist
Analytics	Patient data, IS systems and analytics	Clinton Garafolo	Program manager
Case Management	Social determinants of health, patient barriers and communities	Jeannine Harvell	Director

Internal Community Health Council Members (continued)

Department	Rationale	Member	Postion
Hospital Operations	Hospital and staff operations	MB Johnson	Vice president of Operations
Human Resources	Diversity and inclusion strategies	Alison Bodor	Director
Human Resources	Health education strategies	Allison Petrella	Director
Medical Staff	Medical staff operations and knowledge	Kevin Most, DO	Senior Vice President, CMO, CDH and Marianjoy
NM Regional Medical Group Clinical Operations	Physician operations	Matthew Watson	Director, Regional Medical Group
Nursing	Patients, barriers and community nursing	Gina Reid Tinio	Senior vice president, CNE
Philanthropy	Community outreach programming and fundraising opportunities	Catherine Wierz	Director
Process Improvement	Process improvement strategies	John Parker	Director
Quality	Hospital quality data and resources	Marty Dietrich	Vice president
Strategy	Business development and strategies	Katherine Bertani	Director

External Community Health Council and community stakeholders

The following community organizations, who are representative of the CSA (including those who serve medically underserved, low-income and minority populations), were formally engaged to participate in the NMDH prioritization process. These key stakeholders were selected based on strong collaborative efforts to improve the health of the community, and their varied backgrounds in providing diverse insight into prioritizing the identified health needs.

Table 17. External Community Health Council and Community Stakeholders

External Community Health Council and Community Stakeholders

External CHC and Stakeholders	Populations Served and Social Determinants Addressed
Ravenswood Health and Wellness Center, and Advance Performance Pain & Wellness Center	General population
Rush Copley Medical Center	Health care, underserved populations, access to care
American Cancer Society	General population – cancer
Nutrition and wellness educator at University of Illinois	General population – nutrition
Professor, Health Studies, Nutrition and Dietetics, Northern Illinois University	Education, nutrition, health
Kane County Department of Transportation (KDOT), Deputy Chief of Staff, Special Projects, Traffic Manager	Transportation, health and wellness
Northern Illinois Food Bank	Food insecurity
Visiting Nurse Association	Care for underserved populations
Kane County Health Department	General population, underserved populations, health and fitness, chronic disease, wellness
Aunt Martha's Youth Services	FQHC, care for underserved populations
Greater Elgin Family Care Center	FQHC, care for underserved populations
AMITA Health, Provena Mercy Medical Center	Health care, underserved populations, access to care, nutrition
Elgin Community College	Education
AMITA Health	Faith community nursing, health and wellness
KDOT Planning and Programming	Transportation, health and wellness

External Community Health Council and Community Stakeholders (continued)

External CHC and Stakeholders	Populations Served and Social Determinants Addressed
Waubonsee Community College	Education, wellness
Association for Individual Development	Behavioral health, developmental disabilities
Active Medical Center	Health care, access to care
Community Harvest Educational Foundation	Education
Advocate Health	Health care, underserved populations, access to care
American Heart Association	Heart disease and wellness
Fox Valley Park District	Physical activity, fitness, health
Kane County Bicycle and Pedestrian Coordinator	Health, fitness, exercise
Center for Diabetic Wellness, AMITA Health	Diabetes, underserved populations
Northern Illinois University	Population-focused care, education
Upward Bound	Education, GED completion
PADS Program, Elgin	Homeless population

Prioritization process and methodology

A structured process was used to inform both councils regarding the NMDH prioritization process of the identified health needs. The Internal CHC was engaged to review guiding principles, examine CHNA findings (including the 13 significant health needs and their associated key themes), apply the prioritization factors when completing the Pairwise Survey Tool, and participate in robust conversations regarding potential priority health needs for the NMDH CSA. The External CHC also received the 13 significant health needs and their associated key themes and were asked to provide feedback regarding the topic priorities via the Pairwise Survey Tool.

It should be noted that communication with both councils was held online because of COVID-19. The Pairwise Survey Tool was selected for its quality and design, but also ease of use.

The prioritization process was also reviewed by the Internal CHC with regards to alignment with Northwestern Medicine's guiding principles in response to community need, including:

Importance of the problem to the community:

- Is there a demonstrated community need?
- Will action impact disproportionately affected populations?
- Does the identified health need 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 time frame?

Opportunity for collective impact:

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

Applicability of NMDH as a change agent (partner, researcher, educator, or the role of knowledge-sharing in providing direct funding):

- Does NMDH have the expertise or resources to address the identified health need?

Estimated resources, time frame and size of impacted population

A data book was developed to detail findings of each area of opportunity, including prevalence, morbidity and mortality of the condition, for easy comparison across needs.

This data book was distributed to the Internal CHC outlining the following prioritization factors for objective analysis:

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

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

Feasibility: What capacity and 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 changed over time?

Pairwise Prioritization Tool

The Pairwise Prioritization Ranking Survey Tool uses a machine-optimized process to display items two at a time. Respondents are asked to pick one of the two items. Using a dynamic lookup model, the pairwise ranking process then optimizes for orthogonality first. This means that all the items are randomly divided into groups of two each and presented to the respondent. After that, the selected items are again recursively grouped two at a time, again randomized until the final item is reached.

This process then deterministically defines the best option, and a tree is created. Once the tree is created, the system can then rank all the items based on the respondent's input. This model allows for a simple and effective mobile-friendly process, where users swipe left and right, to determine the efficacy of an item. It can order a respondent's preference without resorting to a complex cognitive load.

Prioritization timeline

First meeting with Internal CHC to review findings .... April 19, 2021
First prioritization survey sent to Internal CHC .... April 19, 2021
Second prioritization survey sent to Internal CHC. .... May 8, 2021
First prioritization survey sent to External CHC .... May 8, 2021
Results compiled .... May 14, 2021
Second meeting with Internal CHC to present data .... May 17, 2021
Prioritization voting complete and priorities finalized. .... May 24, 2021

Prioritized significant health needs identified

NMDH has prioritized four significant health needs that will enable us, in partnership with the community, to maximize the health outcomes generated by our collective resources over the next few years. In selecting these priorities, we considered the degree of the community need, capacity and available resources to meet the need, and the suitability of our own expertise to address the need. In particular, we identified health needs that would be best 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. Key themes were also included and integrated into the determination of our priority needs, as many times they served as contributing factors and/or root causes of the priority need.

A deeper dive into the primary data findings and secondary data indicators for each of these topics as presented previously in this report was made in the consideration and determination of the 2021 prioritized health needs. This information highlights in detail how each issue became a high-priority health need for NMDH. Comprehensive, additional secondary data indicators are included in Appendix A.

Through this process, the 2021 NMDH priority significant health needs were identified as shown in Table 18.

Table 18. NMDH Prioritized Health Needs

2021 NMDH priority significant health needs	
Access to Health Care and Community Resources	Mental Health and Substance Use Disorders
Chronic Disease	Social Determinants of Health

Non-prioritized health needs

As discussed previously, NMDH has identified four priority health needs that we believe we are best positioned to impact based on our expertise and resources. However, NMDH also commits staff, expertise and financial resources to work collaboratively within the community to impact the remaining health needs. Table 19 lists areas in which NMDH serves and interacts with outside community organizations in support of the non-prioritized health needs.

Table 19. Activities in Support of Non-prioritized Health Needs

Activities in Support of Non-prioritized Health Needs

Education	Various locations	Stroke Education, a community-focused education program
Environment	NMDH	Maintained walk pathway for community members and employees
	NMDH	Community Kitchen classes for children and adults, plus specialty classes for kids with special needs
Exercise, nutrition and weight	Making Kane County Fit for Kids	Funded program providing parents and children with information on physical activity and eating habits
	Various locations	Provided evidence-based Coordinated Approach to Child Health (CATCH) program
	NMDH	Small community benefit grants targeted to enhance/promote health and minimize chronic disease and obesity
	Various locations	Hosted/offered evidence-based community health and wellness programming
Immunization & Infectious Disease	Various locations	Flu vaccine clinics
	Various locations	COVID-19 vaccine clinics
Maternal, Fetal and Infant Health	Various locations	Evidence-based community health and wellness programming

Activities in Support of Non-prioritized Health Needs (continued)

Older Adults & Aging	Senior Services Associates	Funding Community Collaboration Center
Public Safety	Batavia United Way	Funding Kane County 211
	Various locations	Kits for Kids, an educational program that may be used by parents, teachers, Scouts leaders and other individuals to assist children in learning about hand-washing, bicycle safety and nutrition
	Various locations	Provide evidence-based ThinkFirst education on prevention of brain and spinal cord injury
	Tri City Health Partnership Medical and Dental Clinic	Support a free clinic
Teen/Adolescent Health	Naperville High School	Funded and supported Naperville Central High School health careers class
Transportation	American Cancer Society Road to Recovery	Funded transportation
Additional Activities	Ecker Center Behavioral Health Center	Bolstered their telehealth program to continue to provide essential behavioral health services
	Tri City Health Partnership Medical and Dental Clinic	Provided free dental services with a specialty clinic for clients with diabetes
	Ecker Center for Behavioral Health- Renz Office	Provided individual, family and group counseling; medication-assisted treatment; and case management support in the community

Summary of progress since previous NMDH Community Health Needs Assessment

NMDH completes its CHNA every three years. An important piece of this three-year cycle includes the ongoing review of progress made on priority health topics set forth in the preceding CHNA and implementation strategy (Figure 35). By reviewing the actions taken to address priority health issues and evaluating the impact those actions have made in the community, it is possible to better target resources and efforts during the next assessment.

Figure 35. The CHNA Cycle

Priority health needs from the preceding NMDH CHNA

In response to a comprehensive CHNA, NMDH identified four priority health areas for years 2018-2020:

Access to Health Care Services	Mental Health and Substance Use Disorders
Chronic Disease	

Highlights of progress with priority health needs

The following sections include notable highlights from a few of the initiatives implemented since the last CHNA to address the priority health needs. A more detailed and comprehensive delineation of NMDH's initiatives, responses and outcomes is included in the 2020 Community Health Improvement Plan Report (CHIP-R) and is available on request.

CHIP Summary 2018

Access to Health Care Services

In conjunction with national and local benchmarks, the following goals were established in response to the problem of limited access to care:

NMDH will continue to support efforts to increase access to care by providing leadership, investing resources and working collaboratively with other community organizations throughout the county.

NMDH will support the maintenance and expansion of an efficient and effective continuum of care offering medical homes (including primary and specialty care; pharmaceuticals; and inpatient, outpatient and emergent care to uninsured adult residents of DuPage County.

NMDH will offer a comprehensive financial assistance program to patients who are unable to afford the cost of necessary medical care.

NMDH will also seek to engage and maintain a multicultural workforce of primary care practitioners, specialists, mid-level practitioners, registered professional nurses and other medical professionals committed to working in an evidence-based practice setting.

NMDH strategies to address access to health care included:

NMDH will ensure financial assistance policies are easily accessible, respectful and in compliance with all regulatory requirements.

NMDH will continue to provide medically necessary inpatient and outpatient hospital services to uninsured and underinsured patients.

NMDH will assist with applications for government-sponsored healthcare programs.

NMDH will collaborate with community partners to ensure a comprehensive continuum of care.

NMDH will provide an operational grant to Tri City Health Partnership (TCHP) to support their coordination of care for patients without insurance.

NMDH will continue to provide free inpatient and outpatient care to TCHP patients in accordance with presumptive eligibility and existing NMDH financial assistance policies.

NMDH will provide continued support to TCHP by assuming costs related to laboratory and other hospital services to presumptively eligible patients.

NMDH will serve as a training center for nursing and allied health professionals to ensure the continuation of a diverse, culturally sensitive and highly skilled workforce.

NMDH will use trained, professional healthcare interpreters in an effort to reduce barriers to care, promote access and ensure high-quality, culturally competent care.

NMDH will provide office space and support to the Senior Health Insurance Program, which provides Medicare counseling and support to seniors.

NMDH will work collaboratively with local Federally Qualified Health Centers (FQHCs) to promote a seamless continuum of care to underserved individuals.

NMDH will offer vaccine clinics that are accessible to uninsured and underinsured families who do not have access to vaccines under the State of Illinois Vaccines for Children Program.

Key outcomes and metrics included:

All financial assistance policies were reviewed annually.

More than 18,500 individuals received financial assistance at NMDH and Northwestern Medicine Central DuPage Hospital (NMCDH).

$77,754,019 was rendered in financial assistance to uninsured and underinsured individuals (NMDH and NMCDH).

Medicaid applications from 598 people were processed through HJQ financial services.

NMDH leadership and staff participated in various community task forces to further the development of the health and human services safety net.

Tri City Health Partnership, a free clinic supported by NMDH, was accessed by 104 people.

NMDH provided $42,502 of free inpatient care to TCHP clients.

NMDH provided $129,694 of free care to TCHP clients for outpatient and other services.

148,057 hours were committed to nursing and allied health professions training (NMDH and NMCDH).

Trained professional healthcare interpreters were used for 40,326 encounters (NMDH and NMCDH).

The Senior Health Insurance Program provided support and assistance to 450 seniors (NMDH and NMCDH).

A formal agreement was executed in December 2016 with VNA Health Care. Workgroups developed a process for referring patients, and 61 patients received care from NMRMG and NM hospitals.

48 vaccine clinics were offered this fiscal year.

Chronic Disease

In conjunction with national and local benchmarks, the following goals were established in response to the growing incidence and prevalence of chronic disease by addressing chronic disease across its life span:

NMDH will continue to provide community education related to chronic disease in the areas of evidence-based primary interventions (disease prevention, health promotion).

NMDH will offer evidence-based secondary interventions (screenings).

NMDH will offer evidence-based tertiary interventions (programs for individuals affected with a chronic disease to promote an optimum state of wellness).

NMDH will also continue to provide acute care for chronic disease and chronic disease management to all individuals, regardless of ability to pay.

NMDH strategies to impact chronic disease across its life span included:

NMDH will host/offer evidence-based community health and wellness programming in the areas of cardiovascular disease, peripheral vascular disease and diabetes.

NMDH will host/offer evidence-based community health and wellness programming in the areas of 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.

NMDH will host/offer evidence-based community health and wellness programming in various other areas related to chronic disease, including but not limited to obesity, injury prevention, arthritis, maternal and child health, joint replacement, fall prevention, chronic lung disease, epilepsy and Parkinson's disease.

NMDH will offer a community-based heart failure (HF) program to all patients with an active diagnosis of HF who have not been referred for or are not receiving other nursing services.

NMDH will offer small community benefit grants targeted to enhance/promote health and minimize chronic disease and obesity.

- Making Kane County Fit for Kids (grant amount: $10,000)
- Northern Illinois Food Bank: Diabetes Prevention Education (grant amount: $15,000)
- Fox Valley Food for Health (grant amount: $5,000)
- St. Charles Park District CATCH (grant amount: $1,400)

NMDH will work with local schools to implement the CATCH program. Emphasis will be on parents and children attending the 4-year-old program and all preschool program teachers.

NMDH and NMCDH will provide Stroke Education, a community-focused education program.

NMDH will provide Kits for Kids, an educational program that may be used by parents, teachers, Scouts leaders and other individuals to assist children in learning about hand-washing, bicycle safety and nutrition.

Key outcomes and metrics included:

One cardiovascular health educational seminar offered; 170 individuals attended (NMDH and NMCDH combined data).

Meeting space provided for 20 support groups (NMDH and NMCDH).

Two cancer educational seminars offered; 102 individuals attended (NMDH and NMCDH).

12 additional educational seminars offered; 1,343 individuals attended (NMDH and NMCDH).

18 Rehabilitation Services community programs, 282 individuals attended (NMDH and NMCDH).

9 Diabetes Education Services community programs offered; 78 individuals attended (NMDH and NMCDH).

The Community-Based Heart Failure program enrolled 382 individuals (NMDH and NMCDH), resulting in the following:

- 30-day readmission rate for heart failure diagnosis was 1% (markedly below the national rate).
- 85% of clients demonstrated the ability to identify appropriate action in the event of a worsening of their condition.
- 97% of clients used an effective medication management system.
- 86% of clients demonstrated compliance with symptom tracking.

Making Kane County Fit for Kids:

- Provided parents and children with information on physical activity and eating habits
- Supported a culture of wellness and health promotion in schools, workplaces and other institutions
- Developed land use, planning and policies to support physical activity
- Provided affordable and accessible fresh fruit and vegetables to all families

The Northern Illinois Food Bank Diabetes Prevention Education programs had 104 participants.

St. Charles Park District CATCH Kids Club used their new CATCH Early Childhood equipment set and curriculum to impact the health and wellness of the students and families that attended Baker Station.

Fox Valley Food for Health built a network of adult and teen volunteers who helped in providing nutrient-rich meals, nutrition education and personal caring support to individuals and families dealing with serious illness such as cancer.

The CATCH program reached more than 778 students and teachers (NMDH and NMCDH):

- 89% of children were able to verbalize six of eight Go foods.
- 84% of children recognized the importance of consuming Go foods daily.
- 95% of schools/programs adjusted their snack lists to include healthy (Go) foods.
- 100% of teachers organized 20 minutes of moderate physical activity.
- 96% of teachers continued to reinforce the Go/Whoa healthy food message in the classroom.

10 community programs and 679 individuals participated in community stroke education presentations (NMDH and NMCDH).

308 Kits for Kids were disseminated in the areas of hand-washing, bicycle safety and healthy nutrition (NMDH and NMCDH).

184 individuals participated in smoking cessation programs; 91% self-reported smoking cessation by the end of week three (NMDH and NMCDH).

The ThinkFirst curriculum was offered to 24,240 children from kindergarten through high school, and 132,733 individuals participated in ThinkFirst community events (NMDH and NMCDH):

- 6,549 children were fitted for and received bike helmets (NMDH and NMCDH).
- 77 couples attended child safety classes (NMDH and NMCDH).
- 1,066 car seats were checked or distributed (NMDH/NMCDH).

Mental Health and Substance Use Disorders

In conjunction with national and local benchmarks, the following goals were established in response to the priority need Mental Health and Substance Use Disorders:

NMDH will provide leadership, invest resources and work collaboratively with community partners in a countywide mental health and substance use disorder coalition.

The purpose of the coalition will be to study the issues and needs, and develop planned responses that will ultimately improve the quantity, quality and continuity of mental health services available in the county.

NMDH strategies to impact mental health and substance use disorders included:

NMDH will provide in-kind leadership and support to the implementation of the Mental Health Council that has been developed by the Kane County Health Department.

NMDH will offer evidence-based wellness programs in the areas of mental health and substance use disorders

via programmatic venues, including but not limited to the Dinner with the Doc series, clinician-led educational offerings, self-help groups, rehabilitation services programs, support groups and professional development.

NMDH will offer community benefit grants targeted to address mental health needs in the NMDH CSA:

- TriCity Family Services (grant amount: $5,000)
- Ecker Center (grant amount: $5,000)
- Samara Care Mental Health Access Program (grant amount: $5,000) (NMDH and NMCDH)
- World Relief Refugee Wellness Program (grant amount: $5,000) (NMDH and NMCDH)

NMDH will implement the National Council for Behavioral Health Mental Health First Aid (MHFA) program and offer programming to members of the community (NMDH and NMCDH).

Key outcomes and metrics included:

Leadership staff member Allison Johnson participated in the Kane County Behavioral Council. The council focused on creating a Department of Housing and Community Development (DHCD) Roadmaps Receiving project, exploring two sites where there are central receiving centers for residents affected by mental health and substance use problems.

NMDH leadership participated on the TriCity Family Services advisor council. The goal of the council is to provide support to community service agencies that serve the mental health needs of residents.

NMDH and NMCDH Behavioral Health Services hosted 10 evidence-based wellness events:

- Professional Seminar Series: Youth Depression and Professional Education
- Kane County Youth Collaborative
- Student School Refusal/Anxiety presentations
- Patient Education presentations
- Kane County Regional Office of Education institute day presentations on compassion, fatigue and mindfulness
- Teen Anxiety presentations for staff and counselors
- Lazarus House Shelter presentation for staff regarding medication-assisted therapies for people who misuse opiates
- Emotional support for St. Charles high school staff and students

Office space was provided at no charge for 12-step programs (NMDH and NMCDH).

- 1,530 hours of room usage was recorded.

TriCity Family Services grant outcomes:

- 80% reported progress toward treatment plan goals.
- 47.3% reported progress in Moods and Emotions, which indicates a reduction of anxiety and/or depression symptoms.
- 26.5% reported progress in Home/Family, which indicates improvements in family relationships and interactions.
- 9.25% reported progress in Thinking, which indicated improved cognition relative to self and others.

Ecker Center grant outcomes:

- Medication Possession Ratio: The baseline was 0.89, and it was measured to be consistently 0.92 over the grant period.
- The client symptom improvement baseline was 72%, and it was measured that 90% of clients reported symptom improvement.

Individuals impacted by funding from the Samara Care Mental Health Access Program reported the following (NMDH and NMCDH):

- 87% of clients experienced an increase in their GAF scale score.
- 90% of those who completed the client satisfaction survey indicated that they agree/strongly agree, "I feel I was able to accomplish what I set out to do," "I am better able to handle conflict and stress."
- 95% of those who completed the client satisfaction survey indicated that they agree/strongly agree, "My counselor interventions and interactions were helpful."

Outcomes reported as the result of NMDH funding to the World Relief Refugee Wellness Program (NMDH and NMCDH):

- 8% of participants were able to identify symptoms of mental illness.
- 75% were to identify at least three helpful mainstream community resources and report stronger connectedness to members of their own community.
- 68% of refugees receiving mental health treatment demonstrated an increased level of functioning, decreased symptoms and completed treatment goals.

One staff member was trained to offer the nationally recognized evidence-based Mental Health First Aid program.

- 17 classes were held.
- 318 individuals (adults and youth) attended the programs.
- 100% of MHFA participants scored a minimum of 85% on the MHFA course exam.

CHIP Summary 2019

Access to Health Care Services

In conjunction with national and local benchmarks, the following goals were established in response to the problem of limited access to care:

NMDH will continue to support efforts to increase access to care by providing leadership, investing resources and working collaboratively with other community organizations throughout the county.

NMDH will support the maintenance and expansion of an efficient and effective continuum of care offering medical homes (including primary and specialty care); pharmaceuticals; and inpatient, outpatient and emergent care to uninsured adult residents of DuPage County.

NMDH will offer a comprehensive financial assistance program to patients who are unable to afford the cost of necessary medical care.

NMDH will also seek to engage and maintain a multicultural workforce of primary care practitioners, specialists, mid-level practitioners, registered professional nurses and other medical professionals committed to working in an evidence-based practice setting.

NMDH strategies to address access to health care included:

NMDH and NMCDH will ensure financial assistance policies are easily accessible, respectful and in compliance with all regulatory requirements.

NMDH and NMCDH will continue to provide medically necessary inpatient and outpatient hospital services to uninsured and underinsured patients.

NMDH and NMCDH will assist with applications for government-sponsored healthcare programs.

NMDH and NMCDH will collaborate with community partners to ensure a comprehensive continuum of care.

NMDH will provide an operational grant to Tri City Health Partnership (TCHP) to support their coordination of care for patients without insurance.

NMDH will continue to provide free inpatient and outpatient care to TCHP patients in accordance with presumptive eligibility and existing NMDH financial assistance policies.

NMDH will provide continued support to TCHP by assuming costs related to laboratory and other hospital services to presumptively eligible patients.

NMDH and NMCDH will serve as training centers for physician, nursing and allied health professionals to ensure the continuation of a diverse, culturally sensitive and highly skilled workforce.

NMDH and NMCDH will serve as transition to work facility by providing work experience for young people with significant disabilities.

NMDH and NMCDH will use trained, professional healthcare interpreters in an effort to reduce barriers to care, promote access and ensure high-quality, culturally competent care.

NMDH will work collaboratively with local FQHCs to promote a seamless continuum of care to underserved individuals.

NMDH will offer vaccine clinics that are accessible to uninsured and underinsured families who do not have access to vaccines under the State of Illinois Vaccines for Children Program.

Key outcomes and metrics included:

All financial assistance policies were reviewed annually.

More than 12,376 individuals received financial assistance at NMCDH and NMDH.

$12,688,809 was rendered in charity care to uninsured and underinsured individuals; $1,332,681 was rendered in government-sponsored indigent support (NMCDH and NMDH).

Medicaid applications from 1,333 people were processed through Change HealthCare financial services.

NMDH leadership and staff participated in various community task forces to further the development of the health and human services safety net.

TCHP, a free clinic supported by NMDH, was accessed by 194 people.

NMDH provided $23,602 of free inpatient care to TCHP clients.

NMDH provided $109,107 of free care to TCHP clients for outpatient and other services.

117,679 hours were committed to physician, nursing and allied health professions training (NMDH and NMCDH).

A formal agreement was executed in December 2016 with VNA Health Care. Workgroups developed a process for referring patients, and 61 patients received care from NMRMG and NM hospitals.

50 vaccine clinics were offered this fiscal year.

Chronic Disease

In conjunction with national and local benchmarks, the following goals were established in response to the growing incidence and prevalence of chronic disease by addressing chronic disease across its life span:

NMDH will continue to provide community education related to chronic disease in the areas of evidence-based primary interventions (disease prevention, health promotion).

NMDH will offer evidence-based secondary interventions (screenings).

NMDH will offer evidence-based tertiary interventions (programs for individuals affected with a chronic disease to promote an optimum state of wellness).

NMDH will also continue to provide acute care for chronic disease and chronic disease management to all individuals, regardless of ability to pay.

NMDH strategies to impact chronic disease across its life span included:

NMDH and NMCDH will host/offer evidence-based community health and wellness programming in the areas of cardiovascular disease, peripheral vascular disease and diabetes.

NMDH and NMCDH will host/offer evidence-based community health and wellness programming in the areas of 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.

NMDH and NMCDH will host/offer evidence-based community health and wellness programming in various other areas related to chronic disease, including but not limited to obesity, injury prevention, arthritis, maternal and child health, joint replacement, fall prevention, chronic lung disease, epilepsy and Parkinson's disease.

NMDH and NMCDH will offer a community-based heart failure program to all patients with an active diagnosis of HF who have not been referred for or are not receiving other nursing services.

NMDH will offer small community benefit grants targeted to enhance/promote health and minimize chronic disease and obesity.

- Making Kane County Fit for Kids (grant amount: $15,000)
- Well Child Center (grant amount: $10,000)

NMDH and NMCDH will work with local schools to implement the CATCH program. Emphasis will be on parents and children attending the 4-year-old program and all preschool program teachers.

NMDH and NMCDH will provide Stroke Education, a community-focused education program.

NMDH and NMCDH will provide Kits for Kids, an educational program that may be used by parents, teachers, Scouts leaders and other individuals to assist children in learning about hand-washing, bicycle safety and nutrition.

NMDH and NMCDH staff will continue efforts to promote referral patterns of physicians and ancillary staff to smoking cessation resources.

NMDH and NMCDH will offer the nationally recognized ThinkFirst Injury Prevention Program.

NMDH will host Community Kitchen classes to promote healthy eating and nutrition-based education, along with hands-on experience.

Key outcomes and metrics included:

Two cardiovascular health educational seminars offered; 277 individuals attended (NMDH and NMCDH combined data).

Meeting space provided for 20 support groups (NMDH and NMCDH).

Three cancer educational seminars offered; 210 individuals attended (NMDH and NMCDH).

Nine additional educational seminars offered; 1,020 individuals attended (NMDH and NMCDH).

One Rehabilitation Services community program; seven individuals attended (NMDH and NMCDH).

18 Diabetes Education Services community programs; 229 individuals attended (NMDH and NMCDH).

The Community-Based Heart Failure program enrolled 366 individuals (NMDH and NMCDH), resulting in the following:

- 30-day readmission rate for HF diagnosis was 1% (markedly below the national rate).
- 99% of clients demonstrated the ability to identify appropriate action in the event of a worsening of their condition.
- 96% of clients used an effective medication management system.
- 89% of clients demonstrated compliance with symptom tracking.

Making Kane County Fit for Kids

- Provided parents and children with information on physical activity and eating habits.
- Supported a culture of wellness and health promotion in schools, workplaces and other institutions.
- Developed land use, planning and policies to support physical activity.
- Provided affordable and accessible fresh fruit and vegetables to all families.

The Well Child Center Pediatric Dental Program measured increases among all the children they treated: 73% of the children completed their preventive 6-month appointment; 62% of the children had no decay and 77% had no new decay.

The CATCH program reached more than 2,526 students and teachers (NMDH and NMCDH):

- 97% of children were able to verbalize six of eight Go foods.
- 97% of children recognized the importance of consuming Go foods daily.
- 97% of children recognized the importance of daily exercise.
- 95% of schools/programs adjusted their snack lists to include healthy (Go) foods.

106 stroke education community programs reached 4,960 people (NMDH and NMCDH).

91 Kits for Kids were downloaded in the areas of hand-washing, bicycle safety and healthy nutrition (NMDH and NMCDH).

155 individuals participated in smoking cessation programs; 80% self-reported smoking cessation by the end of week six (NMDH and NMCDH).

The ThinkFirst curriculum offered 469 presentations to children from kindergarten through high school, and 21,527 individuals participated in ThinkFirst community events (NMDH and NMCDH):

- 6,836 children were fitted for and received bike helmets (NMDH and NMCDH).
- 72 couples attended child safety classes (NMDH and NMCDH).
- 994 car seats were checked or distributed (NMDH and NMCDH).

National Diabetes Prevention Program had 17 participants. There was a loss of 121 pounds, a 3.4% decrease and 979.5 hours of self-reported exercise by the final class (NMCDH and NMDH).

112 Community Kitchen classes held for children and adults, plus specialty classes for kids with special needs; 757 people attended the healthy cooking classes.

Mental Health and Substance Use Disorders

In conjunction with national and local benchmarks, the following goals were established in response to the priority need Mental Health and Substance Use Disorders:

NMDH will provide leadership, invest resources and work collaboratively with community partners in a countywide mental health and substance use disorder coalition.

The purpose of the coalition will be to study the issues and needs, and develop planned responses that will ultimately improve the quantity, quality and continuity of mental health services available in the county.

NMDH strategies to impact mental health and substance use disorders included:

NMDH will provide in-kind leadership and support to the implementation of the Mental Health Council that has been developed by the Kane County Health Department.

NMDH and NMCDH will offer evidence-based wellness programs in the areas of mental health and substance use disorder via programmatic venues, including but not limited to the Dinner with the Doc series, clinician-led educational offerings, self-help groups, rehabilitation services programs, support groups and professional development.

NMDH will offer community benefit grants targeted to address mental health needs in the NMDH service area.

- TriCity Family Services (grant amount: $10,000)
- Ecker Center (grant amount: $15,000) (NMDH and NMCDH)

NMDH will implement the National Council for Behavioral Health Mental Health First Aid (MHFA) program and offer programming to members of the community (NMDH and NMCDH).

Key outcomes and metrics included:

Leadership staff member Allison Johnson participated in the Kane County Behavioral Council. The council focused on creating a DCHD Roadmaps Receiving project, exploring two sites where there are central receiving centers for residents affected by mental health and substance use problems.

NMDH leadership participated on the TriCity Family Services advisor council. The goal of the council is to provide support to community service agencies that serve the mental health needs of residents.

NMDH and NMCDH Behavioral Health Services hosted 11 evidence-based wellness events:

- TriCity Family Services Advisory Committee
- DuPage County Heroin Opioid Prevention and Education Task Force
- Mid Valley Schools Mental Health Partnership Meetings
- St. Charles Chamber of Commerce Board of Directors
- Christian Counseling Professional of Chicagoland Steering Committee
- Naperville Central High School health occupations class tours
- Batavia School District Institute Day presentation on cell phones and teens
- Kane County Regional Office of Education institute presentations
- Wheaton Christian Center mental health presentations
- St. Charles Chamber Legal Presentation: Cannabis
- Glenbard Parent Series

Office space was provided at no charge for 12-step programs (NMDH and NMCDH).

- 1,530 hours of room usage was recorded.

TriCity Family Services grant outcomes:

- 70% reported progress toward treatment plan goals within the 0- to 5-point improvement range.
- 50.6% reported progress in Moods and Emotions, which indicates a reduction of anxiety and/or depression symptoms.
- 31.2% reported progress in Home/Family, which indicates improvements in family relationships and interactions.
- 4.8% reported progress in Thinking, which indicated improved cognition relative to self and others.

Ecker Center grant outcomes (NMDH and NMCDH):

- Medication Possession Ratio: The baseline is 0.89, and it was measured to be consistently 0.92 over the grant period.
- The client symptom improvement baseline is 72%, and it was measured that 90% of clients reported symptom improvement.

One staff member was trained to offer the nationally recognized evidence-based Mental Health First Aid Program.

- 18 classes held.
- 271 individuals (adults and youth) attended the programs.
- 100% of MHFA participants scored a minimum of 99% on the MHFA course exam.

CHIP Summary 2020

Access to Health Care Services

In conjunction with national and local benchmarks, the following goals were established in response to the problem of limited access to care:

NMDH will continue to support efforts to increase access to care by providing leadership, investing resources and working collaboratively with other community organizations throughout the county.

NMDH will support the maintenance and expansion of an efficient and effective continuum of care offering medical homes (including primary and specialty care); pharmaceuticals; and inpatient, outpatient and emergent care to uninsured adult residents of DuPage County.

NMDH will offer a comprehensive financial assistance program to patients who are unable to afford the cost of necessary medical care.

NMDH will also seek to engage and maintain a multicultural workforce of primary care practitioners, specialists, mid-level practitioners, registered professional nurses and other medical professionals committed to working in an evidence-based practice setting.

NMDH strategies to address access to health care included:

NMDH and NMCDH will ensure financial assistance policies are easily accessible, respectful and in compliance with all regulatory requirements.

NMDH and NMCDH will continue to provide medically necessary inpatient and outpatient hospital services to uninsured and underinsured patients.

NMDH and NMCDH will assist with applications for government-sponsored healthcare programs.

NMDH and NMCDH will collaborate with community partners to ensure a comprehensive continuum of care.

NMDH will provide an operational grant to Tri City Health Partnership (TCHP) to support their coordination of care for patients without insurance.

NMDH will continue to provide free inpatient and outpatient care to TCHP patients in accordance with presumptive eligibility and existing NMDH financial assistance policies.

NMDH will provide continued support to TCHP by assuming costs related to laboratory and other hospital services to presumptively eligible patients.

NMDH and NMCDH will serve as a training center for physician, nursing and allied health professionals to ensure the continuation of a diverse, culturally sensitive and highly skilled workforce.

NMDH and NMCDH will serve as a transition-to-work facility by providing work experience for young people with significant disabilities.

NMDH and NMCDH will use trained, professional healthcare interpreters in an effort to reduce barriers to care, promote access and ensure high-quality, culturally competent care.

NMDH will work collaboratively with local FQHCs to promote a seamless continuum of care to underserved individuals.

NMDH will offer vaccine clinics that are accessible to uninsured and underinsured families who do not have access to vaccines under the State of Illinois Vaccines for Children Program.

Key outcomes and metrics included:

All financial assistance policies were reviewed annually.

More than 23,638 individuals received financial assistance at NMCDH and NMDH.

$72,881,880 was rendered in financial assistance within the following categories: Presumptive Charity Care, $27,976,088; Approved Financial Assistance, $60,832,071; and Alternate Charity Care, $724,629 (NMCDH and NMDH).

Medicaid applications from 2,227 people were processed through Engage DuPage services. Medicaid applications from 2,222 people were processed through Change HealthCare financial services, and 1,468 Medicaid applications were approved (NMCDH and NMDH).

NMDH leadership and staff participated in various community task forces to further the development of the health and human services safety net.

TCHP, a free clinic supported by NMDH, was accessed by 140 people.

NMDH provided $66,438 of free inpatient care to TCHP clients.

NMDH provided $157,578 of free care to TCHP clients for outpatient and other services.

117,679 hours were committed to physician, nursing and allied health professions training (NMDH and NMCDH).

A formal agreement was executed in December 2016 with VNA Health Care. Workgroups developed a process for referring patients, and 106 patients received care from NMRMG and NM hospitals (NMCDH and NMDH).

Trained professional healthcare interpreters were used for 58,190 encounters (NMCDH and NMDH).

44 vaccine clinics were offered this fiscal year.

Chronic Disease

In conjunction with national and local benchmarks, the following goals were established in response to the growing incidence and prevalence of chronic disease by addressing chronic disease across its life span:

NMDH will continue to provide community education related to chronic disease in the areas of evidence-based primary interventions (disease prevention, health promotion).

NMDH will offer evidence-based secondary interventions (screenings).

NMDH will offer evidence-based tertiary interventions (programs for individuals affected with a chronic disease to promote an optimum state of wellness).

NMDH will also continue to provide acute care for chronic disease and chronic disease management to all individuals, regardless of ability to pay.

NMDH strategies to impact chronic disease across its life span included:

NMDH and NMCDH will host/offer evidence-based community health and wellness programming in the areas of cardiovascular disease, peripheral vascular disease and diabetes.

NMDH and NMCDH will host/offer evidence-based community health and wellness programming in the areas of 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.

NMDH and NMCDH will host/offer evidence-based community health and wellness programming in various other areas related to chronic disease, including but not limited to obesity, injury prevention, arthritis, maternal and child health, joint replacement, fall prevention, chronic lung disease, epilepsy and Parkinson's disease.

NMDH and NMCDH will offer a community-based heart failure program to all patients with an active diagnosis of HF who have not been referred for or are not receiving other nursing services.

NMDH will offer small community benefit grants targeted to enhance/promote health and minimize chronic disease and obesity.

- American Cancer Society (grant amount: $10,000) (NMCDH and NMDH)
- Almost Home Kids (grant amount: $15,000) (NMCDH and NMDH)
- Marklund Children's Home (grant amount: $10,000) (NMDH)
- Tri City Health Partnership (grant amount: $15,000) (NMDH)
- Well Child Center (grant amount: $10,000) (NMDH)

NM will offer COVID-19-specific community benefit grants to support programs that needed assistance to run their programs.

- Batavia School District 101 Thermometer Program (grant amount: $7,480) (NMDH)
- St. Mark's Preschool COVID-19 thermometer, water filling and portable hand-washing program (grant amount: $2,635) (NMDH)

NMDH and NMCDH will work with local schools to implement the CATCH program. Emphasis will be on parents and children attending the 4-year-old program and all preschool program teachers.

NMDH and NMCDH will provide Stroke Education, a community-focused education program.

NMDH and NMCDH will provide Kits for Kids, an educational program that may be used by parents, teachers, Scouts leaders and other individuals to assist children in learning about hand-washing, bicycle safety and nutrition.

NMDH and NMCDH staff will continue efforts to promote referral patterns of physicians and ancillary staff to smoking cessation resources.

NMDH and NMCDH will offer the nationally recognized ThinkFirst Injury Prevention Program.

NMDH will host Community Kitchen classes to promote healthy eating and nutrition-based education, along with hands-on experience.

Key outcomes and metrics included:

One cardiovascular health educational seminar offered; 116 individuals attended (NMDH and NMCDH combined data).

Meeting space provided for 19 support groups (NMDH and NMCDH).

One cancer educational seminar offered; 93 individuals attended (NMDH and NMCDH).

Five additional educational seminars offered; 574 individuals attended (NMDH and NMCDH).

12 Diabetes Education Services community programs offered; 90 individuals attended (NMDH and NMCDH).

The Community-Based Heart Failure program enrolled 226 individuals (NMDH/NMCDH), resulting in the following:

- 30-day readmission rate for heart failure diagnosis was 4% (markedly below the national rate).
- 99% of clients were seen at home visits within seven days of discharge.
- 87% of clients were able to name two cardiac medications and describe their actions.

American Cancer Society (NMCDH and NMDH):

- 104 patients with cancer were provided rides.

- Eight drivers completed their training program, which increased the number of drivers to 110. That is an increase of 13% from the previous year.
- There was a temporary suspension of services due to COVID-19. There were 1,492 rides provided during the time that service was in operation. That was an increase in ride fulfillment rate of 5%.

Almost Home Kids (NMCDH and NMDH):

- 90% of children received an evaluation to determine if sleep medicine could improve health outcomes with better sleep patterns.
- 20 sleep studies (polysomnography) were conducted, based on the child's actual needs.
- One to two candidates were identified for decannulation annually.

Marklund Children's Home (NMDH):

- The overall client care key performance indicator averaged 82%.
- 50% of the student goals were met, which was on target for the program's overall goal.
- Due to COVID-19, the students moved to hybrid learning, which impacted the Student Time on Task goal. The overall average was 61%, which was significantly less than the 92% set goal.
- The overall average for student attendance was 78%.

Tri City Health Partnership (NMDH):

- Patient compliance was up to 54% for follow-up visits.
- All the patients in the program met the goal of lowering their bleeding points by 50%; several patients reduced it by as much as 70%.
- Because of the COVID-19 pandemic, TCHP was only able to provide medication refills and telehealth options for patients. As a result, accurate monitoring of the hemoglobin A1c levels did not happen for patients with diabetes.

Well Child Center (NMDH):

- 47% of the children in the Pediatric Dental program completed a preventive six-month follow-up appointment.
- 67% of the children in the program did not have decay.
- 36% of the children in the First Tooth Visit Program followed up for a six-month preventive care appointment.
- 85% of the children in the First Tooth Visit program did not have new decay.
- 95% of the patients/parents reported positive experience with dentists, dental treatments and the Pediatric Clinic.
- 95% of parents reported an increase in confidence in preventive dentistry and knowledge of how to practice good daily dental care, including their understanding of guidelines from the American Dental Association.

The CATCH program reached more than 855 students and teachers (NMCDH and NMDH).

Three stroke education community programs were offered; 86 people were reached (NMCDH and NMDH).

465 page views of Kits for Kids were downloaded in the areas of hand-washing, bicycle safety and healthy nutrition (NMCDH and NMDH).

128 individuals participated in smoking cessation programs; 100% self-reported smoking cessation by the end of week six (NMCDH and NMDH).

The ThinkFirst curriculum offered 315 presentations to children from kindergarten through high school, and 17,301 individuals participated in ThinkFirst community events (NMCDH and NMDH):

- 5,218 children were fitted for and received bike helmets (NMCDH and NMDH).
- 261 couples attended child safety classes (NMCDH and NMDH).
- 822 car seats were checked or distributed (NMCDH and NMDH).

31 individuals participated in the National Diabetes Prevention Program (NMCDH and NMDH).

- 140 pounds lost by the group
- 426 hours of self-reported exercise by the final class

64 Community Kitchen classes for children and adults, plus specialty classes for kids with special needs, were presented. 463 people attended the healthy cooking classes.

COVID-19 grant outcomes (NMDH):

- Batavia School District 101 purchased 1,250 thermometers to give to each family so they could monitor symptoms at home.
- St. Mark's Preschool purchased infrared thermometers, a water bottle filling station and a portable hand-washing program.

Mental Health and Substance Use Disorders

In conjunction with national and local benchmarks, the following goals were established in response to the priority need Mental Health and Substance Use Disorders:

NMDH will provide leadership, invest resources and work collaboratively with community partners in a countywide mental health and substance use disorder coalition.

The purpose of the coalition will be to study the issues and needs, and develop planned responses that will ultimately improve the quantity, quality and continuity of mental health services available in the county.

NMDH strategies to impact mental health and substance use disorders included:

NMDH will provide in-kind leadership and support to the implementation of the Mental Health Council that has been developed by the Kane County Health Department.

NMCDH and NMDH will provide medication disposal locations and events.

NMDH and NMCDH will offer evidence-based wellness programs in the areas of mental health and substance use disorders via programmatic venues, including but not limited to the Dinner with the Doc series, clinician-led educational offerings, self-help groups, rehabilitation services programs, support groups and professional development.

NMDH will offer community benefit grants targeted to address mental health needs in the NMDH service area.

- TriCity Family Services (grant amount: $10,000)

NMDH will implement the National Council for Behavioral Health Mental Health First Aid (MHFA) program and offer programming to members of the community (NMDH and NMCDH).

Key outcomes and metrics included:

Leadership staff member Allison Johnson participated in the Kane County Behavioral Council. The council coordinates services and assists in making the system more responsive by bringing together provider organizations, mental health authorities, major funders of mental health services, mental health advocacy groups and public officials.

NMDH leadership participated on the TriCity Family Services advisor council. The goal of the council is to provide support to community service agencies that serve the mental health needs of residents.

NMDH hosted a drug takeback day, and 59.2 pounds of medications were collected. The NMDH medication drug disposal kiosk in the Emergency Department collected 463 pounds of medication.

NMDH and NMCDH Behavioral Health Services hosted five evidence-based wellness events:

- Continuing education programs for mental health and substance use disorder professionals
- Naperville Central High School health careers class
- Thompson Middle School student support group for mental health
- Chamber of Commerce member education topics, including helping employees with COVID-19 stress, cannabis legislation, workplace stress management and general anxiety
- Education presentation on mental health and substance abuse

Office space was provided at no charge for 12-step programs (NMCDH and NMDH).

- 1,530 hours of room usage was recorded.

TriCity Family Services grant outcomes:

- On measures of function: 70% of GAF scale scores and C-GAS scores fell in the 0- to 5-point improvement range; 16.3% fell in the 6-10 range; 4.9% fell in the 11-15 range; 2.9% fell in the 16-20 range; and 2.9% fell in the >20-point range. These scores indicate that the majority of clients are improving in their functioning by the end of treatment, as reported by their therapist.
- For goal measures: 50.6% of identified client goals were in the category of Moods and Emotions; 31.2% were in Home/Family/Interpersonal Relations; 5.3% were in School/Work Adjustment; 4.8% were in Behavior Toward Others; and 4.8% were in Thinking. The remaining 4% were divided among the categories.

Three NMDH and NMCDH staff members were trained to offer the nationally recognized evidence-based Mental Health First Aid program virtually.

- Seven classes were held.
- 136 individuals (adults and youth) attended the programs.
- 100% of MHFA participants scored a minimum of 100% on the MHFA course exam.

Community feedback from previous CHNAs and implementation plans

The NMDH 2016-2018 and 2018-2020 CHNAs and implementation plans were made available to the public and open for public comment via the website: nm.org/about-us/community-initiatives/community-health-needs-assessment.

No comments were received on either document at the time this report was written.

Note: Reports are available at no charge. The public may request the report in the following ways:

Visit: Delnor Hospital at 300 South Randall Road, Geneva, Illinois 60134

- Inquire at the main entrance welcome desk.

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

Call: 312.926.2301 (TTY: 711)

Email: communityhealth@nm.org

Appendix A

Comprehensive Secondary Data Analysis

Access to Health Services

Score	Access to Health Services	Units	Kane County	HP2020	Illinois	U.S.	Measurement Period	Source*
2.03	Primary Care Provider Rate	providers/ 100,000 population	40.8		80.0		2017	7
1.75	Clinical Care Ranking	ranking	83				2020	7
1.67	Adults with Health Insurance	percent	88.2	100	90.1	87.5	2018	1
1.56	Children With Health Insurance	percent	95.1	100	96.6	94.8	2018	1
1.42	Non-physician Primary Care Provider Rate	providers/ 100,000 population	71.3		82.4		2019	7
0.92	Dentist Rate	dentists/ 100,000 population	66.3		77.9		2018	7
0.83	Adults With Health Insurance: 18+	percent	92.5		91.5	91.3	2020	6
0.83	Preventable Hospital Stays: Medicare Population	discharges/1,000 Medicare enrollees	50.7		54.8	49.4	2015	20

*Data source key in Appendix C.

Cancer

Score	Cancer	Units	Kane County	HP2020	Illinois	U.S.	Measurement Period	Source*
2.44	Cancer: Medicare Population	percent	9.2		8.9	8.2	2017	5
1.39	Prostate Cancer Incidence Rate	cases/100,000 males	104.9		109.1	104.5	2013-2017	16
1.06	Breast Cancer Incidence Rate	cases/100,000 females	120.6		133.1	125.9	2013-2017	16
1.00	Oral Cavity and Pharynx Cancer Incidence Rate	cases/100,000 population	10.7		12.2	11.8	2013-2017	16
0.81	Age-Adjusted Death Rate due to Prostate Cancer	deaths/100,000 males	17.6	21.8	20.0	19.0	2013-2017	16
0.72	Colorectal Cancer Incidence Rate	cases/100,000 population	36.1	39.9	42.5	38.4	2013-2017	16
0.39	Age-Adjusted Death Rate due to Colorectal Cancer	deaths/100,000 population	12.7	14.5	14.7	13.7	2013-2017	16
0.25	Cervical Cancer Incidence Rate	cases/100,000 females	6.2	7.3	7.7	7.6	2013-2017	16
0.17	Lung and Bronchus Cancer Incidence Rate	cases/100,000 population	50.2		63.7	58.3	2013-2017	16
0.00	Age-Adjusted Death Rate due to Breast Cancer	deaths/100,000 females	17.1	20.7	21	20.1	2013-2017	16
0.00	Age-Adjusted Death Rate due to Lung Cancer	deaths/100,000 population	33.0	45.5	41.1	38.5	2013-2017	16

*Data source key in Appendix C.

Children's Health

Score	Children's Health	Units	Kane County	HP2020	Illinois	U.S.	Measurement Period	Source*
1.67	Children With Low Access to a Grocery Store	percent	5.3				2015	23
1.56	Children With Health Insurance	percent	95.1	100	96.6	94.8	2018	1
1.50	Age-Adjusted Hospitalization Rate due to Pediatric Mental Health	hospitalizations/ 10,000 population under 18 years	61.6		67.5		2017-2019	13
1.33	Age-Adjusted ER Rate due to Pediatric Asthma	ER visits/10,000 population under 18 years	51.0		78.7		2017-2019	13
1.33	Age-Adjusted ER Rate due to Pediatric Mental Health	ER visits/10,000 population under 18 years	101.5		103.8		2017-2019	13
1.25	Age-Adjusted Hospitalization Rate due to Pediatric Asthma	hospitalizations/ 10,000 population under 18 years	5.7		11.8		2017-2019	13
1.25	Blood Lead Levels in Children (≥5 micrograms per deciliter)	percent	2.5		3.4		2014	19
0.67	Food Insecure Children Likely Ineligible for Assistance	percent	2.0		18.0	25.0	2018	8
0.64	Substantiated Child Abuse Rate	cases/1,000 children	8.1		9.7	9.2	2015	11
0.50	Child Food Insecurity Rate	percent	9.4		12.7	15.2	2018	8

*Data source key in Appendix C.

Diabetes

Score	Diabetes	Units	Kane County	HP2020	Illinois	U.S.	Measurement Period	Source*
1.67	Age-Adjusted Hospitalization Rate due to Long-Term Complications of Diabetes	hospitalizations/ 10,000 population 18+ years	14.1		15.1		2017-2019	13
1.58	Hospitalization Rate due to Short-Term Complications of Diabetes	hospitalizations/ 100,000 population 18+ years	49.7		67.3		2015	12
1.50	Age-Adjusted ER Rate due to Short-Term Complications of Diabetes	ER visits/ 10,000 population 18+ years	2.0		1.7		2017-2019	13
1.33	Age-Adjusted Hospitalization Rate due to Diabetes	hospitalizations/ 10,000 population 18+ years	26.9		31.8		2017-2019	13
1.33	Age-Adjusted Hospitalization Rate due to Type 2 Diabetes	hospitalizations/ 10,000 population 18+ years	20.9		23.6		2017-2019	13
1.25	Adults With Diabetes	percent	7.5				2010-2014	10
1.25	Hospitalization Rate due to Uncontrolled Diabetes	hospitalizations/ 100,000 population 18+ years	13.6		17.4		2015	12
1.17	Age-Adjusted ER Rate due to Type 2 Diabetes	ER visits/ 10,000 population 18+ years	28.7		42.3		2017-2019	13
1.17	Age-Adjusted Hospitalization Rate due to Short-Term Complications of Diabetes	hospitalizations/ 10,000 population 18+ years	8.0		10.0		2017-2019	13

*Data source key in Appendix C.

Diabetes (continued)

Score	Diabetes	Units	Kane County	HP2020	Illinois	U.S.	Measurement Period	Source*
1.17	Age-Adjusted Hospitalization Rate due to Uncontrolled Diabetes	hospitalizations/ 10,000 population 18+ years	4.8		6.6		2017-2019	13
1.14	Hospitalization Rate due to Long-Term Complications of Diabetes	hospitalizations/ 100,000 population 18+ years	73.7		105.6		2015	12
1.14	Hospitalization Rate due to Lower-Extremity Amputation Among Diabetic Patients	hospitalizations/ 100,000 population 18+ years	8.9		16.5		2015	12
1.11	Diabetes: Medicare Population	percent	25.6		27.2	27.2	2017	5
1.00	Age-Adjusted ER Rate due to Diabetes	ER visits/ 10,000 population 18+ years	33.1		48.6		2017-2019	13
1.00	Age-Adjusted ER Rate due to Long-Term Complications of Diabetes	ER visits/ 10,000 population 18+ years	4.7		7.2		2017-2019	13
1.00	Age-Adjusted ER Rate due to Uncontrolled Diabetes	ER visits/ 10,000 population 18+ years	24.9		30.7		2017-2019	13

*Data source key in Appendix C.

Economy

Score	Economy	Units	Kane County	HP2020	Illinois	U.S.	Measurement Period	Source*
2.17	Renters Spending 30% or More of Household Income on Rent	percent	50.4		48.8	50.2	2014-2018	1
2.11	SNAP Certified Stores	stores/1,000 population	0.5				2016	23
1.75	Households That Are Asset Limited, Income Constrained, Employed (ALICE)	percent	27.1				2017	25
1.67	Overcrowded Households	percent of households	3.7		2.5		2014-2018	1
1.67	Severe Housing Problems	percent	17.8		17.3	19.0	2012-2016	7
1.67	Unemployed Workers in Civilian Labor Force	percent	10.6		11.5	10.5	July 2020	21
1.42	Households That Are Above the Asset Limited, Income Constrained, Employed (ALICE) Threshold	percent	63.9				2017	25
1.42	Social and Economic Factors Ranking	ranking	30				2020	7
1.33	Low-Income and Low Access to a Grocery Store	percent	3.8				2015	23
1.25	Households That Are Below the Federal Poverty Level	percent	9.0				2017	25
1.00	People 65+ Living Below Poverty Level	percent	6.7		8.8	9.3	2014-2018	1
1.00	Projected Child Food Insecurity Rate	percent	18.3				2020	8
1.00	Projected Food Insecurity Rate	percent	12.2				2020	8

*Data source key in Appendix C.

Economy (continued)

Score	Economy	Units	Kane County	HP2020	Illinois	U.S.	Measurement Period	Source*
0.89	Students Eligible for the Free Lunch Program	percent	40.0		46.7	41.2	2018-2019	17
0.78	Households With Cash Public Assistance Income	percent	1.7		2.4	2.5	2014-2018	1
0.75	Persons With Disability Living in Poverty	percent	18.9		26.5	26.1	2018	1
0.67	Food Insecure Children Likely Ineligible for Assistance	percent	2.0		18.0	25.0	2018	8
0.50	Child Food Insecurity Rate	percent	9.4		12.7	15.2	2018	8
0.50	Children Living Below Poverty Level	percent	15.0		18.1	19.5	2014-2018	1
0.50	Food Insecurity Rate	percent	7.1		10.1	11.5	2018	8
0.50	People Living 200% Above Poverty Level	percent	74.5		70.6	68.1	2014-2018	1
0.50	Per Capita Income	dollars	34,924		34,463	32,621	2014-2018	1
0.50	Persons With Disability Living in Poverty (5-year)	percent	19.1		26.3	26.7	2014-2018	1
0.39	Homeownership	percent	70.1		59.6	56.1	2014-2018	1
0.17	Median Household Income	dollars	76,912		63,575	60,293	2014-2018	1
0.17	People Living Below Poverty Level	percent	10.0		13.1	14.1	2014-2018	1

*Data source key in Appendix C.

Education

Score	Education	Units	Kane County	HP2020	Illinois	U.S.	Measurement Period	Source*
1.72	Student-to-Teacher Ratio	students/teacher	15.7		15.0	16.5	2018-2019	17
1.67	People 25+ With a High School Degree or Higher	percent	84.1		88.9	87.7	2014-2018	1
1.11	High School Graduation	percent	88.1	87.0	85.4	85.3	2017-2018	7
0.67	People 25+ With a Bachelor's Degree or Higher	percent	33.1		34.1	31.5	2014-2018	1

*Data source key in Appendix C.

Environment

Score	Environment	Units	Kane County	HP2020	Illinois	U.S.	Measurement Period	Source*
2.11	SNAP Certified Stores	stores/1,000 population	0.5				2016	23
1.83	Recognized Carcinogens Released Into Air	pounds	51,211				2018	24
1.75	Physical Environment Ranking	ranking	101				2020	7
1.69	Annual Ozone Air Quality	grade	F				2016-2018	2
1.69	Liquor Store Density	stores/100,000 population	11.6		10.8	10.6	2018	22
1.67	Children With Low Access to a Grocery Store	percent	5.3				2015	23
1.67	Farmers Market Density	markets/1,000 population	0				2016	23
1.67	Fast Food Restaurant Density	restaurants/ 1,000 population	0.6				2014	23
1.67	Grocery Store Density	stores/1,000 population	0.2				2014	23
1.67	Overcrowded Households	percent of households	3.7		2.5		2014-2018	1
1.67	Severe Housing Problems	percent	17.8		17.3	19.0	2012-2016	7
1.61	Months of Mild Drought or Worse	months/year	7				2016	19
1.61	Number of Extreme Precipitation Days	days	44				2016	19
1.50	People With Low Access to a Grocery Store	percent	18.5				2015	23

*Data source key in Appendix C.

Environment (continued)

Score	Environment	Units	Kane County	HP2020	Illinois	U.S.	Measurement Period	Source*
1.39	Number of Extreme Heat Days	days	13				2016	19
1.39	Number of Extreme Heat Events	events	4				2016	19
1.33	Low-Income and Low Access to a Grocery Store	percent	3.8				2015	23
1.33	Recreation and Fitness Facilities	facilities/1,000 population	0.1				2014	23
1.25	Annual Particle Pollution	grade	A				2016-2018	2
1.25	Blood Lead Levels in Children (≥5 micrograms per deciliter)	percent	2.5		3.4		2014	19
1.17	People 65+ With Low Access to a Grocery Store	percent	1.8				2015	23
1.00	Daily Dose of UV Irradiance	Joule/square meter	2,242		2,506		2015	19
1.00	Households With No Car and Low Access to a Grocery Store	percent	0.9				2015	23
0.67	Access to Exercise Opportunities	percent	96.4		90.8	84.0	2020	7
0.56	Food Environment Index	index	9.3		8.6	7.6	2020	7

*Data source key in Appendix C.

Exercise, Nutrition and Weight

Score	Exercise, Nutrition and Weight	Units	Kane County	HP2020	Illinois	U.S.	Measurement Period	Source*
2.11	SNAP Certified Stores	stores/1,000 population	0.5				2016	23
1.67	Children With Low Access to a Grocery Store	percent	5.3				2015	23
1.67	Farmers Market Density	markets/1,000 population	0				2016	23
1.67	Fast Food Restaurant Density	restaurants/ 1,000 population	0.6				2014	23
1.67	Grocery Store Density	stores/1,000 population	0.2				2014	23
1.50	People With Low Access to a Grocery Store	percent	18.5				2015	23
1.36	Adults Who Are Obese	percent	29.9	30.5			2010-2014	10
1.33	Low-Income and Low Access to a Grocery Store	percent	3.8				2015	23
1.33	Recreation and Fitness Facilities	facilities/1,000 population	0.1				2014	23
1.25	Adult Fruit and Vegetable Consumption	percent	18.5				2007-2009	10
1.25	Health Behaviors Ranking	ranking	2				2020	7
1.17	People 65+ With Low Access to a Grocery Store	percent	1.8				2015	23
1.08	Adults Who Are Sedentary	percent	18	32.6			2010-2014	10
1.00	Households With No Car and Low Access to a Grocery Store	percent	0.9				2015	23

*Data source key in Appendix C.

Exercise, Nutrition and Weight (continued)

Score	Exercise, Nutrition and Weight	Units	Kane County	HP2020	Illinois	U.S.	Measurement Period	Source*
1.00	Projected Child Food Insecurity Rate	percent	18.3				2020	8
1.00	Projected Food Insecurity Rate	percent	12.2				2020	8
0.67	Access to Exercise Opportunities	percent	96.4		90.8	84.0	2020	7
0.67	Food Insecure Children Likely Ineligible for Assistance	percent	2.0		18.0	25.0	2018	8
0.56	Food Environment Index	index	9.3		8.6	7.6	2020	7
0.50	Child Food Insecurity Rate	percent	9.4		12.7	15.2	2018	8
0.50	Food Insecurity Rate	percent	7.1		10.1	11.5	2018	8

*Data source key in Appendix C.

Heart Disease & Stroke

Score	Heart Disease & Stroke	Units	Kane County	HP2020	Illinois	U.S.	Measurement Period	Source*
2.44	Atrial Fibrillation: Medicare Population	percent	9.7		8.9	8.4	2017	5
1.89	Stroke: Medicare Population	percent	3.9		3.8	3.8	2017	5
1.78	Hypertension: Medicare Population	percent	58.3		58.2	57.1	2017	5
1.72	Hyperlipidemia: Medicare Population	percent	43.2		39.8	40.7	2017	5
1.56	Age-Adjusted Death Rate due to Cerebrovascular Disease (Stroke)	deaths/100,000 population	36.0	34.8	38.0	37.3	2016-2018	4
1.42	High Cholesterol Prevalence	percent	31.6	13.5			2007-2009	10
1.33	Age-Adjusted Hospitalization Rate due to Acute Myocardial Infarction	hospitalizations/ 10,000 population 18+ years	21.8		25.1		2017-2019	13
1.33	Age-Adjusted Hospitalization Rate due to Hypertension	hospitalizations/ 10,000 population 18+ years	6.1		8.1		2017-2019	13
1.25	Risk-Adjusted Hospitalization Rate due to Angina Without Procedure	hospitalizations/ 100,000 population 18+ years	4.8		9.4		2014	12
1.17	Age-Adjusted Hospitalization Rate due to Heart Failure	hospitalizations/ 10,000 population 18+ years	42.4		61.5		2017-2019	13
1.14	Risk-Adjusted Hospitalization Rate due to Heart Failure	hospitalizations/ 100,000 population 18+ years	268.1		378.3		2014	12

*Data source key in Appendix C.

Heart Disease & Stroke (continued)

Score	Heart Disease & Stroke	Units	Kane County	HP2020	Illinois	U.S.	Measurement Period	Source*
1.14	Risk-Adjusted Hospitalization Rate due to Hypertension	hospitalizations/ 100,000 population 18+ years	31.9		47.3		2014	12
1.08	High Blood Pressure Prevalence	percent	23.0	26.9			2007-2009	10
1.00	Age-Adjusted ER Rate due to Heart Failure	ER visits/10,000 population 18+ years	7.9		15.3		2017-2019	13
1.00	Age-Adjusted ER Rate due to Hypertension	ER visits/10,000 population 18+ years	35.2		61.5		2017-2019	13
0.89	Age-Adjusted Death Rate due to Heart Attack	deaths/100,000 population 35+ years	50.4		57.4		2018	19
0.67	Ischemic Heart Disease: Medicare Population	percent	23.9		26.8	26.9	2017	5
0.61	Heart Failure: Medicare Population	percent	12.3		15.2	13.9	2017	5
0.22	Age-Adjusted Death Rate due to Coronary Heart Disease	deaths/ 100,000 population	65.5	103.4	83.7	92.7	2016-2018	4

*Data source key in Appendix C.

Immunizations & Infectious Diseases

Score	Immunizations & Infectious Diseases	Units	Kane County	HP2020	Illinois	U.S.	Measurement Period	Source*
2.50	COVID-19 Daily Average Incidence Rate	cases/100,000 population	84.2		79.9	47.5	November 6, 2020	9
1.83	HIV Diagnosed Cases	cases	32				2018	12
1.67	Overcrowded Households	percent of households	3.7		2.5		2014-2018	1
1.58	Adults With Pneumonia Vaccination	percent	24.4				2010-2014	10
1.50	Chlamydia Incidence Rate	cases/100,000 population	407.7		604.0	539.9	2018	18
1.50	Syphilis Incidence Rate	cases/100,000 population	3.9		11.0	10.8	2018	18
1.42	Adults With Influenza Vaccination	percent	43.3	70.0			2010-2014	10
1.42	Age-Adjusted Hospitalization Rate due to Hepatitis	hospitalizations/ 10,000 population 18+ years	1.4		1.4		2017-2019	13
1.39	Lyme Disease Cases	cases	7				2016	12
1.39	Tuberculosis Cases	cases	15				2019	12
1.33	Age-Adjusted ER Rate due to Immunization-Preventable Pneumonia and Influenza	ER visits/10,000 population 18+ years	33.1		33.9		2017-2019	13
1.31	Risk-Adjusted Hospitalization Rate due to Bacterial Pneumonia	hospitalizations/ 100,000 population 18+ years	246.1		252.4		2014	12

*Data source key in Appendix C.

Immunizations & Infectious Diseases (continued)

Score	Immunizations & Infectious Diseases	Units	Kane County	HP2020	Illinois	U.S.	Measurement Period	Source*
1.25	Age-Adjusted ER Rate due to Hepatitis	ER visits/ 10,000 population 18+ years	0.4		0.7		2017-2019	13
1.17	Gonorrhea Incidence Rate	cases/ 100,000 population	77.8		198.6	179.1	2018	18
1.11	COVID-19 Daily Average Case-Fatality Rate	deaths/ 100 cases	0.7		1.4	1.7	November 6, 2020	9
1.00	Age-Adjusted ER Rate due to Community-Acquired Pneumonia	ER visits/ 10,000 population 18+ years	24.2		32.4		2017-2019	13
1.00	Age-Adjusted Hospitalization Rate due to Community-Acquired Pneumonia	hospitalizations/ 10,000 population 18+ years	20.1		24.0		2017-2019	13
1.00	Age-Adjusted Hospitalization Rate due to Immunization-Preventable Pneumonia and Influenza	hospitalizations/ 10,000 population 18+ years	5.3		7.1		2017-2019	13
0.50	Age-Adjusted Death Rate due to Influenza and Pneumonia	deaths/ 100,000 population	12.9		15.5	14.2	2016-2018	4

*Data source key in Appendix C.

Maternal, Fetal & Infant Health

Score	Maternal, Fetal & Infant Health	Units	Kane County	HP2020	Illinois	U.S.	Measurement Period	Source*
1.78	Preterm Births	percent	11.0	9.4	10.7		2018	12
1.50	Preterm Labor and Delivery Hospitalizations	percent	3.7		4.1		2017-2019	13
1.44	Babies With Low Birth Weight	percent	7.6	7.8	8.6		2018	12
0.97	Teen Births	percent	1.0		1.1	2.8	2018	12
0.89	Infant Mortality Rate	deaths/1,000 live births	4.9	6.0	6.3		2016-2018	12

*Data source key in Appendix C.

Mental Health & Mental Disorders

Score	Mental Health & Mental Disorders	Units	Kane County	HP2020	Illinois	U.S.	Measurement Period	Source*
1.75	Poor Mental Health Days	percent	40.5				2010-2014	10
1.50	Age-Adjusted Hospitalization Rate due to Pediatric Mental Health	hospitalizations/ 10,000 population under 18 years	61.6		67.5		2017-2019	13
1.44	Alzheimer's Disease or Dementia: Medicare Population	percent	10.0		10.7	10.9	2017	5
1.44	Depression: Medicare Population	percent	16.4		16.4	17.9	2017	5
1.33	Age-Adjusted ER Rate due to Pediatric Mental Health	ER visits/10,000 population under 18 years	101.5		103.8		2017-2019	13
1.33	Age-Adjusted Hospitalization Rate due to Adolescent Suicide and Intentional Self-Inflicted Injury	hospitalizations/ 10,000 population aged 10-17	100.5		106.0		2017-2019	13
1.33	Age-Adjusted Hospitalization Rate due to Adult Mental Health	hospitalizations/ 10,000 population 18+ years	64.7		84.5		2017-2019	13
1.33	Age-Adjusted Hospitalization Rate due to Adult Suicide and Intentional Self-Inflicted Injury	hospitalizations/ 10,000 population 18+ years	51.3		65.4		2017-2019	13
1.17	Age-Adjusted ER Rate due to Adult Mental Health	ER visits/10,000 population 18+ years	129.1		144.5		2017-2019	13

*Data source key in Appendix C.

Mental Health & Mental Disorders (continued)

Score	Mental Health & Mental Disorders	Units	Kane County	HP2020	Illinois	U.S.	Measurement Period	Source*
1.00	Age-Adjusted ER Rate due to Adolescent Suicide and Intentional Self-Inflicted Injury	ER visits/10,000 population aged 10-17	80.3		114.5		2017-2019	13
1.00	Age-Adjusted ER Rate due to Adult Suicide and Intentional Self-Inflicted Injury	ER visits/10,000 population 18+ years	38.1		60.0		2017-2019	13
0.78	Frequent Mental Distress	percent	10.8		11.0	12.0	2017	7
0.69	Age-Adjusted Death Rate due to Suicide	deaths/100,000 population	8.4	10.2	11.1	13.9	2016-2018	4
0.61	Age-Adjusted Death Rate due to Alzheimer's Disease	deaths/100,000 population	15.4		25.4	30.6	2016-2018	4

*Data source key in Appendix C.

Older Adults & Aging

Score	Older Adults & Aging	Units	Kane County	HP2020	Illinois	U.S.	Measurement Period	Source*
2.44	Atrial Fibrillation: Medicare Population	percent	9.7		8.9	8.4	2017	5
2.44	Cancer: Medicare Population	percent	9.2		8.9	8.2	2017	5
2.44	Osteoporosis: Medicare Population	percent	7.0		6.3	6.4	2017	5
2.17	Rheumatoid Arthritis or Osteoarthritis: Medicare Population	percent	35.7		34.6	33.1	2017	5
1.89	Stroke: Medicare Population	percent	3.9		3.8	3.8	2017	5
1.78	Hypertension: Medicare Population	percent	58.3		58.2	57.1	2017	5
1.72	Hyperlipidemia: Medicare Population	percent	43.2		39.8	40.7	2017	5
1.50	Chronic Kidney Disease: Medicare Population	percent	22.6		24.0	24.0	2017	5
1.44	Alzheimer's Disease or Dementia: Medicare Population	percent	10.0		10.7	10.9	2017	5
1.44	Depression: Medicare Population	percent	16.4		16.4	17.9	2017	5
1.39	Asthma: Medicare Population	percent	4.7		4.9	5.1	2017	5
1.28	Hospitalization Rate due to Hip Fractures Among Males 65+	hospitalizations/ 100,000 males 65+ years	413.4	418.4	435.0		2017-2019	13
1.17	People 65+ With Low Access to a Grocery Store	percent	1.8				2015	23

*Data source key in Appendix C.

Older Adults & Aging (continued)

Score	Older Adults & Aging	Units	Kane County	HP2020	Illinois	U.S.	Measurement Period	Source*
1.11	Diabetes: Medicare Population	percent	25.6		27.2	27.2	2017	5
1.00	Hospitalization Rate due to Hip Fractures Among Females 65+	hospitalizations/ 100,000 females 65+ years	652.1	741.2	762.0		2017-2019	13
1.00	People 65+ Living Below Poverty Level	percent	6.7		8.8	9.3	2014-2018	1
0.72	People 65+ Living Alone	percent	24.3		28.5	26.1	2014-2018	1
0.67	Ischemic Heart Disease: Medicare Population	percent	23.9		26.8	26.9	2017	5
0.61	Age-Adjusted Death Rate due to Alzheimer's Disease	deaths/100,000 population	15.4		25.4	30.6	2016-2018	4
0.61	COPD: Medicare Population	percent	9.5		11.9	11.7	2017	5
0.61	Heart Failure: Medicare Population	percent	12.3		15.2	13.9	2017	5

*Data source key in Appendix C.

Oral Health

Score	Oral Health	Units	Kane County	HP2020	Illinois	U.S.	Measurement Period	Source*
1.00	Age-Adjusted ER Rate due to Dental Problems	ER visits/10,000 population	48.1		75.8		2017-2019	13
1.00	Oral Cavity and Pharynx Cancer Incidence Rate	cases/100,000 population	10.7		12.2	11.8	2013-2017	16
0.92	Dentist Rate	dentists/ 100,000 population	66.3		77.9		2018	7

Other Chronic Diseases

Score	Other Chronic Diseases	Units	Kane County	HP2020	Illinois	U.S.	Measurement Period	Source*
2.44	Osteoporosis: Medicare Population	percent	7.0		6.3	6.4	2017	5
2.17	Rheumatoid Arthritis or Osteoarthritis: Medicare Population	percent	35.7		34.6	33.1	2017	5
1.50	Chronic Kidney Disease: Medicare Population	percent	22.6		24.0	24.0	2017	5
1.33	Age-Adjusted Death Rate due to Kidney Disease	deaths/100,000 population	16.7		16.9	13.0	2016-2018	4

*Data source key in Appendix C.

Other Conditions

Score	Other Conditions	Units	Kane County	HP2020	Illinois	U.S.	Measurement Period	Source*
1.75	Risk-Adjusted Hospitalization Rate due to Perforated Appendix	hospitalizations/ 1,000 appendicitis admissions 18+ years	277.2		373.3		2014	12
1.33	Age-Adjusted ER Rate due to Headaches	ER visits/10,000 population 18+ years	127.7		134.9		2017-2019	13
1.17	Age-Adjusted Hospitalization Rate due to Dehydration	hospitalizations/ 10,000 population 18+ years	18.1		21.3		2017-2019	13
1.17	Age-Adjusted Hospitalization Rate due to Urinary Tract Infections	hospitalizations/ 10,000 population 18+ years	16.8		19.5		2017-2019	13
1.14	Risk-Adjusted Hospitalization Rate due to Urinary Tract Infections	hospitalizations/ 100,000 population 18+ years	139.7		167.9		2014	12
1.00	Age-Adjusted ER Rate due to Dehydration	ER visits/10,000 population 18+ years	20.6		27.5		2017-2019	13
1.00	Age-Adjusted ER Rate due to Urinary Tract Infections	ER visits/10,000 population 18+ years	115.6		132.6		2017-2019	13
0.92	Risk-Adjusted Hospitalization Rate due to Dehydration	hospitalizations/ 100,000 population 18+ years	100.8		139.2		2014	12

*Data source key in Appendix C.

Prevention & Safety

Score	Prevention & Safety	Units	Kane County	HP2020	Illinois	U.S.	Measurement Period	Source*
1.67	Severe Housing Problems	percent	17.8		17.3	19.0	2012-2016	7
1.33	Age-Adjusted Hospitalization Rate due to Unintentional Falls	hospitalizations/ 10,000 population 18+ years	55.1		62.0		2017-2019	13
1.28	Hospitalization Rate due to Hip Fractures Among Males 65+	hospitalizations/ 100,000 males 65+ years	413.4	418.4	435.0		2017-2019	13
1.00	Age-Adjusted ER Rate due to Unintentional Falls	ER visits/10,000 population 18+ years	247.8		304.7		2017-2019	13
1.00	Death Rate due to Drug Poisoning	deaths/100,000 population	14.2		20.6	21	2016-2018	7
1.00	Hospitalization Rate due to Hip Fractures Among Females 65+	hospitalizations/ 100,000 females 65+ years	652.1	741.2	762.0		2017-2019	13

*Data source key in Appendix C.

Public Safety

Score	Public Safety	Units	Kane County	HP2020	Illinois	U.S.	Measurement Period	Source*
1.89	Alcohol-Impaired Driving Deaths	percent	32.0		32.0	28.0	2014-2018	7
1.39	Domestic Violence Offenses	offenses	1,681				2018	15
1.39	Hate Crime Offenses	offenses	3				2018	15
1.39	School Crime Incidents	incidents	218				2018	15
1.25	Age-Adjusted ER Rate due to Assault by Firearms	ER visits/10,000 population	0.2		0.6		2015-2017	13
1.25	Age-Adjusted Hospitalization Rate due to Assault by Firearms	hospitalizations/ 10,000 population	0.1		0.4		2015-2017	13
0.81	Violent Crime Rate	crimes/100,000 population	165.7		403.1	386.5	2014-2016	7
0.64	Substantiated Child Abuse Rate	cases/1,000 children	8.1		9.7	9.2	2015	11

*Data source key in Appendix C.

Respiratory Diseases

Score	Respiratory Diseases	Units	Kane County	HP2020	Illinois	U.S.	Measurement Period	Source*
2.50	COVID-19 Daily Average Incidence Rate	cases/100,000 population	84.2		79.9	47.5	November 6, 2020	9
1.58	Adults With Pneumonia Vaccination	percent	24.4				2010-2014	10
1.42	Adults With Current Asthma	percent	7.6				2010-2014	10
1.42	Adults With Influenza Vaccination	percent	43.3	70.0			2010-2014	10
1.39	Asthma: Medicare Population	percent	4.7		4.9	5.1	2017	5
1.39	Tuberculosis Cases	cases	15				2019	12
1.33	Age-Adjusted ER Rate due to Adult Asthma	ER visits/10,000 population 18+ years	33.5		45.6		2017-2019	13
1.33	Age-Adjusted ER Rate due to Asthma	ER visits/10,000 population	38.0		54.1		2017-2019	13
1.33	Age-Adjusted ER Rate due to Immunization-Preventable Pneumonia and Influenza	ER visits/10,000 population 18+ years	33.1		33.9		2017-2019	13
1.33	Age-Adjusted ER Rate due to Pediatric Asthma	ER visits/10,000 population under 18 years	51.0		78.7		2017-2019	13
1.33	Age-Adjusted Hospitalization Rate due to Adult Asthma	hospitalizations/ 10,000 population 18+ years	5.5		7.1		2017-2019	13
1.33	Age-Adjusted Hospitalization Rate due to Asthma	hospitalizations/ 10,000 population	5.6		8.3		2017-2019	13

*Data source key in Appendix C.

Respiratory Diseases (continued)

Score	Respiratory Diseases	Units	Kane County	HP2020	Illinois	U.S.	Measurement Period	Source*
1.31	Risk-Adjusted Hospitalization Rate due to Bacterial Pneumonia	hospitalizations/ 100,000 population 18+ years	246.1		252.4		2014	12
1.25	Age-Adjusted Hospitalization Rate due to Pediatric Asthma	hospitalizations/ 10,000 population under 18 years	5.7		11.8		2017-2019	13
1.25	Hospitalization Rate due to COPD or Asthma in Older Adults	hospitalizations/ 100,000 population 40+ years	341.8		516.9		2015	12
1.14	Hospitalization Rate due to Asthma in Younger Adults	hospitalizations/ 100,000 population 18-39 years	23.4		49.0		2015	12
1.11	COVID-19 Daily Average Case-Fatality Rate	deaths/100 cases	0.7		1.4	1.7	November 6, 2020	9
1.00	Age-Adjusted ER Rate due to Community-Acquired Pneumonia	ER visits/10,000 population 18+ years	24.2		32.4		2017-2019	13
1.00	Age-Adjusted ER Rate due to COPD	ER visits/10,000 population 18+ years	17.3		37.7		2017-2019	13
1.00	Age-Adjusted Hospitalization Rate due to Community-Acquired Pneumonia	hospitalizations/ 10,000 population 18+ years	20.1		24.0		2017-2019	13
1.00	Age-Adjusted Hospitalization Rate due to COPD	hospitalizations/ 10,000 population 18+ years	24.4		33.2		2017-2019	13

*Data source key in Appendix C.

Respiratory Diseases (continued)

Score	Respiratory Diseases	Units	Kane County	HP2020	Illinois	U.S.	Measurement Period	Source*
1.00	Age-Adjusted Hospitalization Rate due to Immunization-Preventable Pneumonia and Influenza	hospitalizations/ 10,000 population 18+ years	5.3		7.1		2017-2019	13
0.61	COPD: Medicare Population	percent	9.5		11.9	11.7	2017	5
0.50	Age-Adjusted Death Rate due to Influenza and Pneumonia	deaths/100,000 population	12.9		15.5	14.2	2016-2018	4
0.17	Lung and Bronchus Cancer Incidence Rate	cases/100,000 population	50.2		63.7	58.3	2013-2017	16
0.00	Age-Adjusted Death Rate due to Lung Cancer	deaths/100,000 population	33.0	45.5	41.1	38.5	2013-2017	16

*Data source key in Appendix C.

Social Environment

Score	Social Environment	Units	Kane County	HP2020	Illinois	U.S.	Measurement Period	Source*
1.89	Mean Travel Time to Work	minutes	28.9		29.0	26.6	2014-2018	1
1.67	People 25+ With a High School Degree or Higher	percent	84.1		88.9	87.7	2014-2018	1
1.56	Voter Turnout: General Election	percent	68.1		70.6		2016	14
1.42	Social and Economic Factors Ranking	ranking	30				2020	7
1.17	Single-Parent Households	percent	26.5		32.5	33.1	2014-2018	1
0.83	Adults with Internet Access	percent	96.2		94.4	94.0	2020	6
0.83	Households With a Computer	percent	93.7		90.7	90.0	2020	6
0.72	People 65+ Living Alone	percent	24.3		28.5	26.1	2014-2018	1
0.67	People 25+ With a Bachelor's Degree or Higher	percent	33.1		34.1	31.5	2014-2018	1
0.64	Substantiated Child Abuse Rate	cases/1,000 children	8.1		9.7	9.2	2015	11
0.50	Children Living Below Poverty Level	percent	15.0		18.1	19.5	2014-2018	1
0.50	Per Capita Income	dollars	34,924		34,463	32,621	2014-2018	1
0.39	Homeownership	percent	70.1		59.6	56.1	2014-2018	1
0.17	Median Household Income	dollars	76,912		63,575	60,293	2014-2018	1
0.17	People Living Below Poverty Level	percent	10.0		13.1	14.1	2014-2018	1

*Data source key in Appendix C.

Substance Use Disorders

Score	Substance Use Disorders	Units	Kane County	HP2020	Illinois	U.S.	Measurement Period	Source*
2.11	Teens Who Use Alcohol	percent	46.0		40.0		2018	3
1.89	Alcohol-Impaired Driving Deaths	percent	32.0		32.0	28.0	2014-2018	7
1.83	Age-Adjusted ER Rate due to Adult Alcohol Use	ER visits/10,000 population 18+ years	88.0		87.0		2017-2019	13
1.69	Liquor Store Density	stores/100,000 population	11.6		10.8	10.6	2018	22
1.67	Age-Adjusted Hospitalization Rate due to Adult Alcohol Use	hospitalizations/ 10,000 population 18+ years	29.0		29.5		2017-2019	13
1.56	Teens Who Use Marijuana	percent	24.4		26.0		2018	3
1.50	Adults Who Use Electronic Cigarettes: Past 30 Days	percent	4.3		4.2	4.4	2020	6
1.42	Adults Who Binge Drink	percent	18.7	24.2			2010-2014	10
1.42	Adults Who Smoke	percent	14.0	12.0			2010-2014	10
1.42	Age-Adjusted ER Rate due to Adolescent Alcohol Use	ER visits/10,000 population aged 10-17	14.0		14.0		2017-2019	13
1.25	Age-Adjusted Hospitalization Rate due to Adolescent Alcohol Use	hospitalizations/ 10,000 population aged 10-17	3.5		4.7		2017-2019	13
1.25	Health Behaviors Ranking	ranking	2				2020	7
1.17	Age-Adjusted ER Rate due to Opioid Use	ER visits/10,000 population 18+ years	13.5		25.2		2017-2019	13

*Data source key in Appendix C.

Substance Use Disorders (continued)

Score	Substance Use Disorders	Units	Kane County	HP2020	Illinois	U.S.	Measurement Period	Source*
1.17	Age-Adjusted ER Rate due to Substance Use	ER visits/10,000 population 18+ years	25.3		52.9		2017-2019	13
1.17	Age-Adjusted Hospitalization Rate due to Opioid Use	hospitalizations/ 10,000 population 18+ years	5.1		15.2		2017-2019	13
1.17	Age-Adjusted Hospitalization Rate due to Substance Use	hospitalizations/ 10,000 population 18+ years	7.2		19.2		2017-2019	13
1.00	Age-Adjusted Drug and Opioid-Involved Overdose Death Rate	deaths/100,000 population	14.8		20.5	20.7	2016-2018	4
1.00	Death Rate due to Drug Poisoning	deaths/100,000 population	14.2		20.6	21.0	2016-2018	7
0.67	Adults Who Used Smokeless Tobacco: Past 30 Days	percent	1.7		1.8	2.0	2020	6
0.67	Teens Who Smoke	percent	4.4		5.0		2018	3

*Data source key in Appendix C.

Teen & Adolescent Health

Score	Teen & Adolescent Health	Units	Kane County	HP2020	Illinois	U.S.	Measurement Period	Source*
2.11	Teens Who Use Alcohol	percent	46.0		40.0		2018	3
1.56	Teens Who Use Marijuana	percent	24.4		26.0		2018	3
1.33	Age-Adjusted Hospitalization Rate due to Adolescent Suicide and Intentional Self-Inflicted Injury	hospitalizations/ 10,000 population aged 10-17	100.5		106.0		2017-2019	13
1.00	Age-Adjusted ER Rate due to Adolescent Suicide and Intentional Self-Inflicted Injury	ER visits/10,000 population aged 10-17	80.3		114.5		2017-2019	13
0.97	Teen Births	percent	1.0		1.1	2.8	2018	12
0.67	Teens Who Smoke	percent	4.4		5.0		2018	3

*Data source key in Appendix C.

Transportation

Score	Transportation	Units	Kane County	HP2020	Illinois	U.S.	Measurement Period	Source*
2.00	Solo Drivers With a Long Commute	percent	42.4		41.3	36.0	2014-2018	7
1.89	Mean Travel Time to Work	minutes	28.9		29.0	26.6	2014-2018	1
1.78	Workers Commuting by Public Transportation	percent	2.6	5.5	9.4	5.0	2014-2018	1
1.33	Workers Who Drive Alone to Work	percent	79.7		73.1	76.4	2014-2018	1
1.00	Households With No Car and Low Access to a Grocery Store	percent	0.9				2015	23
0.56	Households Without a Vehicle	percent	4.4		10.8	8.7	2014-2018	1

Women's Health

Score	Women's Health	Units	Kane County	HP2020	Illinois	U.S.	Measurement Period	Source*
1.06	Breast Cancer Incidence Rate	cases/100,000 females	120.6		133.1	125.9	2013-2017	16
0.25	Cervical Cancer Incidence Rate	cases/100,000 females	6.2	7.3	7.7	7.6	2013-2017	16
0.00	Age-Adjusted Death Rate due to Breast Cancer	deaths/100,000 females	17.1	20.7	21.0	20.1	2013-2017	16

*Data source key in Appendix C.

Appendix B

Community Resource List

Health Services

Acute care hospitals and emergency departments

Northwestern Medicine Central DuPage Hospital

Rush-Copley Medical Center – Aurora

Rush-Copley Emergency Center – Yorkville

Advocate Sherman Hospital

AMITA Health Mercy Center

Federally Qualified Health Centers and other safety net providers

Aunt Martha's Health and Wellness

Aurora Community Health Center

Community Health Partnership of Illinois

Greater Elgin Family Health

VNA Health Care

Tri City Health Partnership

Mental health services and facilities

Ecker Center for Behavioral Health

Elgin Mental Health Center

Northwestern Medicine Behavioral Health Services

Streamwood Behavioral Health Center

Renz Addiction Counseling Center

Other health-related organizations

American Cancer Society

LivingWell Cancer Resource Center, part of Northwestern Medicine

Marklund Children's Home

Human service community programming (addressing health disparities and social determinants of health)

African American Cultural Board

African American Sororities and Fraternities: "The Divine Nine"

Age Guide Northeastern Illinois

Association for Individual Development

Aurora Interfaith Food Pantry

Aurora School District 129

Aurora School District 131

Blue Cross and Blue Shield of Illinois

Batavia Public School District 101

Bridging the Gap of Aurora

City of Aurora

City of Batavia

City of Geneva

City of North Aurora

City of St. Charles

Human service community programming (addressing health disparities and social determinants of health) (continued)

Community Advocacy Awareness Network

Community Foundation of Fox River Valley

Fox Valley Community Services

Fox Valley Montessori School

Fox Valley United Way

Fox Valley United Way – SPARK Early Childhood Collaboration

Gail Borden Public Library

Grand Victoria Foundation

Hesed House

Holy Angels Food Pantry

Illinois Department of Public Health

Kane County Development and Community Services

Kane County Health Department

Kane County Juvenile Justice Council

Kane County Regional Office of Education

Kids Above All

Kane Health Counts

Lazarus House

Leaders in Transformational Education

Main Baptist Church

Marie Wilkinson Food Pantry

Mutual Ground

NAMI Kane South, DeKalb and Kendall Counties (KDK)

Northern Illinois Food Depository

Salvation Army

Save One Life Foundation

School District U-46

Senior Services Association

Sugar Grove United Methodist Church

Two Rivers Head Start Agency

Village of North Aurora Public Library

Village of Sugar Grove Public Library

Waubonsee Community College

West Town Community Services

World Relief Chicagoland

Xilin Association

Appendix C

Secondary Data Source Citations

Key	Source Title
1	American Community Survey
2	American Lung Association
3	Center for Prevention Research and Development, Illinois Youth Survey
4	Centers for Disease Control and Prevention
5	Centers for Medicare & Medicaid Services
6	Claritas Consumer Profiles
7	County Health Rankings
8	Feeding America
9	Healthy Communities Institute
10	Illinois Behavioral Risk Factor Surveillance System
11	Illinois Department of Children and Family Services
12	Illinois Department of Public Health
13	Illinois Hospital Association
14	Illinois State Board of Elections
15	Illinois State Police
16	National Cancer Institute
17	National Center for Education Statistics
18	National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
19	National Environmental Public Health Tracking Network
20	The Dartmouth Atlas of Health Care
21	U.S. Bureau of Labor Statistics
22	U.S. Census Bureau County Business Patterns
23	U.S. Department of Agriculture Food Environment Atlas
24	U.S. Environmental Protection Agency
25	United For ALICE

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