



Northwestern Medicine Central DuPage Hospital

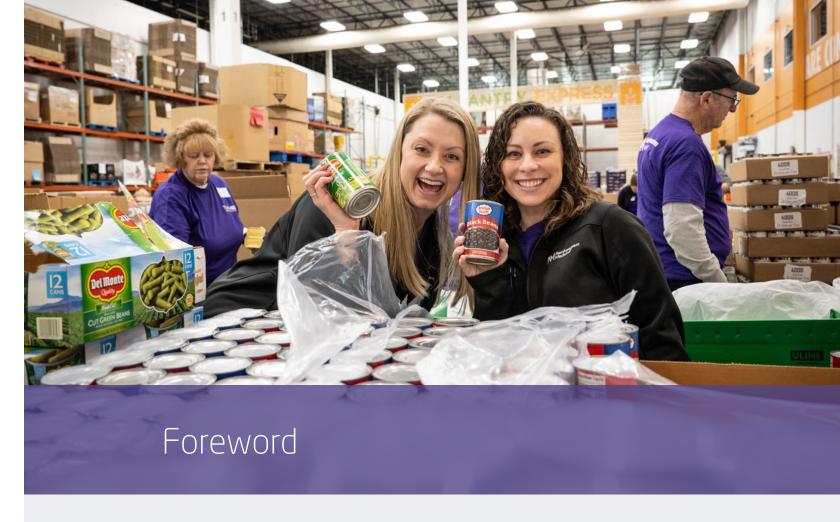
2024 Community Health Needs Assessment

# Your Feedback Makes Us Better

Northwestern Medicine is committed to building healthier communities. Your voice is important for helping us understand your lived experiences in your community.

Northwestern Medicine Central DuPage Hospital encourages comments from the public regarding our Community Health Needs Assessment (CHNA) process or findings. Please submit comments to <a href="mailto:communityhealth@nm.org">communityhealth@nm.org</a>, and include your name and organization, if applicable.

This report was adopted by the Central DuPage Hospital Association Board of Directors on July 30, 2024, and made available to the public on August 31, 2024. It was created in accordance with federal IRS regulations (26 C.F.R. § 1.501(r)-3).



# Our Commitment to Equity

The world has experienced dramatic change in the last few years. From the medical, social and economic challenges brought on by the COVID-19 pandemic, to the painful and increasing inequities that are affecting people across the country, now more than ever, we are called to be better.

Better is a philosophy that drives everything we do at Northwestern Medicine. Just as we are driven to provide better care, better treatments and better patient experiences, we also are relentless in our pursuit of building better communities.

2024 Community Health Needs Assessment

# Three pillars of community work



#### **Access to Care**

We deliver worldclass, culturally competent care regardless of ability to pay, race, age, gender, sexuality, or any other social factor, in the communities where our patients live and work.



#### **Economic and** Workforce **Development**

We invest in the communities we serve by employing individuals from a variety of backgrounds and providing innovative training, education, and development initiatives that help drive economic growth for under-resourced communities.



#### Community **Engagement**

shelter and and we support

This Community Health Needs Assessment may be on a three-year cycle, but our community work happens every day, in every department. In short, this is who we are.

Two areas span our community pillars and touch every strategy we have for addressing the priority health needs of our communities.

#### Structural inequities and bias

We elevate initiatives that:

- Facilitate community engagement and cultivate new relationships
- Allow us to work with long-standing community allies to address health inequities
- Invest in disparity research
- Foster ongoing bias training for all employees and clinicians
- Ensure Northwestern Medicine is a safe and welcoming environment for all patients





- Strengthen community-clinician relationships
- Lead to better care coordination
- Connect patients with community resources

Every member of the Northwestern Medicine workforce is dedicated to our vision of a stronger, healthier and **better** life for those in the communities we are privileged to serve.

Northwestern Medicine Central DuPage Hospital

2024 Community Health Needs Assessment

## Table of Contents

Acknowledgments	
Who We Are	
Get to know Northwestern Memorial HealthCare	
Defining the Community Service Area	
How the Community Service Area was determined       9         How the Community Service Area is defined       10         Community Service Area map       11	•
Completing the Assessment	
Primary data	
Key Findings	
Who lives in the communities we serve.16Social determinants of health.18Health conditions.31Health behaviors43Reflection on our data analysis47Significant health needs48	<b>&gt; &gt; &gt; &gt;</b>
Priority Health Needs	
Community Engagement Council.49How we chose priority health needs51Identified priority health needs53	•
Development of a Plan to Address Priority Health Needs	
Existing resources54Northwestern Medicine roles55	
Appendix A: Evaluation of Impact	•
Appendix B: Resources to Address Significant Health Needs 69	•
Appendix C: Timeline for the 2024 CHNA	•
Appendix D: A Closer Look at Data	•
Appendix E: References	•
Appendix F: Disclaimers	•



Since 2007, Northwestern Medicine Central DuPage Hospital has completed a comprehensive Community Health Needs Assessment (CHNA) every three years. This process helps us better understand who lives in the communities we serve as well as the biggest health issues they face.

## Goals of our CHNA

The goals of the CHNA were to:



- Learn about the health needs of residents within the hospital's Community Service Area
- Identify which needs are most important to address
- Identify resources available to address those needs

Northwestern Medicine is committed to **improving the health of the communities we serve**. The CHNA process helps us achieve this mission.

Northwestern Medicine Central DuPage Hospital 2024 Community Health Needs Assessment

## How we achieved our goals

For the 2024 CHNA, Northwestern Medicine Central DuPage Hospital collaborated with Metopio to learn about the communities we serve and their health needs. Metopio is a software and service company that is grounded in the philosophy that communities are connected through places and people. Metopio uses data visualization to reveal valuable, interconnected factors that influence outcomes in various locations.

Together with Metopio, we gathered information from a variety of sources, including direct community input through surveys, focus groups and key informant interviews. After we collected and analyzed this information, we interpreted the findings to identify the most significant health needs affecting the communities we serve. Then, we worked with community representatives to help identify which needs were the most important for Northwestern Medicine to address over the next three years.

We identified health needs among people across all:

- Socioeconomic groups
- Races and ethnicities
- Sexual orientations and gender identities
- Ages

While we assessed information across our entire service area, this report highlights health inequities and needs that disproportionately impact people in communities that have been historically under-resourced and have a higher percentage of people with barriers to health and wellness, such as a lack of medical insurance.

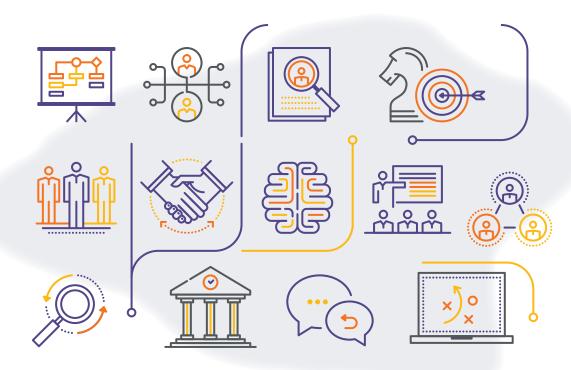
## Priority health needs

Many health needs were identified through the CHNA process. To identify which needs to address, we considered which were most widespread, severe and persistent. Then we considered which needs would be best addressed through a collaboration with our community allies. These needs are the priority health needs we will focus on over the next three years.

The priority health needs for Northwestern Medicine Central DuPage Hospital in the 2024 CHNA are:

- Behavioral Health
- Access to Health Care
- Food Access





## Addressing identified priority health needs

Northwestern Medicine Central DuPage Hospital will use the information and insight gained through this assessment to guide our work on improving the health of the communities we serve. We will develop an implementation plan to detail how we will address priority health needs in collaboration with healthcare, social service, public health and policy organizations.

Drawing on our collective resources, **together we can address the priority health needs of residents** in our defined Community Service Area.

# Acknowledgments

We rely on voices within the communities we serve to help us better understand the needs and issues that affect the health of their residents. This CHNA and the work that will come out of it would not have been possible without discussions with key community collaborators, organizations and residents. We are grateful to everyone who dedicated their time to share their insights with us.

We also gratefully acknowledge Metopio for their collaboration and significant efforts in the completion of this CHNA.



## Get to know Northwestern Memorial HealthCare

#### Who we are



Nonprofit | Growing, nationally recognized | World-class care

# Who we serve







Suburban

People with a broad range of socioeconomic statuses and needs associated with social determinants of health

Northwestern Medicine Central DuPage Hospital 2024 Community Health Needs Assessment



#### We are...

- Pushing boundaries in our research labs
- Training the next generation of physicians and scientists
- Pursuing excellence in patient care

## Our mission

Provide quality medical care regardless of the patient's ability to pay

Transform medical care through clinical innovations, breakthrough research and academic excellence

Improve the health of the communities we serve

### How we achieve our mission

As a pillar in the community, Northwestern Medicine Central DuPage Hospital is uniquely positioned to lead efforts to positively impact community health.

- We provide culturally informed care to meet the needs of those who live in our communities.
- We maintain strong relationships with community organizations that share our vision of building stronger, healthier communities.
- We are a major economic driver in the communities we serve.

## About Northwestern Medicine Central DuPage Hospital







Services: The hospital provides care through a complete range of emergency, inpatient and outpatient services. There are specialty care services in oncology, neurology, pediatrics, behavioral health and cardiology. Northwestern Medicine Central DuPage Hospital is also home to the first proton center in Illinois and the only one in the Chicago metropolitan area, the Bluhm Cardiovascular Institute, a clinical partnership with Ann & Robert H. Lurie Children's Hospital of Chicago, and a nationally ranked orthopaedics program.

**Community:** A mixture of suburban and rural areas



#### Northwestern Medicine Central DuPage Hospital

Located in Winfield, Illinois, Northwestern Medicine Central DuPage Hospital is an acute-care, 406-bed tertiary community hospital with an enduring commitment to the residents of DuPage County and beyond. Northwestern Medicine Central DuPage Hospital provides much-needed access to quality health care in its community. The hospital provides care through a broad range of specialties and unique services, including the first proton center in Illinois and the only one in the Chicago metropolitan area. In fiscal year 2023 (FY23), the medical staff of more than 1,300 physicians treated patients through more than 22,000 inpatient admissions and 76,600 emergency department visits.

Northwestern Medicine Central DuPage Hospital has a rich history of caring for the community.

We work with trusted community-based organizations to identify and respond to priority health needs within the community and systematically reduce barriers to patient care services. Together, we have developed important initiatives to minimize risk factors and provide access to care.



## How the Community Service Area was determined

Northwestern Medicine Central DuPage Hospital defined the Community Service Area (CSA) used in this CHNA by considering:

- Geographic area served by the hospital
- Main functions of the hospital
- Areas that have been historically under-resourced
- Areas where we are currently working on addressing priority health needs, including work with community allies

The defined CSA considers populations that are:

- Medically under-served
- Low-income
- Historically under-represented, minority populations

Our CSA definition does not consider how much patients or their insurers pay for care or if patients are eligible for financial assistance through Northwestern Medicine.

Northwestern Medicine Central DuPage Hospital

2024 Community Health Needs Assessment

# How the Community Service Area is defined



10







18
neighborhoods

**248** square miles







Suburban and rural

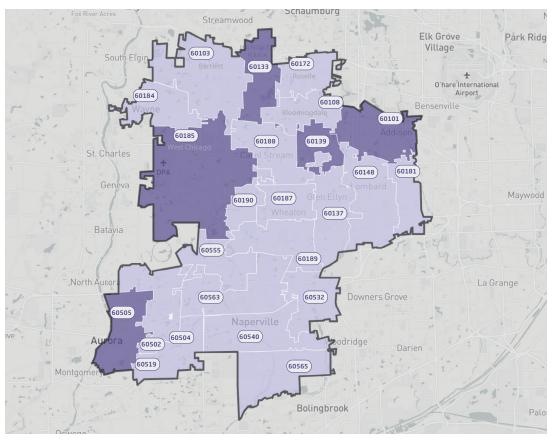
CSA Cities and ZIP Codes			
City	ZIP Code	City	ZIP Code
Addison	60101	Lombard	60148
Aurora	60502, 60504, 60505 60519, 60568	Naperville	60540, 60563, 60565
Bartlett	60103	Roselle	60172
Bloomingdale	60108	Villa Park	60181
Carol Stream	60188	Warrenville	60555
Glendale Heights	60139	Wayne	60184
Glen Ellyn	60137	West Chicago	60185
Hanover Park	60133	Wheaton	60187, 60189
Lisle	60532	Winfield	60190

<sup>\*</sup>The CSA mainly comprises DuPage County ZIP codes, with only small parts of Cook, Kane and Will counties on the edges of the CSA.

# Community Service Area map

Once the CSA has been defined, we use the Socioeconomic Resource Index (SERI) to identify areas experiencing economic hardship. Under-resourced areas are identified based on multiple indicators, including:

- Unemployment (for individuals older than 16 years)
- Education (those older than 25 years without a high school diploma)
- Per capita income level
- Crowded housing (more than one person per room)
- Dependents (younger than 18 or older than 64 years)
- Poverty (income below 200% of the federal poverty level)



Northwestern Medicine Central DuPage Hospital Community Service Area. Locations in dark purple have been identified as under-resourced communities by SERI.



Northwestern Medicine performed the CHNA from October 2023 through January 2024. We worked with Metopio to plan for data collection and analysis, and we took an intentional approach to build on previous CHNAs.

We conducted surveys, focus groups and key informant interviews to gather primary data directly from those in the community. We also looked at secondary data, such as local health statistics. Taken together, the data allowed us to identify health trends and compare the health needs in our CSA to benchmarks at the city, county, state and national levels.

Once the data was collected, it was analyzed and reviewed by community health experts. Then, we presented it to key collaborators in the community and Northwestern Medicine Central DuPage Hospital, who identified which needs should be prioritized.

## Primary data

Community input is the most important data for the CHNA, as it provides the most real-time information about community health needs. This is particularly true in the context of the COVID-19 pandemic, as we were able to gain first-hand information from communities most impacted by inequities that lead to poorer outcomes from COVID-19.



#### Community input surveys at a glance

- Conducted from October 2023 to January 2024 by Metopio
- Insights collected from 3,604 survey participants within the defined CSA
- Intended to gain first-hand information from people who are typically under-represented in the assessment process, including people of color, immigrants, people who identify within the LGBTQ+ community, people with disabilities and people with low income
- · Collected from individuals 18 years and older
- · Available online or on paper
- Disseminated in English and Spanish
- Seventy-six questions
- Asked about demographic data, community health status, strengths, opportunities for improvement and COVID-19 effects
- Promoted widely through social media, email blasts and in-person events
- Also promoted in partnership with local community organizations (both paper and online versions)

Additional information regarding the survey can be found in Appendix D.



#### Focus groups at a glance

- Conducted from January to March 2024 by Metopio
- Four community focus groups within the CSA
- Participants were 18 years or older and represented a diverse range of ethnic, racial, religious and socioeconomic backgrounds
- Northwestern Medicine recruited participants through hospital community collaborations
- Healthcare professionals provided input through a written survey
- Asked about community strengths, needs, underlying root causes of health needs, COVID-19 effects, solutions to identified health needs and communication strategies

Additional information on focus group sessions can be found in Appendix D.

Completing the Assessment



#### Key informant interviews at a glance

- Conducted in March and April 2024 by Metopio
- Interviews with 10 key informants from the CSA
- Participants represented a diverse range of ethnic, racial, religious and socioeconomic backgrounds
- Northwestern Medicine recruited participants through hospital community collaborations
- Asked about community strengths, needs, underlying root causes of health needs, COVID-19 effects, solutions to identified health needs and communication strategies

Additional information on key informant interviews can be found in Appendix D.

## Secondary data

With help from Metopio, secondary data was identified, compiled and analyzed. The following key topics were chosen for analysis:

- Social Determinants of Health
- Health Conditions
- Health Behaviors

#### Secondary data sources at a glance

- Peer-reviewed literature and white papers
- Existing assessments and plans focused on key topic areas
- Local data compiled by DuPage County government agencies
- Local data compiled by community-based organizations
  - Feeding America
  - Mapping COVID-19 Recovery Initiative
- Illinois Health and Hospital Association/COMPdata: Hospitalization and Emergency Department rates
- State agencies:
  - Illinois State Board of Education
  - Illinois Department of Healthcare and Family Services
  - Illinois Department of Human Services
  - Illinois Department of Public Health
- Federal sources:
  - Centers for Disease Control and Prevention PLACES project
  - Centers for Medicare & Medicaid Services data accessed through the Dartmouth Atlas of Health Care
  - Environmental Protection Agency
  - Health Resources and Services Administration
  - Housing and Urban Development
  - United States Census Bureau American Community Survey
  - United States Department of Agriculture



The following describes the data we collected for Northwestern Medicine Central DuPage Hospital.

## Who lives in the communities we serve

#### Demographics

Demographics affect each person's ability to be healthy. Considering the demographic makeup of a community is crucial for shaping community health initiatives to improve health outcomes.





Sex<sup>1</sup>



380,725

(50.4%) females

375,184 (49.6%) males

Accurate and complete data for people who are transgender, nonbinary and gender-nonconforming is limited.

#### Age<sup>1</sup>

Age Group	Population in the Hospital's CSA	Percentage in the Hospital's CSA
17 years and younger	174,977	23.1%
18 to 39	219,973	29.1%
40 to 64	248,462	32.9%
65 and older	112,497	14.9%

This information is important, as different age groups have unique health needs that must be considered when planning a response to community need.

#### Race and ethnicity<sup>1</sup>

- Majority non-Hispanic white population
- · Hispanic or Latino, Asian and non-Hispanic Black populations have grown over the last decade

Race and Ethnicity	Population in the Hospital's CSA	Percentage in the Hospital's CSA
Non-Hispanic White	430,234	57.1%
Hispanic or Latino	166,379	22.1%
Asian	96,474	12.8%
Non-Hispanic Black	38,429	5.1%
Two or more races	21,657	2.9%

#### Language

Language skills affect the ability to access, understand and act on health information.



22.1%

of CSA residents were not born in the United States (as compared with 14.2% of residents in Illinois)1



of CSA residents speak limited English (as compared with 3.9% of residents in Illinois)1

### Social determinants of health

Up to 80% of health outcomes are influenced by the ways in which people live, work, play and worship, known as social determinants of health (SDOH).<sup>2</sup> SDOH relate to social and economic opportunities, community resources, quality education, workplace safety, environmental factors, and the nature of social interactions and relationships. SDOH help explain why some people in the United States are healthier than others.



#### Access to Health Care

Access to health care means being able to use medical services when needed to achieve the best health outcomes possible.<sup>3</sup> Within the CSA, 34.0% of respondents named access to health care as a top community issue, and 45.5% of survey respondents named medication affordability as a top community issue, making up the top two issues of all survey respondents.

Accessing health insurance is essential for promoting and maintaining health and preventing and managing disease. According to Healthy People 2030, people without insurance are less likely to have a primary care provider, and they may not be able to afford the healthcare services and medications they need.<sup>4</sup>

Healthcare access and quality can vary greatly between communities. Within the CSA, 6.4% of residents do not have medical insurance, which is

Community Input:<sup>23</sup>
Access to Health Care

"If you're well insured, you're fine; and if you're not, then you're struggling to find resources."

"It's hard to know who to call first and how to get the help you need."

- Focus group participants

slightly lower than the state average at 7.0%.¹ Within the CSA, 36.0% of survey respondents said that insurance access and affordability was one of the top concerns in the community.

Health insurance is not the only factor affecting the ability to access health care. Even those with health insurance can face barriers to accessing appropriate and timely care related to:

- Ease of access to health clinics
- Insurance coverage and public benefit
- Immigration status
- Access to linguistically and culturally appropriate services
- Extensive paperwork and approvals before accessing care

Focus group participants highlighted the challenge of navigating complex healthcare systems, particularly for those in crisis or with limited time. Additionally, focus group participants discussed the difficulty of accessing health care services due to limited hours of operation, work schedules and the need for appointments.

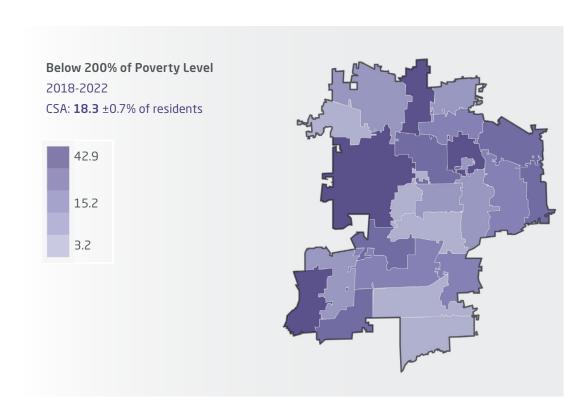
#### **Economic Stability**

Poverty is a key driver of health status and outcomes, such as life expectancy, infant mortality and development of chronic health conditions. It creates barriers to accessing things that are important for good health, such as medical care and healthy food.

Communities in the CSA have significant and concentrated areas of poverty, the highest in Hanover Park (ZIP code 60133) at 14.7% and the lowest in Wayne (60184) at 1.0%.

In Illinois, the median household income is \$71,917, which is lower than the CSA's median household income at \$97,225. However, when looking at the communities making up the CSA, Aurora (60505) has a lower median household income than the state at \$58,149.1

Socioeconomic Status¹	Percentage in the CSA
Persons Living at or Below the Federal Poverty Level	7.3%
Persons Living at or Below 200% of the Federal Poverty Level	18.3%



#### **Education**

Poverty, unemployment and underemployment are highest among those with less education.<sup>5</sup> A higher level of education is linked to positive health outcomes.

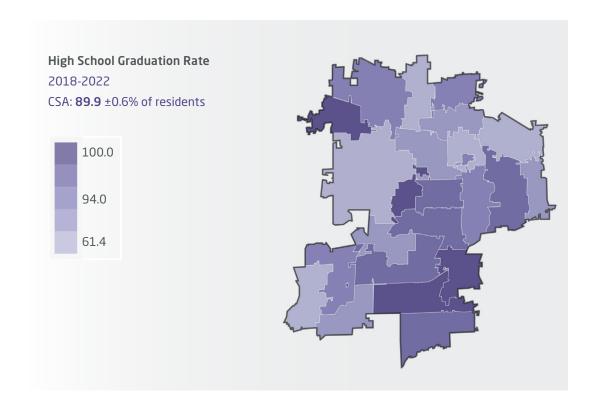
#### Within the CSA:1

- 89.9% of adults 25 years and older have a high school diploma (or equivalent).
- That number is 90.1% for the state of Illinois.



Community Input:<sup>23</sup> Education

One focus group participant stated that parents struggle with understanding when to seek help for their child's developmental delays, despite increased resources and education.



20

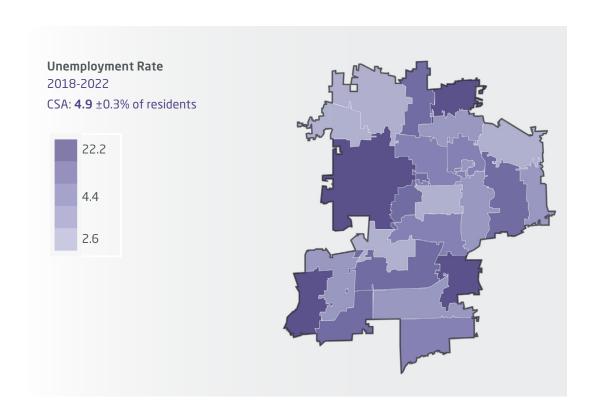
Key Findings

#### Employment

Financial security makes it easier for individuals and families to obtain resources for healthy living and serves as a predictor for positive health outcomes.

#### From 2018 to 2022:1

- The unemployment rate in the CSA averaged 4.9%.
- West Chicago (60185) had the highest unemployment rate in the CSA at 10.5%.



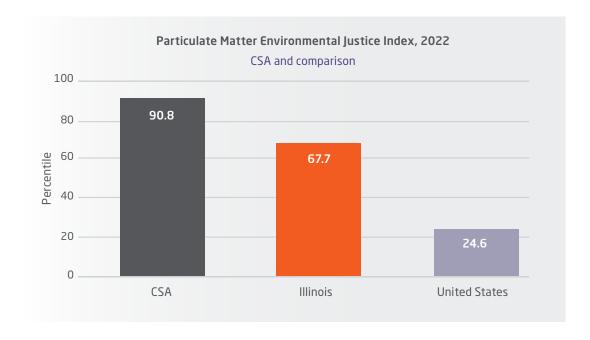
#### **Environmental Equity**

Another socioeconomic factor — a healthy or livable environment — refers to the surroundings in which an individual resides, lives and interacts. The hospital's CSA has a wide range of environmental conditions, from denser suburbs to farms to wilderness.

A clean, safe and healthy environment is a significant contributor to the health of individuals and populations. The neighborhood environment can affect health outcomes in many ways. Particulate matter is one of the most dangerous pollutants because these particles can penetrate deep into the lungs and cause negative health effects. This includes premature death from cardiovascular disease or lung cancer, and increased health problems such as asthma attacks.

In the CSA, particulate matter was estimated in the 91st percentile, which is higher than the average for Illinois in the 67th percentile.<sup>6</sup> This rating is based on the Particulate Matter Environmental Justice Index, in which 0 is the lowest exposure and 100 is the highest exposure.

Additionally, research has shown that emissions from farms outweigh all other human sources of fine-particulate air pollution in much of the United States. Agricultural air pollution comes mainly from ammonia from fertilizers and animal waste that combine in the air with industrial emissions to form solid particles.



Created on Metopio | metop.io/i/3pb61436 | Data source: Environmental Protection Agency (EPA): EJScreen: Environmental Justice Screening

Particulate Matter Environmental Justice Index: Weighted index of vulnerability to particulate matter. Measures exposure to 2.5 in the air, weighted by population vulnerability and reported as a percentile nationally, where 0 = lowest exposure, and 100 = highest exposure. Weighting by the vulnerability of residents can provide a better estimate of the disproportionate impact of environmental hazards.



#### **Food Access and Security**

In the CSA, 20.6% of survey respondents said that access to affordable food was a top concern, and 34.7% of survey respondents said that eating healthy was a top concern.

A healthy food environment gives residents the ability to buy healthy foods close to where they live. Those who cannot afford or access healthy food are more likely to have a less healthy diet, which increases risk of illnesses such as cardiovascular disease, some cancers, obesity, Type 2 diabetes and anemia.

In addition, people who do not have enough food to eat may have a harder time learning, may not develop properly, and may have physical and psychological health challenges.

Inflation since the COVID-19 pandemic has significantly impacted the food environment. Families with children are more likely to have experienced food and nutrition insecurity since the start of the pandemic.

24



Community Input:<sup>23</sup>
Food Access and
Security

One focus group participant stated that families in West Chicago struggle with food insecurity, lack of funds and limited storage space for a community garden.

Another focus group participant discussed the challenge of food access in high schools, suggesting that District 94 could provide free lunches to students if there is a struggle in the community.

One Community Engagement Council member stated that the number of free and reduced lunches has increased drastically over the past few years.

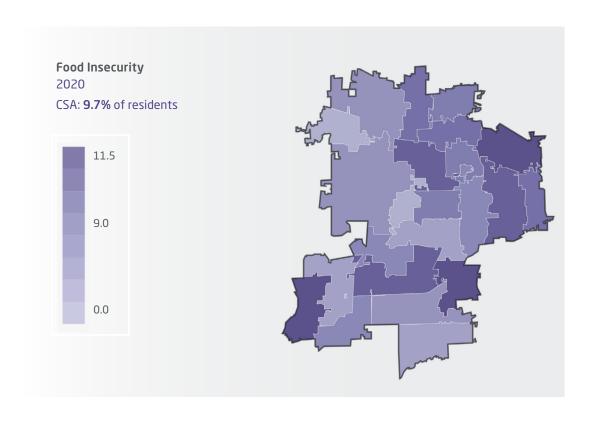
#### Food Access and Security (continued)

Food insecurity is defined as limited or uncertain access to adequate food and may be caused or exacerbated by cost or distance to a grocery store.

In the CSA, 9.7% of residents experience food insecurity, which is slightly higher than the state at 8.3%. Food insecurity is the highest in Aurora (60505) at 11.5% of residents, and the lowest in Wayne (60184) at 6.8% of residents.<sup>7</sup>

In addition, 70.4% of residents in the CSA have low food access, meaning that those who live in urban areas live farther than a half mile from the nearest supermarket and those who live in rural areas live farther than 10 miles from the nearest supermarket.<sup>8</sup>

Among households in the CSA, 8.8% of households receive Supplemental Nutrition Assistance Program\* (SNAP) benefits, which is lower than the state at 13.0%.<sup>1</sup>



<sup>\*</sup>Supplemental Nutrition Assistance Program, SNAP, is a federal nutrition program that improves access to food for those who are eligible. SNAP benefits can be used to purchase foods at grocery stores, convenience stores and farmers markets. People without documented status are generally not eligible for federal assistance programs such as SNAP.

Northwestern Medicine Central DuPage Hospital 2024 Community Health Needs Assessment 25

#### Homelessness and Housing Instability

In the CSA, 31.9% of survey respondents said safe, affordable housing was a top concern. Homelessness was identified as both a root cause and a direct outcome of substance use disorders and chronic disease. Addressing housing issues offers a unique opportunity to address an important SDOH.<sup>2</sup>

In addition, 28.0% of households in the CSA spend more than 30% of their income on housing, classifying them as housing cost burdened.<sup>1</sup>



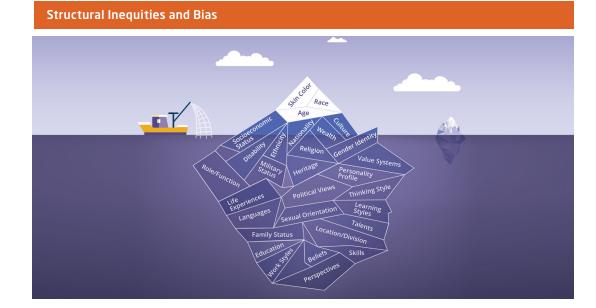
"There's a lot of discussion in DuPage County about the need for affordable housing."

- Focus group participant

Among households in the CSA, 12.0% are severely housing cost burdened, meaning that they spend more than 50% of their income on housing costs.<sup>1</sup>

This significantly affects their ability to pay for other necessities, such as food, transportation and health care.

Focus group participants discussed that access to safe, affordable housing is one of many challenges for under-served populations in the community. One focus group participant stated that it's difficult for individuals with behavioral health issues to break the cycle when needs such as housing, food insecurity and safety are not met.



Northwestern Medicine is a community of caregivers who welcome, respect and serve all people without regard to age, race, color, national origin, religion, culture, language, physical or mental disability, socioeconomic status, sex, sexual orientation, gender identity or expression, or military or veteran status.

#### **Disability Cultural Responsiveness**

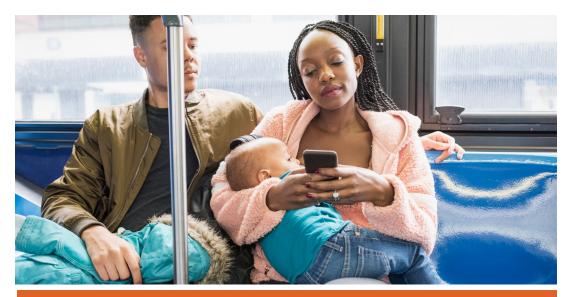
The Americans with Disabilities Act (ADA) defines *disability* as a physical or mental impairment that substantially limits one or more major life activities of an individual. Major life activities can include caring for yourself, speaking, thinking, walking or performing manual tasks.

Northwestern Medicine provides reasonable accommodations to patients with disabilities when requested or needed. Patients and companions with disabilities have a right to request a reasonable accommodation. These are provided at no cost to the patient or companion. Northwestern Medicine also provides reasonable accommodations to its employees and clinicians. By providing reasonable accommodations, Northwestern Medicine ensures equitable care, effective communication and compliance with disability rights laws (such as the ADA).

#### **LGBTQ+ Cultural Responsiveness**

Providing a safe, affirming environment is essential to welcome patients from the LGBTQ+ community. There is evidence that sexual minorities (LGBTQ+) and transgender or gender-nonconforming patients can have significant difficulty in accessing appropriate care, developing trust in the care team and receiving safe and effective health care throughout their lives.<sup>21</sup>

Key Findings



#### Structural Inequities and Bias (continued)

#### **Structural Racism**

Structural racism refers to the complex systems within societies that perpetuate racial discrimination across various sectors (housing, education, employment, income, healthcare, criminal justice, etc.), reinforcing discriminatory beliefs, values and unequal resource distribution through historical, cultural and institutional channels.<sup>9</sup>

Structural racism, also known as systemic racism, is racial bias among institutions and across society. It involves the cumulative and compounding effects of an array of societal factors, including the history, culture, ideology and interactions of institutions and policies that systemically advantage white people and disadvantage people of color.

Systemic and structural racism play a large part in determining where people live and therefore have a downstream effect on health outcomes. These realities make it more likely that people from certain minority groups will live in areas that lack access to:

- Healthy food
- Transportation
- Housing

28

• Parks, playgrounds and other places to connect with community



Community Input:<sup>23</sup>
Structural Racism

"The county is not designed to facilitate healthy aging in place. Many seniors end up living alone."

One focus group participant emphasized the importance of addressing health disparities by increasing access and making health care more welcoming and inclusive.

Another focus group participant highlighted the need for diversity in healthcare staff to improve representation and make patients feel more comfortable sharing their experiences.

- Focus group participants

#### Transportation

In the CSA, 22.9% of survey respondents and many focus group participants said that transportation was a top concern in their community. Safe and reliable transportation is essential to accessing healthcare appointments, social services, work, school and grocery stores. A lack of transportation is associated with adverse health outcomes.

Although most households in the CSA have access to a car, many people still lack access to reliable and affordable public transportation. The CSA does not have a large public transit network, so only 4.4% of residents commute to work by public transportation.¹ One focus group participant discussed the need for more transportation options, such as buses, to address the need for affordable and accessible transportation.



Community Input:23
Transportation

"Sometimes, if people don't have a car, it's hard to get transportation to medical services."

One focus group participant discussed the challenges with dial-a-ride services, especially for those who need to be picked up on their driveway or have limited mobility.

- Focus group participants



Within the CSA, **4.5% of households have no vehicle available**, but that number **climbs as high as 9.0% in some rural areas** and areas where more residents have low income, especially near Naperville (60563).<sup>1</sup>

For those who do have a vehicle, the rising costs of gas have made using that vehicle more difficult to perform daily tasks such as driving to work, school, medical visits or grocery shopping.



Northwestern Medicine Central DuPage Hospital

2024 Community Health Needs Assessment

29

#### **Violence and Community Safety**

The root causes of community violence are multifaceted and include issues such as:

- Concentration of poverty
- Education inequities
- Poor access to health services
- Mass incarceration
- Differential policing strategies
- Generational trauma

COVID-19 has increased economic instability and stressors within communities, contributing to increased gun violence, interpersonal violence and child abuse.

Within the CSA, 22.3% of survey respondents report that safety is a top concern in the community.

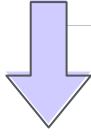


Community Input:<sup>28</sup>
Violence and
Community Safety

"We mainly chose this community because of the safe neighborhoods and recommendations from friends."



- Focus group participants when describing their neighborhood



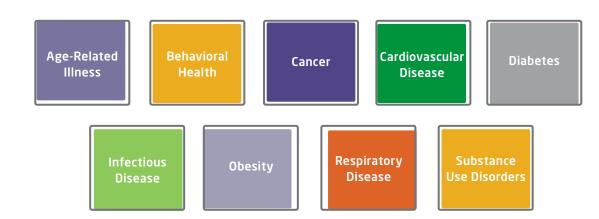
30

The rate of violent crime in DuPage

County is **69.1 cases per 100,000 residents,** which is lower than both the Illinois and United States averages at 363.1 and 369.0, respectively.<sup>10</sup>

Violent crime has decreased in DuPage County since 2019.10

## Health conditions



Overall, estimates of disease burden in the hospital's CSA are similar or slightly lower than those reported for the state of Illinois.

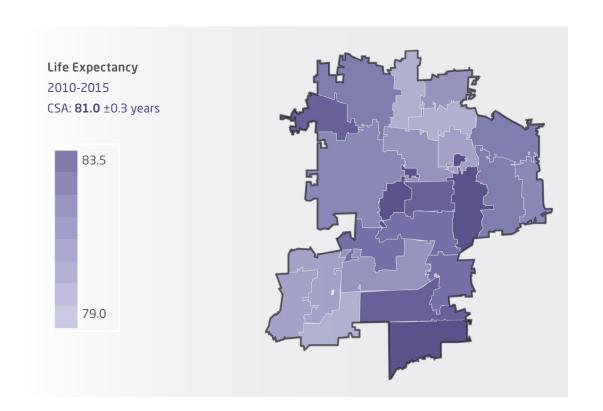
Health Condition <sup>11</sup>	Prevalence in CSA	Prevalence in Illinois
Obesity	32.0%	33.6%
High Blood Pressure	25.3%	29.0%
Asthma	9.1%	9.5%
Diabetes	8.4%	9.8%
Cancer (diagnosis rate)	537.2 per 100,000 residents	570.7 per 100,000 residents

A higher burden of disease was concentrated in the west and southwest edges of the CSA.

#### Life expectancy in the CSA

Life expectancy is a core measure of the overall health of a community. It allows for comparisons between generations and to understand the long-term impact of macro changes in community conditions, such as an epidemic or systemic poverty and a lack of access to resources. In the CSA, there is a four-year gap between the community with the highest life expectancy (Winfield) and the lowest life expectancy (Bloomingdale).<sup>12</sup>

- Overall life expectancy in the CSA: 81.0 years
- Lowest life expectancy: 79.0 years in Bloomingdale (60108)
- Highest life expectancy: 83.5 years in Winfield (60190)



#### Age-Related Illness

Within the CSA, age-related illness (especially Alzheimer's disease) emerged as an important health issue through the community input survey. For the purposes of this report, age-related illness includes:

- Alzheimer's disease and dementia
- Arthritis
- Vision and hearing difficulty

#### Alzheimer's Disease Mortality<sup>13</sup>



C

Annual deaths per 100,000 residents

DuPage County: 25.2

Cook County: 21.8 Kane County: 16.5 Will County: 27.1 Illinois: : 25.9 Arthritis<sup>11</sup>

CSA:

**18.7% of adults** 

Illinois: 20.4% of adults

Vision Difficulty<sup>1</sup>

CSA:



Hearing Difficulty<sup>1</sup>



1.4% of adults

Illinois: 2.1% of adults 2.4% of adults

Illinois: 3.0% of adults

CSA:

Key Findings

#### **Behavioral Health**

Mental health disorders are common and affect people of all demographics. Conditions like depression and anxiety can affect people's ability to take part in healthy behaviors. Similarly, physical health problems can make it harder for people to get treatment for mental disorders.

Within the CSA, adult and adolescent mental health were two of the top health-related challenges in the community according to survey respondents.

# Focus group participants highlighted the following needs:

- Increased availability of behavioral health professionals who accept Medicaid
- Improved access to treatment, including more mental health workers and more culturally and linguistically inclusive practices
- Improved mental health care with more empathy and support, especially for individuals going through traumatic experiences
- More resources for families and caregivers to address mental health challenges
- Youth mental health support

There are 375.5 mental health clinicians per 100,000 residents in the CSA, which is slightly higher than Illinois at 334.4 mental health clinicians per 100,000 residents. For those on Medicaid, there are only 31.5 behavioral health professionals per 100,000 residents in the CSA, which is slightly higher than Illinois at 26.7 behavioral health professionals per 100,000 residents.



The suicide and self-injury hospitalization rate in the CSA is

40.3 per 100,000

residents, which is lower than the state at 45.6, and has declined since 2016.15

# Community Input:<sup>23</sup> Behavioral Health

"One challenge we see is people who want to seek help for their substance use or mental health challenges, but feel restricted because of things like childcare, or they have a job and are afraid of losing it."

- Focus group participant

#### Behavioral Health (continued)



#### **Suicide Mortality**

Annual deaths per 100,000 residents<sup>13</sup>

## DuPage County: 10.0

Cook County: 8.5 Kane County: 8.8 Will County: 10.8 Illinois: 10.9



#### In the CSA:

- 17.6% of adults reported having been diagnosed with depression. 11
- 13.3% of residents have poor self-reported mental health.<sup>11</sup>
- 78.0% of survey respondents reported needing mental health treatment.
- 80.8% of those survey respondents received the treatment they needed.

Focus group participants highlighted the need to support underserved communities through accessible and stigma-free services. Other focus group participants discussed the benefit of screening patients for mental health and substance use issues, as well as providing education and resources to families.

Key Findings

#### Cancer

Among survey respondents in the CSA, **35.7% identified cancer** as an important health need in the community. This made cancer the second highest in the list of most important health needs.

Within the CSA, 5.8% of adults report having had cancer. The cancer mortality rate is 132.4 deaths per 100,000 residents for DuPage County, 152.5 for Cook County, 136.4 for Kane County and 156.3 for Will County.<sup>13</sup>

The CSA's cancer mortality rate is lower than Illinois, with a mortality rate of

150 deaths per 100,000 residents.<sup>13</sup>



#### Cancer Diagnosis Rates<sup>16</sup>

	CSA	Illinois
All invasive cancers	537.2	570.7
Invasive breast cancer (females)	165.2	161.5
Colorectal cancer	41.4	47.4
Lung cancer	56.2	73.3
Prostate cancer (males)	130.4	141.8
Other cancers	161.3	168.4

#### Prevention and Screening in the CSA vs. Illinois<sup>11</sup>

**76.7%** 

of females aged 50-74 years had a mammography screening in 2020 Illinois: 74.9% 80.9%

of females aged 18-64 years had a Pap smear in 2020 Illinois: 81.0% 68.1%

of residents aged 50-75 years had a colorectal cancer screening in 2020 Illinois: 67.4%

#### Cardiovascular Disease

Heart disease represents the leading cause of morbidity and mortality in the CSA.<sup>13</sup> The burden of cardiovascular disease was uniformly evident across the county.

Heart disease and stroke can result in poor quality of life, disability and death. Though both diseases are common, **they can often be prevented by controlling risk factors** like high blood pressure and high cholesterol through treatment.

#### Rates of High Blood Pressure<sup>11</sup>

Adults in the CSA:

**25.3%** 

Illinois: 29.0%



#### Rates of High Cholesterol<sup>11</sup>

Adults in the CSA:

**29.5**%

Illinois: 28.2

The stroke hospitalization rate in the CSA is lower than the state's: 197.5 per 100,000 residents compared with 218.0 per 100,000 residents in Illinois. When stratifying by race and ethnicity, the rate is higher for the non-Hispanic white population when compared with the state (228.9 vs. 214.4).<sup>15</sup>

The heart attack hospitalization rate in the CSA is 148.1 per 100,000 residents, which is slightly lower than Illinois at 165.8. When stratified by sex, males are disproportionately impacted, and that remains consistent at the state level.<sup>15</sup>

#### **Heart Disease**

Annual deaths per 100,000 residents<sup>13</sup>

DuPage County: 126.5

Cook County: 169.2 Kane County: 129.0 Will County: 161.8 Illinois: 165.3

#### Stroke

Annual deaths per 100,000 residents<sup>13</sup>

DuPage County: 35.8

Cook County: 41.2 Kane County: 39.5 Will County: 42.0 Illinois: 39.1

Making sure people who experience a cardiovascular emergency — such as a stroke, heart attack or cardiac arrest — get timely recommended treatment is essential to reduce the risk for long-term disability and death. Teaching people to recognize symptoms is key to helping more people get the treatment they need.<sup>4</sup>



#### Diabetes

In the survey of the CSA residents, 21.3% listed diabetes as the most important health need in the community, placing it in the top 10 health concerns, and 12.8% of survey respondents have been told they have prediabetes.

**Prevalence of Diabetes**<sup>11</sup>

CSA:

8.4% of adults

Illinois: 9.8%



Like many health conditions and exposures, diabetes rates were higher in the western side of the CSA. A lack of access to care can be a contributing factor to poorer outcomes.

There were 127.9 Type 2 diabetes hospitalizations per 100,000 residents in the CSA, which was lower than the Illinois average at 176.4.15

The Emergency Department visit rate for people with uncontrolled diabetes was 131.0 per 100,000 in the CSA, which was significantly higher than the Illinois average at 42.4.15

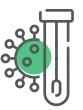
#### **Infectious Disease**

Review of infectious disease data primarily focused on rates of sexually transmitted infections (STIs), influenza and COVID-19.

The STI prevalence for DuPage County is 429.5 cases per 100,000 residents, which is significantly lower than 1,161.4 in Illinois.<sup>17</sup> Only 35.5% of survey respondents reported receiving a test for human papillomavirus infection.

The pneumonia and influenza hospitalization rate in the CSA in 2022 was

**135.9** per 100,000 residents which was lower than the state at 176.3.15



A total of 44.6% of survey respondents reported that they received a flu vaccine in the last 12 months.

Regarding COVID-19, the hospitalization rate in the CSA was 226.7 per 100,000 residents in 2022, which was slightly lower than the state average of 245.9.<sup>15</sup>

In 2021, the COVID-19 vaccination rate was 78.1% of residents, which was similar to the Illinois and United States averages at 77.9% and 79.7%, respectively.<sup>18</sup> Among the survey respondents from the CSA, 94.4% reported having received at least one COVID-19 vaccine shot.

#### COVID-19 Hospitalizations by Race/Ethnicity, 2018-2022



Created on Metopio | metop.io/ii/9q2651ox | Data sources: Wisconsin Health Association Information Center (WHAIC) (Calculated by Metopio), Illinois Health and Hospital Association COMPdata Informatics (Calculated by Metopio)

COVID-19 hospitalization rate: Annual hospital admissions for COVID-19 per 100,000 residents. Risk-adjusted by age and sex. All hospital providers, all payers, based on patient residence.

### Obesity

Obesity is linked to many serious health problems, including:

Cancer (some types)

Stroke

Heart disease

Type 2 diabetes

Obesity is a common health condition in the CSA.

Rates of Obesity<sup>11</sup>

CSA:

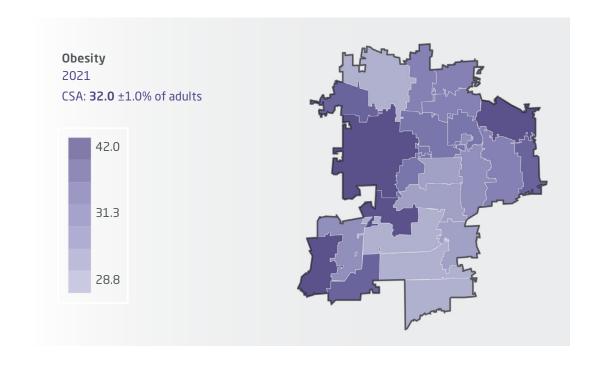
32.0% of adults

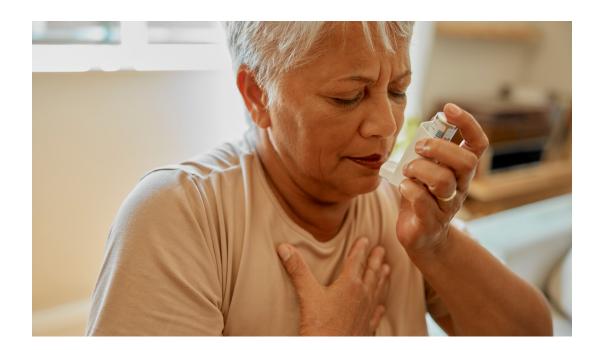
Illinois: 33.6%



Among community input survey respondents, obesity ranked fourth in the list of most important health needs affecting the community.

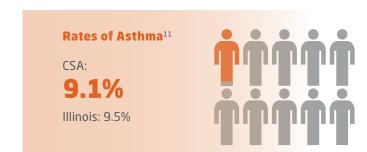
Some people in certain racial and ethnic groups are at higher risk of obesity because they live in communities with a lack of access to healthy food and easy availability of fast food, and other SDOH factors that increase their risk of chronic diseases.<sup>4</sup>





#### **Respiratory Disease**

Lung diseases did not emerge as a high priority in surveys and focus groups conducted in the CSA. Rates of asthma and chronic obstructive pulmonary disease (COPD) in the CSA are both lower than the state average.





40

Key Findings

#### Substance Use Disorder:

A substance use disorder is a complex condition. If use of a substance cannot be controlled and continues despite harmful consequences and impairment in day-to-day functioning, it is termed *substance use disorder.*<sup>20</sup>

The COVID-19 pandemic not only highlighted the increasing burden of substance use disorders, but it also led to an increase in substance use. As of June 2020, the Centers for Disease Control and Prevention estimated that 13% of people in the United States started or increased substance use to cope with the stress and uncertainty of the pandemic.<sup>20</sup>

The CSA has a binge drinking rate at 16.6% of adults, which is slightly lower than Illinois at 17.2% of adults.<sup>11</sup>

Among focus group participants from the CSA, substance use was identified as an important health need in the community. One focus group participant stated that substances like alcohol and marijuana

Community Input:<sup>28</sup>
Substance Use Disorders

"In either mental health or substance use, finding care professionals who accept Medicaid is very challenging."

One focus group participant suggested that Northwestern Medicine could host community chats, be more proactive in substance use disorder programs and expand their medicationassisted treatment program to all locations.

- Focus group participants

are prevalent in the community, and stimulants, benzodiazepines, opioids and heroin mixes are commonly abused. Another focus group participant stated that adolescents and young adults, as well as disenfranchised individuals, are disproportionately affected by substance use, with many seeking alternative coping mechanisms.

**Drug Overdose Mortality**Annual deaths per 100,000 residents<sup>13</sup>

**DuPage County: 16.4** 

Cook County: 25.3 Kane County: 15.6 Will County: 21.0

Illinois: 22.3





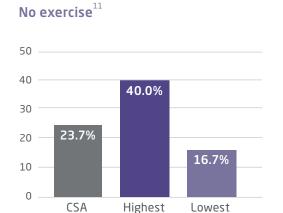
Rate of adults who report binge drinking

The CSA has a binge drinking rate at 16.6% of adults, which is slightly lower than Illinois at 17.2% of adults.<sup>11</sup>

### Health behaviors

Research has shown that a person's health is not solely defined by their socioeconomic status or available resources. In fact, a person's health is greatly influenced by their health behaviors, such as food choices, physical activity and substance use.<sup>22</sup>

#### Health Behaviors by ZIP Code in the CSA (Adults)

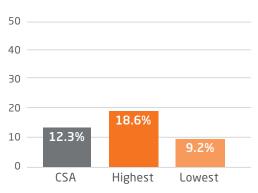


CSA average: 23.7%

Highest: 40.0% in Aurora (60505) Lowest: 16.7% in Aurora (60519)

# Prevalence of cigarette smoking<sup>11</sup>

BACK TO TABLE OF CONTENTS



CSA average: 12.3%

Highest: 18.6% in Aurora (60505) Lowest: 9.2% in Naperville (60540)

Negative behaviors correspond with a higher burden of disease in many of the same communities and highlight structural inequities that contribute to poor health.

Northwestern Medicine Central DuPage Hospital 2024 Community Health Needs Assessment 43

Key Findings



#### Nutrition

Eating healthy was considered a challenge by 34.7% of survey respondents, and access to affordable food was considered a challenge by 20.6% of survey respondents.

Some people do not have the information they need to choose healthy foods, while others do not have access to healthy foods or cannot afford to buy enough food. In fact, 29,036 residents in the CSA live in food deserts.<sup>8</sup>

Many communities across the CSA, particularly in more rural areas, have a high level of food insecurity. Without access to affordable, healthy foods in safe and accessible locations, individuals cannot reasonably make good nutritional choices for themselves and their families.

Community Input:<sup>23</sup>
Nutrition

"Educating parents on sugar content would be huge, and providing more opportunities for them (families) to be involved in some kind of physical activities that could help them create healthier habits."

- Focus group participant

When investing in healthy food options for a community, it is important to understand the history and culture of that community. Programs should make every effort to take a culturally competent approach to create sustainable change in nutrition access.

**9.7%** of CSA residents live with food insecurity

Illinois: 8.3%

**8.8%** of CSA households receive SNAP benefits<sup>1</sup>

Illinois: 13.0%

#### **Physical Activity**

Regular physical activity can improve the health and quality of life of people of all ages. For people who are inactive, even small increases in physical activity are associated with health benefits.

Among survey respondents, 81.8% participated in any form of exercise in the past month, and 18.2% did not exercise at all. Guidelines recommend at least 150 minutes of moderate aerobic activity per week.

Personal, social, economic and environmental factors all play a role in physical activity levels among youth, adults and older adults. Among survey respondents, 11.8% stated that they cannot afford the fees to exercise. Seven percent of survey respondents do not have access to an exercise facility, and 1.3% do not have access to childcare while they exercise.



For residents who cannot afford gym memberships or exercise equipment for their home, they may look to the neighborhood's parks, playgrounds or sports fields to exercise. Among survey respondents, 28.9% use the neighborhood's parks, playgrounds or sports fields at least once a week.

Understanding barriers to and facilitators of physical activity is important to ensure the effectiveness of interventions and other actions to improve levels of physical activity.



#### Tobacco and E-Cigarette Use

In the CSA, 12.3% of adults reported having smoked at least 100 cigarettes in their lifetime and currently smoke every day or some days. Among survey respondents, 6.8% reported ever using an e-cigarette.

There is an ongoing gap in Illinois for county-level data on youth health behaviors.



# Reflections on our data analysis

Community Health Needs Assessments challenge us to explore data through multiple lenses, including understanding where an issue might be more severe because of community conditions and who might be more impacted because of population characteristics. As the data was collected and analyzed, several themes emerged.

## **1** ACCESSIBILITY

Focus group participants and key informants frequently noted transportation as a barrier to accessing services in DuPage County.

## 2 CULTURAL COMPETENCY

At 22.1% of the population, the Hispanic or Latino population is the second largest group in the CSA. Among survey respondents, individuals who identified as Hispanic or Latino were more likely to report delaying care in the last 12 months and less likely to report being up to date on recommended cancer screenings.

## 3 AFFORDABILITY

The cost of living has been increasing in DuPage County, and not all residents can afford it. That means they may have to choose between rent, healthy food and medical visits.

### 4 AGE

Age is an important stratification when prioritizing populations. The data shows alcohol, suicide and self-injury hospitalization rates and substance use emergency department visit rates disproportionately affect individuals who are 18 to 39 years old.

# Significant health needs

Based on local data, benchmark data, the number of people affected and focus group input, we identified the following to be significant health needs within the Northwestern Medicine Central DuPage Hospital CSA. Our collaborators considered these needs when identifying which should be priority health needs for Northwestern Medicine to address.

Access to Health Care Food Access

Behavioral Health Homelessness and Housing

Cancer Obesity

Cardiovascular Disease Substance Use Disorders

Diabetes Transportation





Once significant health needs are identified, it is important to engage individuals from a variety of backgrounds to share their insights. This helps ensure that data is being interpreted with the community voice at its core, and guides decisions about which needs should be a priority for Northwestern Medicine.

To that end, Northwestern Medicine Central DuPage Hospital engaged with community members and organization representatives, along with Northwestern Medicine employees through their Community Engagement Council.

#### **Community Engagement Council**

The Community Engagement Council is a diverse group of representatives from across DuPage County and employees of Northwestern Medicine. Council members are people who have demonstrated a strong, ongoing commitment to improving the health of the communities we serve. Their diverse backgrounds helped ensure we considered a full range of perspectives when prioritizing identified health needs.

Northwestern Medicine Central DuPage Hospital 2024 Community Health Needs Assessment



#### The following community organizations participate on our Community Engagement Council:

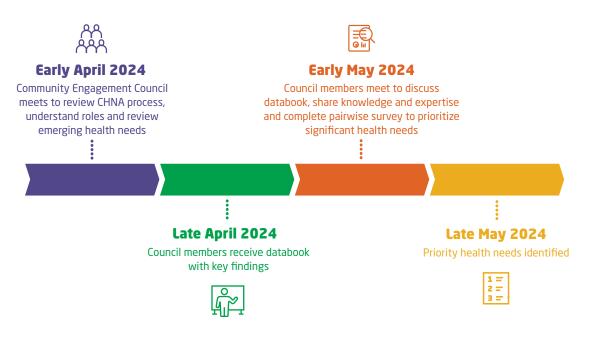
Community Organizations	
Access DuPage	DuPage Regional Office of Education
AgeGuide Northeastern Illinois	Healthy West Chicago
B.R. Ryall YMCA	Northern Illinois Food Bank
DuPage County Health Department	VNA Health Care
DuPage Federation on Human Services Reform	Winfield School District 34

# The following is a list of Northwestern Medicine departments represented and why they were chosen for inclusion.

Hospital Department	Knowledge Area
Community Affairs	Community relationships, data and hospital resources
Behavioral Health	Direct patient care
Care Coordination	Coordination of patient care, including medical and social needs
Executive Leadership	Hospital operations and decision making
Medical Staff	Direct patient care
Patient Engagement	Coordination of patient care
Regional Medical Group	Direct patient care

# How we chose priority health needs

Following completion of data analysis, leaders from Northwestern Medicine Central DuPage Hospital convened our Community Engagement Council to review the findings.



The prioritization of health needs took place over a series of meetings with the Community Engagement Council.

- The council convened in early April 2024 to receive an overview of the CHNA process, including the data collection process within the defined CSA. In these meetings, council members received a preview of the emerging significant health needs identified through the data analysis.
- In late April 2024, council members were given a databook that highlighted key findings.
- In early May 2024, the Community Engagement Council convened again to review the data collected from the community and to prioritize health needs based on data as well as their own knowledge and expertise.
- During this meeting, council members were encouraged to ask questions and offer
  additional data points based on their areas of expertise. This process was meant to ensure
  Northwestern Medicine Central DuPage Hospital was interpreting the data based on the
  voice of the community.

50

- Once the data was reviewed, council members participated in a pairwise survey through OpinionX. Through this process, participants were asked to consider multiple prioritization factors.
  - The survey assessed 10 significant health needs.
- Participants were given two needs at a time and asked to select which was the priority.
   After making their selection, participants were presented with the next pair and so on.
- After prioritizing the list of top 10 needs, the Community Engagement Council was
  able to view and compare their results. The idea behind this methodology is to put an
  emphasis on the community voice while also recognizing that hospital employees can
  provide perspective on what Northwestern Medicine Central DuPage Hospital can feasibly
  accomplish over the next three years in this CHNA cycle.

#### **Prioritization Factors Considered to Establish Priority Health Needs**

Prioritization Factors	Related Questions
Consequences of Inaction	<ul> <li>What impact would inaction have on individuals and on population health?</li> <li>Are there other allies who will act to address the need?</li> <li>Do the inputs needed to take action create challenges to act in other important areas, recognizing that Northwestern Medicine's resources are limited?</li> </ul>
Feasibility of Influencing	<ul> <li>What capacity already exists to address the need? Can Northwestern Medicine action add value?</li> <li>Is there already a foundation for collaboration? Is it local?</li> <li>Could the role of Northwestern Medicine complement that of other allies?</li> </ul>
Magnitude and Inequity	<ul> <li>How many people in the community are impacted?</li> <li>Are there inequalities by race, income or location?</li> <li>Where is the magnitude the greatest?</li> </ul>
Severity and Impact	How does the need impact health and vitality (focusing on people most impacted by needs related to social determinants of health)?
Trend	<ul><li> Is there a pattern in the data?</li><li> Has the data gotten significantly worse or better over time?</li></ul>

# Identified priority health needs

Northwestern Medicine Central DuPage Hospital has identified three priority health needs in the 2024 CHNA. In selecting priorities, we considered:

- How big the need is in the community
- The capacity and resources available to meet the need
- The suitability of our own expertise to address the need

In particular, priority health needs were selected based on their ability to be addressed through a coordinated response from a range of healthcare and community resources.

#### Northwestern Medicine Central DuPage Hospital 2024 Priority Health Needs









To address the priority health needs identified, Northwestern Medicine Central DuPage Hospital will continue to work with the community to develop a comprehensive Community Health Implementation Plan (CHIP). The CHIP will detail strategies to address each priority health need as well as anticipated impacts, resources and planned collaborations.\*

Northwestern Medicine remains committed to providing culturally informed care that is responsive to the needs of the communities we serve. By creating a CHIP with community organizations, including health and social service organizations, we will develop community-based health initiatives designed to address the identified priority health needs.

This work is ultimately intended to improve health equity, remove health disparities and build healthier communities in alignment with the Northwestern Medicine mission.

## Existing resources

We recognize that many healthcare facilities and organizations within the CSA respond to health needs and support health improvement efforts. A list of resources potentially available to address priority health needs is included in Appendix B.

\*The CHIP will also specify significant health needs identified through the CHNA that we did not prioritize, together with the reason that they will not be addressed.

### Northwestern Medicine roles

To address the priority health needs, Northwestern Medicine Central DuPage Hospital can serve in a variety of roles.

#### **Civic Leader**

- Collaborator/convener
- Employer
- Advocate
- Funder





#### **Educator**

- Training
- Youth programs
- Health promotion
- Knowledge transfer

#### Researcher

- Medical/biomedical research
- Community-based evaluation
- Outcomes data
- Proof of concept





#### **Care Provider**

- Financial assistance
- Medicaid
- Safety net collaborators

# Appendix A: Evaluation of Impact

## Actions taken to address Northwestern Medicine Central DuPage Hospital 2021 priority health needs

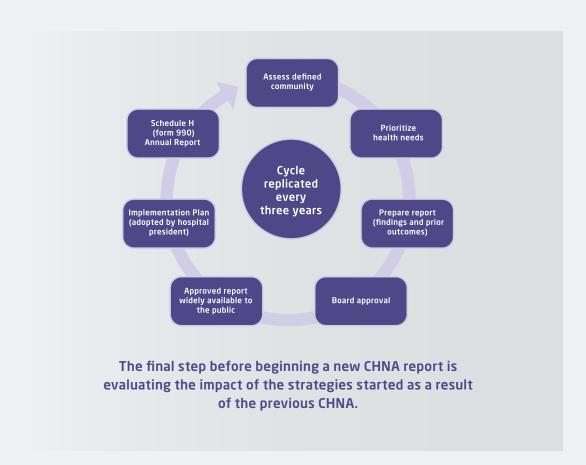
The last CHNA completed by Northwestern Medicine Central DuPage Hospital took place in 2021. We worked with PRC Custom Research to determine significant health needs through a comprehensive assessment that included analysis of community voice, data and the potential health impact of a given issue.

Our community councils met to identify priority health needs for the CSA based on CHNA findings. In selecting priorities, Northwestern Medicine Central DuPage Hospital considered the following criteria:

- Ability to impact
- Risk of inaction
- Trend

Magnitude

Scope and severity



Through the 2021 CHNA process, Northwestern Medicine Central DuPage Hospital identified four priority health needs to be addressed through collaborative planning and coordinated action with organizations that impact health services in the community:

- 1. Access to Health Care
- 2. Chronic Disease
- 3. Mental Health and Substance Use Disorders
- 4. Social Determinants of Health

The hospital and key community organizations collaborated to address the identified priority health needs. This Evaluation of Impact report summarizes the progress of community strategies outlined in the hospital's 2021 CHIP. This evaluation shows change over time and indicates how well these strategies addressed the priority health needs of the community.

# Priority Health Need 1: Access to Health Care

Goal: Improve access to quality healthcare and community resources to help ensure that underresourced populations in the Northwestern Medicine Central DuPage Hospital CSA have the services and support needed to live healthy lives.

Strategy 1.1: Community Engagement: Support efforts that increase access to healthcare services and community resources by investing in resources and collaborating with community-based organizations.

This strategy focused on supporting efforts to increase access to care by providing leadership, investing resources and working collaboratively with other community organizations throughout the county.

- DuPage Health Coalition/Access DuPage
- DuPage Health Department
- Health Equity Action Response Team (HEART)
- Healthy West Chicago
- VNA Health Care
- WeGo Together for Kids Partnership Committee

In collaboration with the DuPage Health Department and other community organizations, committees have organically been developed to increase initiatives focused on promoting access to care, especially with low-income and under-resourced communities.

#### **Impact of Strategy**

These community partnerships allow us to increase access, and improve efficiency and quality in coordinating care among all of the settings in our CSA. These examples demonstrate the variety of ways we can enhance the work of organizations that are already making an impact for patients in the community.

Strategy 1.2: Federally Qualified Health Center (FQHC) and Clinical Community Collaboration: Align with the system-level approach to better serve the uninsured and underinsured populations through clinical community relationships.

This strategy focused on collaboratively working with local FQHCs to promote a seamless continuum of care for the underserved.

- VNA Health Care
- DuPage Health Coalition/Access DuPage

#### **VNA Health Care**

Northwestern Medicine Central DuPage Hospital participated in a third-party software program along with VNA Health Care so they could assess a number of patients who seek medical care in the Northwestern Medicine Central DuPage Hospital Emergency Department and inpatient setting.

Number of patients identified:

- FY22: 3,010 patients in the Emergency Department and 240 inpatient admissions
- FY23: 3,635 patients in the Emergency Department and 209 inpatient admissions
- FY24 so far: 2,087 patients in the Emergency Department and 135 inpatient admissions

#### **DuPage Health Coalition**

Northwestern Medicine Central DuPage Hospital provided funding to support DuPage Health Coalition through strategic grants in the amount of \$423,168, including an additional \$600,000 grant for DuPage Health Coalition's Access DuPage program. The grants were used by DuPage Health Coalition to offer free programs, resources and low-cost primary healthcare services to individuals who have a low income and lack medical insurance.

#### Impact of Strategy

Providing funding for and otherwise supporting these organizations ensured that our most vulnerable patients had access to adequate and timely care.

Appendix A: Evaluation of Impact

Strategy 1.3: Health Screenings: Support efforts to increase access to health screenings by investing in resources and collaborating with community-based organizations such as the Why Wait program.

Northwestern Medicine Central DuPage Hospital provided breast cancer screening and subsequent care to individuals who lacked health insurance or could not afford breast cancer screening. Unfortunately, the Why Wait program was discontinued during the reporting time frame. In its place, Northwestern Medicine Central DuPage Hospital provided education related to breast health:

- FY22: Three presentations with 10 participants.
- FY23: Five presentations with 33 participants.
- FY24: Presentations have not been held yet.

#### Impact of Strategy

As part of this transition, the breast health education offered by Northwestern Medicine Central DuPage Hospital had a wider reach in the community and covered such topics as breast health, prenatal care, newborn care and breastfeeding.

Strategy 1.4: Community Benefit Donations and Grants: Provide funding through the Community Benefit donations and grants process to strategies and organizations that address access to healthcare services.

Northwestern Medicine Central DuPage Hospital provided funding through the Community Benefit Competitive Grant process. This process resulted in the following awards:

- FY22: Six grants were awarded in the total amount of \$320,000.
- FY23: Thirteen grants were awarded in the total amount of \$553,000.
- FY24: Grant recipients are being selected.

Funding supported the following organizations and strategies:

- **DuPagePads:** Repurposing a hotel to be used as an interim housing center, including client access to healthcare and community resources.
- Winfield School District 34: Providing a certified school nurse to promote community health education and outreach, including offering health services to students.

#### Impact of Strategy

Over the past few years, the need for access to health care for the community has increased significantly. Through our financial support of high-quality, trusted community organizations, we have been able to expand access in the CSA.

## Priority Health Need 2: Chronic Disease

Goal: Improve access to educational and behavioral modification programs as well as healthy food options to help reduce the risk of chronic disease.

Strategy 2.1: Health Screenings: Provide no-cost biometric screenings and educational sessions to the community. Provide no-cost blood pressure screenings and education about cardiovascular disease. Offer strategies to help people eat healthier, maintain a healthy weight and increase physical activity.

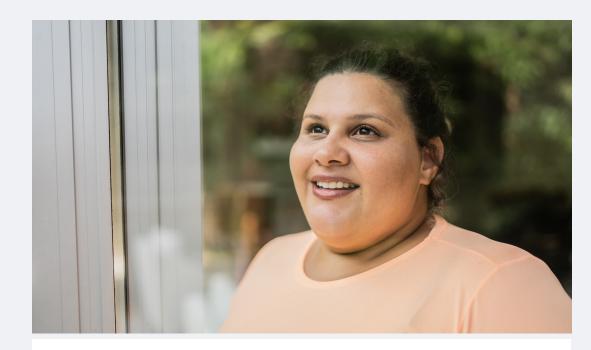
Northwestern Medicine Central DuPage Hospital continued to provide community education related to chronic disease in the areas of evidence-based primary interventions (disease prevention, health promotion), secondary interventions (screenings) and tertiary interventions (programs for individuals with a chronic disease to promote an optimum state of wellness). This acute care for chronic disease and chronic disease management was provided to all individuals, regardless of ability to pay.

The following blood pressure screenings were held in the CSA:

- FY22: Four clinics with 131 people
- FY23: Nine clinics with 97 people
- FY24 so far: Ten clinics with 154 people

#### **Impact of Strategy**

Community-based screenings help identify people with unmanaged high blood pressure. They also reinforce awareness of heart disease and the importance of measures to prevent or manage it. Patients who screened positive for high blood pressure were given information on how to manage it. They were encouraged to follow treatment plans provided by their clinicians, and where necessary, they were referred to a primary care site.



Strategy 2.2: Community Health and Wellness Programming: Promote health and reduce chronic disease through prevention, detection and addressing risk factors. Collaborate with early-childhood schools and childcare centers to review policies and curricula and increase efforts that promote nutrition and moderate to vigorous physical activity.

Northwestern Medicine Central DuPage Hospital continued to provide community education related to preventing childhood obesity through nutrition education, increased physical activity and family involvement, with an emphasis on parents and children attending the 4-year-old program.

The Coordinated Approach to Child Health (CATCH) program was provided in the following locations:

- FY22: Fifteen schools and 409 participants
- FY23: Thirteen schools and 318 participants
- FY24 so far: Three schools and 354 participants

#### **Impact of Strategy**

Over the past few years, the CATCH program has affected not only the students within the program, but also their families. Students and their families gained an understanding of a healthier lifestyle through nutrition education, physical activity and physical education.

Strategy 2.3: Community Benefit Donations and Grants: Provide funding through the Community Benefit donations and grants process to strategies and organizations that address chronic disease.

Northwestern Medicine Central DuPage Hospital provided funding through the Community Benefit Competitive Grant process. This process resulted in the following awards:

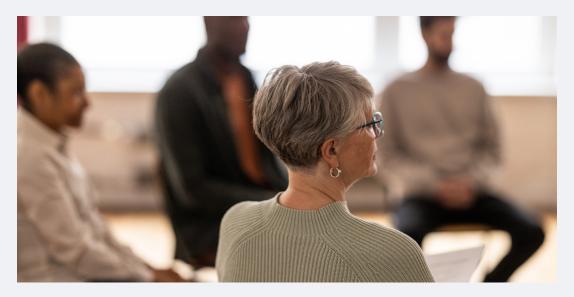
- FY22: Six grants were awarded in the total amount of \$320,000.
- FY23: Thirteen grants were awarded in the total amount of \$553,000.
- FY24: Grant recipients are being selected.

Funding supported the following organizations and strategies:

- **DuPage Senior Citizens Council**: Conducting well-being checks and providing nutrition education and nutritious meals.
- Hamdard Health Alliance: Purchasing diagnostic equipment and remote monitoring
  equipment to increase care compliance and increase the percentage of patients
  whose hypertension and diabetes are controlled.

#### **Impact of Strategy**

Over the past few years, the chronic health needs of the community have increased significantly. We expanded access to care in the CSA by providing financial support to high-quality, trusted community organizations who offer services for managing chronic conditions.



## Priority Health Need 3: Mental Health and Substance Use Disorders

Goal: Improve access to mental health and substance use disorder resources to help ensure under-resourced populations in the Northwestern Medicine Central DuPage Hospital CSA have the services and support needed to get appropriate treatment.

Strategy 3.1: Community Engagement: Support mental health efforts by collaborating with community-based organizations.

This strategy focused on supporting efforts to increase mental health services by providing leadership, investing resources and working collaboratively with other community organizations throughout the county. Through collaboration with community organizations, the following work groups were developed:

- DuPage Prevention Leadership Team
- WeGo Together for Kids Mental Health Work Group
- Community Consolidated School District 93 Interconnected Mental Health Work Group

#### **Impact of Strategy**

As part of these efforts, there was an increased focus on identifying programs and initiatives to address mental health care and substance use. These groups each met monthly.

Appendix A: Evaluation of Impact

Strategy 3.2: Mental Health Training and Education: Educate the community on how to identify, understand and respond to the signs of mental illnesses and substance use disorders. Increase awareness of negative attitudes and beliefs around mental health.

Northwestern Medicine Central DuPage Hospital continued to provide evidence-based wellness programs in the areas of mental health and substance use disorders via programmatic venues, including Mental Health First Aid, mental health focused programming offered by the Community Programming Team, and support groups. We also collaborated with the county to provide medication disposal locations and events.

- The Mental Health First Aid course was offered to the CSA to increase awareness and decrease stigma related to mental health. In FY22, there were three classes and 35 participants; in FY23, four classes and 77 participants; and in FY24, two classes and 23 participants so far.
- Mental health community programming: In FY22, presentations were not developed yet; in FY23, there were four presentations, and in FY24, there have been two presentations so far.
- Medication disposal locations and events: A disposal kiosk was placed at an
  entrance of Northwestern Medicine Central DuPage Hospital for easy drop-off.
   We participate in the biannual Drug Take Back Day by providing locations across
  multiple Northwestern Medicine sites and staff to offer Narcan education.

#### **Impact of Strategy**

With this multi-community approach to addressing care gaps for mental health and substance use disorders, we continue to work closely with the county and stay apprised of the community's needs.

Strategy 3.3: Community Benefit Donations and Grants: Provide funding through the Community Benefit donations and grants process to strategies and organizations that address mental health or substance use disorders.

Northwestern Medicine Central DuPage Hospital provided funding through the Community Benefit Competitive Grant process. This process resulted in the following awards:

- FY22: Six grants were awarded in the total amount of \$320,000.
- FY23: Thirteen grants were awarded in the total amount of \$553,000.
- FY24: Grant recipients are being selected.

Funding supported the following organizations and strategies:

- Almost Home Kids: De-escalation training for staff to deal with an increase in aggressive behavior and mental health needs.
- **SamaraCare**: The Mental Health Access Program, which offers mental health care through fee subsidy assistance.
- 360 Youth Services: No-cost and low-cost counseling for vulnerable youth experiencing homelessness, along with preventive mental health care for local schools.
- Northeast DuPage Family and Youth Services: Adolescent therapeutic groups across the county, which includes dialectical behavioral therapy to teach young people ways to cope with depression, anxiety, addictions, eating disorders and posttraumatic stress.
- Glen Ellyn Children's Resource Center: A social-emotional learning program that focuses on improving prosocial behaviors and student attitude and reduce student stress and depression.

#### **Impact of Strategy**

The CSA has experienced a severe increase in mental health issues and substance use disorders. Our financial support of the aforementioned organizations that address these issues means access to care in the CSA is expanding.

## Priority Health Need 4: Social Determinants of Health

Goal: Improve access to community resources addressing SDOH to help ensure under-resourced populations in the Northwestern Medicine Central DuPage Hospital CSA have the services and support needed to live healthy lives.

Strategy 4.1: Community Benefit Donations and Grants: Provide funding through the Community Benefit donations and grants process to strategies and organizations that address SDOH.

Northwestern Medicine Central DuPage Hospital provided funding through the Community Benefit Competitive Grant process. This process resulted in the following awards:

- FY22: Six grants were awarded in the total amount of \$320,000.
- FY23: Thirteen grants were awarded in the total amount of \$553,000.
- FY24: Grant recipients are being selected.

Funding supported the following organizations and strategies:

- People's Resource Center: Access to educational resources and referrals to county and community services.
- Northern Illinois Food Bank: The Take 50 Foods to Encourage program, allowing local community partners to access nutritious food at a low cost to serve the community.
- Neighborhood food pantries: Uninterrupted food distributions of healthy, nutritious food to neighbors experiencing food insecurity.
- **DuPage Habitat for Humanity:** Support for seniors who need help with home repairs to improve safety and accessibility.
- Loaves & Fishes Community Services: Wrap-around services for families with food
  insecurity that offers access to nutritious foods and education about healthy food
  choices and meets the needs of special care populations (infants, children, seniors
  and individuals with dietary restrictions). Services also include helping people sign
  up for community resources like SNAP and the Special Supplemental Nutrition
  Program for Women, Infants, and Children (WIC).

#### Impact of Strategy

68

Access to nutritious foods is an SDOH. As with safe housing and transportation, food insecurity can be addressed by collaborating with organizations in the community that are already doing the work to make more resources available. By supporting organizations that can provide access to nutritious and healthy food, we are helping to address an important SDOH.

# Appendix B: Resources Available to Address Significant Health Needs

The following healthcare facilities and community organizations may be available to address significant health needs identified in this CHNA.

Category	Resource	Description	Link
Health Care	Northwestern Medicine Delnor Hospital	Hospital	nm.org
	VNA Health Care	Free clinic	<u>vnahealth.com</u>
Nonprofit, Faith-Based	Wheaton Bible Church	Church	wheatonbible.org
Organizations	St. Andrew Lutheran Church	Church	standrewlutheran.net
Social Service Organizations	WeGo Together for Kids	Supports and enhances the health, safety, learning and social- emotional well-being of children and families	wegotogetherforkids.com
	DuPagePads	Provides interim and permanent housing and support services to end homelessness	dupagepads.org
	DuPage Health Coalition	Supports the health of low-income populations across the continuum of care in DuPage County	accessdupage.org
	Northern Illinois Food Bank	Food bank	solvehungertoday.org

Northwestern Medicine Central DuPage Hospital 2024 Community Health Needs Assessment **69** 

# Appendix C: Timeline for the 2024 CHNA for Northwestern Medicine Central DuPage Hospital

Phase	Description	Date
Assessment and Analysis	Overall	October 2023 to April 2024
	Community input survey	October 2023 to January 2024
	Focus groups	January to February 2024
	Key informant interviews	March to April 2024
Prioritization	Overall	May 2024
	Community Engagement Council	May 1, 2024
	Central DuPage Hospital Association Board of Directors	July 30, 2024
Approval	Central DuPage Hospital Association Board of Directors	July 30, 2024
Report Made Widely	Website	August 31, 2024
Available to the Public	Paper copy available at no charge on request	August 31, 2024
Public Comment	Northwestern Medicine Central DuPage Hospital 2024 CHNA	August 31, 2024, through August 31, 2030
	Northwestern Medicine Central DuPage Hospital 2021 CHNA	August 31, 2021, through August 31, 2027

# Appendix D: A Closer Look at Data

# Community Input Summary

#### **Community Input Survey**

Metopio collected 3,604 survey responses from people in the CSA. The following issues were selected as the most important health needs in the community by 25% or more of the survey respondents:

- 1. Adult mental health (38.2%)
- 2. Cancer (35.7%)
- 3. Adolescent mental health (34.7%)
- 4. Obesity (33.6%)
- 5. Heart disease (32.7%)
- 6. Alzheimer's disease (28.6%)

The following factors that support improvements in health needs were selected by 25% or more of the survey respondents:

- 1. Medication affordability (45.5%)
- 2. Insurance access (36.0%)
- 3. Eating healthy (34.7%)
- 4. Access to health care (34.0%)
- 5. Safe, affordable housing (31.9%)
- 6. Elder care (30.7%)

#### Community focus groups and key informant interviews

Metopio facilitated five focus groups in the CSA and conducted 10 key informant interviews. Focus groups took place with priority populations such as individuals living with mental illness, people of color, older adults, caregivers, teens and young adults, people from sexual minority groups, families with children, faith communities and adults with disabilities.

Most focus groups were 90 minutes long with an average of 10 participants. Groups were conducted virtually using the Zoom platform or in person. A trained facilitator moderated each session. Sessions were recorded, and recordings were stored securely on a server at Metopio.

Key informant interviews lasted 30 minutes and were done with a trained interviewer. Sessions were held over the Zoom platform. Notes were captured in a Word document.

The following themes were identified during focus group sessions and key informant interviews for the hospital's CSA:

#### Accessibility

- Access to behavioral health care
- Difficulty navigating healthcare and insurance systems
- Transportation needs for medical appointments and other common locations
- Limited availability of appointment times

#### **Cultural Competency**

• Linguistically and culturally competent care

#### **Affordability**

- Cost of living
- Cost of care and medications

#### Age

• Lack of education for youth on substance use and healthy living

Appendix E: References

# Appendix E: References

- 1. U.S. Department of Commerce. (2022). U.S. Census Bureau 2018-2022 *American Community Survey 5-year estimates*. U.S. Department of Commerce. <a href="mailto:census.gov/newsroom/press-kits/2022/acs-5-year.html">census.gov/newsroom/press-kits/2022/acs-5-year.html</a>
- 2. Centers for Disease Control and Prevention. (2022). *Social determinants of health*. Centers for Disease Control and Prevention. cdc.gov/chronicdisease/programs-impact/sdoh.htm
- 3. Millman, M. (1993). *Access to health care in America*. Institute of Medicine (U.S.) Committee on Monitoring Access to Personal Health Care Services. <a href="https://ncbi.nlm.nih.gov/books/NBK235882/">ncbi.nlm.nih.gov/books/NBK235882/</a>
- 4. U.S. Department of Health and Human Services. (2023). *Healthy People 2030*. U.S. Department of Health and Human Services. <u>health.gov/healthypeople</u>
- 5. McGill, N. (2016). Education attainment linked to health throughout lifespan: Exploring social determinants of health. The Nation's Health (1971), 46(6), 1.
- 6. Environmental Protection Agency. (2020). *Particulate Matter Environmental Justice Index*. Environmental Protection Agency. Accessed through Metopio.
- 7. Feeding America. (2020). Map the meal gap. Feeding America. Accessed through Metopio.
- 8. U.S. Department of Agriculture. (2019). *Food access research atlas*. U.S. Department of Agriculture. Accessed through Metopio.
- 9. Krieger, N. (2014). Discrimination and health inequities. *International Journal of Health Services*, 44(4), 643-710. doi:10.2190/HS.44.4.b
- 10. Federal Bureau of Investigation. (2021). FBI crime data explorer. Accessed through Metopio.
- 11. Centers for Disease Control and Prevention. (2021). PLACES. Accessed through Metopio.
- 12. National Center for Health Statistics. (2020). *U.S. Small-area Life Expectancy Estimates*\*Project USALEEP. Centers for Disease Control and Prevention. Accessed through Metopio.
- 13. Centers for Disease Control and Prevention. (2022). *Mortality statistics*. National Vital Statistics System. Accessed through Metopio.
- 14. Centers for Medicare & Medicaid Services (CMS). (2021). *National provider identifier files*. Accessed through Metopio.
- 15. Illinois Health and Hospital Association (IHA). (2022). *COMPdata informatics*. Calculated by Metopio.
- 16. Illinois Department of Public Health (IDPH). (2015-2019). *Illinois state cancer registry*. Calculated by Metopio.

- 17. Centers for Disease Control and Prevention (CDC). (2021). *National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention: Atlas Plus.* healthindicators.gov
- 18. Illinois Department of Public Health. (2022). COVID-19 vaccines. Accessed through Metopio.
- 19. American Psychiatric Association. (2023). What is a substance use disorder? <a href="mailto:psychiatry.org/">psychiatry.org/</a>
  <a href="psychiatry.org/">patients-families/addiction-substance-use-disorders/what-is-a-substance-use-disorder">psychiatry.org/</a>
- 20. Abramson, A. (2021). Substance use during the pandemic. American Psychological Association. <a href="mailto:apa.org/monitor/2021/03/substance-use-pandemic#:~:text=According%20">apa.org/monitor/2021/03/substance-use-pandemic#:~:text=According%20</a> to%20the%20Centers%20for,emotions%20related%20to%20COVID%2D19
- 21. Bass, B, Nagy, H. (2023). *Cultural Competence in the Care of LGBTQ Patients*. StatPearls Publishing. <u>ncbi.nlm.nih.gov/books/NBK563176/</u>
- 22. Institute of Medicine (U.S.) Committee on Health and Behavior: Research, Practice, and Policy. (2001). Health and Behavior: *The Interplay of Biological, Behavioral, and Societal Influences*. National Academies Press (U.S.). <a href="mailto:ncbi.nlm.nih.gov/books/NBK43732/">ncbi.nlm.nih.gov/books/NBK43732/</a>
- 23. Community input represents information and beliefs obtained from CHNA focus groups and from persons representing the broad interests of the community, including people who are uninsured, have low incomes and belong to certain minority groups.

Appendix F: Disclaimers

# Appendix F: Disclaimers

#### Information gaps

Northwestern Medicine Central DuPage Hospital made efforts to comprehensively collect and analyze CHNA data to assess the health of the community. However, there are limitations to consider while reviewing the findings.

- Data is presented for the most recent years available for any given source. Because of
  variations in data collection time frames across different sources, some datasets are not
  available for the same time spans.
- Data availability ranges from census track to national geographies. The most relevant localized data is reported.
- There are persistent gaps in data for certain community health issues, such as homelessness, behavioral health, crime, environmental health and education.

Northwestern Medicine is investigating strategies for addressing information gaps for future assessment and implementation processes.

#### **Public dissemination**

The 2024 CHNA report for Northwestern Medicine Central DuPage Hospital is available to the public at no charge and can be accessed in the following ways:

Online: nm.org/about-us/nm-community-impact/reports

**Phone:** 312.926.2301 (TTY: 711)

Email: communityhealth@nm.org

In person: Please visit the main customer service desk at the hospital listed below:

Northwestern Medicine Central DuPage Hospital 25 North Winfield Road Winfield, Illinois 60190

#### **Public comment**

As of May 2024, Northwestern Medicine Central DuPage Hospital has not received comments from the public. Northwestern Medicine will continue to use its website as a tool to encourage public comments and ensure that these comments are considered in the development of future CHNAs.

Extensive input from the broader community was gathered through surveys and focus groups for this report. This input, in conjunction with any public comments received, was considered when identifying and prioritizing the significant health needs of the community.

Northwestern Medicine Central DuPage Hospital welcomes comments from the public regarding the CHNA. Please submit comments to <a href="mailto:communityhealth@nm.org">communityhealth@nm.org</a>, and include your name, organization (if applicable) and any feedback you have regarding the CHNA process or findings.



### Northwestern Medicine Central DuPage Hospital

25 North Winfield Road Winfield, Illinois 60190 630.933.1600

nm.org