Northwestern Medicine®

2019 Community Health Needs Assessment Hospital Report

Northwestern Memorial Hospital

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Key Dates
Adopted by the Northwestern Memorial Hospital Board of Directors: July 24, 2019
Made Available to the Public: August 31, 2019

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Executive Summary

Since 2012, Northwestern Memorial Hospital (NMH) has formally completed a comprehensive Community Health Needs Assessment (CHNA) every three years, in accordance with federal IRS regulations §1.501(r)-3, to better understand the population it serves as well as the health issues that are of greatest concern within its community.

The goal of the CHNA is to assess the health needs of residents within the defined NMH Community Service Area (CSA), identify and prioritize those needs, and identify resources potentially available to address priority health needs.

In 2019, NMH partnered with the Alliance for Health Equity (AHE) to employ a systematic, data-driven approach to conduct a CHNA that incorporated data from both quantitative and qualitative sources.[1] Following data collection and analysis at the city and county level, NMH took additional steps to review and interpret findings, including data analysis at the NMH CSA level and engagement of community partners.

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

While many health needs were identified through the CHNA process, NMH prioritized health needs of the largest magnitude, seriousness and trend, as well as those that would be best addressed through a coordinated response from a partnership of healthcare and community resources. Through the CHNA process, the 2019 NMH priority health needs were identified as follows:

1. Access to Health Care and Community Resources
    a. Chronic Disease
    b. Mental Health

2. Social Determinants of Health
    a. Economic Vitality and Workforce Development
    b. Structural Inequities
    c. Violence and Community Safety

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

[1]Alliance for Health Equity, "Community Health Needs Assessment for Chicago and Suburban Cook County," ed. Illinois Public Health Institute Northwestern Memorial Hospital (Chicago, IL 2019).

Introduction

About Northwestern Memorial HealthCare

Northwestern Memorial HealthCare (NMHC) is committed to its mission to: 1) provide quality medical care, regardless of the patient's ability to pay; 2) transform medical care through clinical innovation, breakthrough research and academic excellence; and 3) improve
the health of the communities we serve. NMHC is a not-for-profit, integrated academic health system committed to serving a broad community. NMHC provides world-class care at 10 hospitals, three medical groups, and more than 200 diagnostic and ambulatory locations in communities throughout Chicago and the north, west and northwest suburbs, *one patient at a time.*

NMHC hospitals are pillars in their respective communities and lead efforts to positively impact the health of the populations they serve. From facilitating collaborations with community partners to serving as major economic drivers, NMHC strengthens our communities.

About Northwestern Medicine

Working together as Northwestern Medicine® (NM), NMHC and Northwestern University Feinberg School of Medicine (Feinberg) share a vision to transform medical care through clinical innovation, breakthrough research and academic excellence to make a positive difference in people's lives and the health of our communities. Whether directly providing patient care or supporting those who do, every NM employee has an impact on the quality of the patient experience and the level of excellence we collectively achieve. This knowledge, expressed in our shared commitment to a single, patient-focused mission, unites us.

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

- We are all caregivers or someone who supports a caregiver.
- We are here to improve the health of our community.
- We have an essential relationship with Feinberg.
- We integrate education and research to continually improve excellence in clinical practice.
- We serve a broad community and bring the best in medicine closer to where patients live and work.

About Northwestern Memorial Hospital

Northwestern Memorial Hospital (NMH) is an 894-bed, adult acute-care, nationally ranked academic medical center (AMC) located in downtown Chicago that provides a complete range of adult inpatient and outpatient services in an education and research environment. For more than 150 years, NMH and its predecessor institutions have served the residents of Chicago. The commitment to provide health care, regardless of the patients' ability to pay, reaches back to our founding principles, and continues to be integral to our mission to put patients first.

NMH serves a large, complex and diverse area, with patients coming from the City of Chicago and surrounding counties. In fiscal year 2018 (FY18), NMH admitted more than 45,000 adults as inpatients. NMH's Prentice Women's Hospital is the largest birthing center in Illinois, with more than 11,600 deliveries in FY18; and as an adult Level I trauma center, NMH had more than 83,000 emergency department visits in FY18.

To best address the diverse needs of our patients and community, NMH partners with trusted community-based organizations in the Chicagoland area. We realize that to have the greatest impact, we need to work with our neighbors and learn from them. We collaborate to identify and respond to priority health needs within our community and systematically reduce barriers to patient care services. Together, we have developed important initiatives to promote healthy lifestyles and minimize risk factors for heart disease, stroke and other chronic diseases; to deliver health services to at-risk women; to address mental health and recreational drug use; and to provide access to care for some of our community's most vulnerable patients. NMH has a rich history of caring for its community and continues to uphold its promise to meaningfully improve access to high-quality health care and implement targeted programs that address priority health needs of the community.

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

Acknowledgments

Parties with whom NMH collaborated and contracted for assistance

NMH gratefully acknowledges the Alliance for Health Equity (AHE) for their partnership and significant efforts in the completion of this CHNA.

NMH also acknowledges the participation of a dedicated group of organizations that gave generously of their time and expertise to help guide the 2019 CHNA.

- Chicago Department of Public Health
- Northwestern Memorial Hospital External Steering Committee
  - —Bright Star Community Outreach
  - —Chicago Public Library, Richard M. Daley Branch
  - —CommunityHealth
  - —Erie Family Health Centers
  - —Kelly Hall YMCA
  - —Near North Health Services Corporation
  - —Neighborhood Housing Services
  - —Salvation Army Freedom Center
  - —West Humboldt Park Development Council
- Northwestern University Institute for Public Health and Medicine (IPHAM)
- Northwestern University's Alliance for Research in Chicagoland Communities (ARCC) Steering Committee

The Community Health Needs Assessment

Background

A comprehensive CHNA was conducted in collaboration with the Alliance for Health Equity (AHE). AHE is made up of 37 hospitals working with local health departments and regional and community-based organizations to improve health equity, wellness and quality of life across Chicago and Suburban Cook County. The Illinois Public Health Institute (IPHI) acts as the backbone organization for AHE and developed the collaboration so that participating organizations could collaboratively assess community health needs, collectively develop shared implementation plans to address community health needs, more efficiently share resources and have a greater impact on the larger population residing in Cook County.

The CHNA process consisted of a systematic, data-driven approach to determine the health status, behaviors and needs of residents in the NMH CSA.

AHE defined parameters for leveraging the CHNA to advance health equity and committed that this process would:

Build on prior CHNAs as well as other local assessments, regional assessments and plans;

Provide greater insight into community health needs and strategies for ongoing community health priorities;

Leverage expertise of community residents, community partners and key stakeholders;

Provide an overview of community health status and highlight data related to health inequities;

Inform strategies related to population health, connections between community and clinical sectors, anchor institution efforts, policy change and community partnerships; and

Highlight health inequities and their underlying root causes throughout the CHNA.

The CHNA provided information to enable hospital leadership and key community stakeholders to identify health issues of greatest concern among all residents and decide how best to commit the hospital's resources to those areas, thereby achieving the greatest possible impact on the community's health status.

CHNA Goals

The NMH CHNA serves as a tool toward reaching three related goals:

1. **Improve residents' health status, increase life spans and elevate overall quality of life.** A healthy community is one where its residents suffer little from physical and mental illness and enjoy a high quality of life.
2. **Reduce health disparities among residents.** By gathering demographic information along with health status and behavior data, it is possible to identify population segments that are most at risk for various diseases and injuries. Intervention plans targeting these segments may then combat some of the socioeconomic factors that have historically had a negative impact on residents' health.
3. **Increase accessibility to preventive services for all residents.** Access to preventive services may improve health status, life spans and overall quality of life, and impact the cost associated with care for late stage diseases resulting from a lack of preventive care.

Community Description

How the Community Service Area was Determined

In 2019, NMH went through a process to redefine its Community Service Area (CSA). NMH's prior CSA comprised the entire City of Chicago. Using this large geographic area posed several challenges for defining and addressing community needs. While NMH's clinical services reach residents from every Chicago community, it is difficult for one hospital to achieve a similarly large reach for community-based programs and services that it supports. In addition, attempting to address community needs on such a large scale may divert resources from the most underserved communities, where there are the greatest unmet needs. Further, there are four academic medical centers located in Chicago, promoting overlap between the community service area of NMH and that of other hospitals.

To define the NMH CSA for the current CHNA, the following factors were considered: 1) the geographic area served by NMH; 2) principal functions of NMH; 3) areas of high hardship (e.g., differences in unmet socioeconomic needs across Chicago neighborhoods such as education, housing, income, poverty, unemployment and dependents); 4) the location of existing NM assets (e.g., NM-supported clinics and programs) that serve Chicago communities; 5) the defined hospital service areas of other academic medical centers in Chicago; and 6) existing initiatives addressing community needs in Chicago.

Stakeholders from NMHC Community Affairs and Government Relations, as well as the Northwestern University Institute for Public Health and Medicine met to discuss the NMH CSA definition. Using GIS software, each factor mentioned above was mapped to examine the greatest area of overlap impacting medically underserved, low-income and minority populations. During regular meetings of these internal stakeholders, it was determined that a 7-mile radius around NMH maximized the opportunity to identify and address health needs for communities serviced by our hospital. The defined CSA did not exclude populations based on whether or how much patients or their insurers pay for the care received or whether patients are eligible under NMH's Financial Assistance Policy.

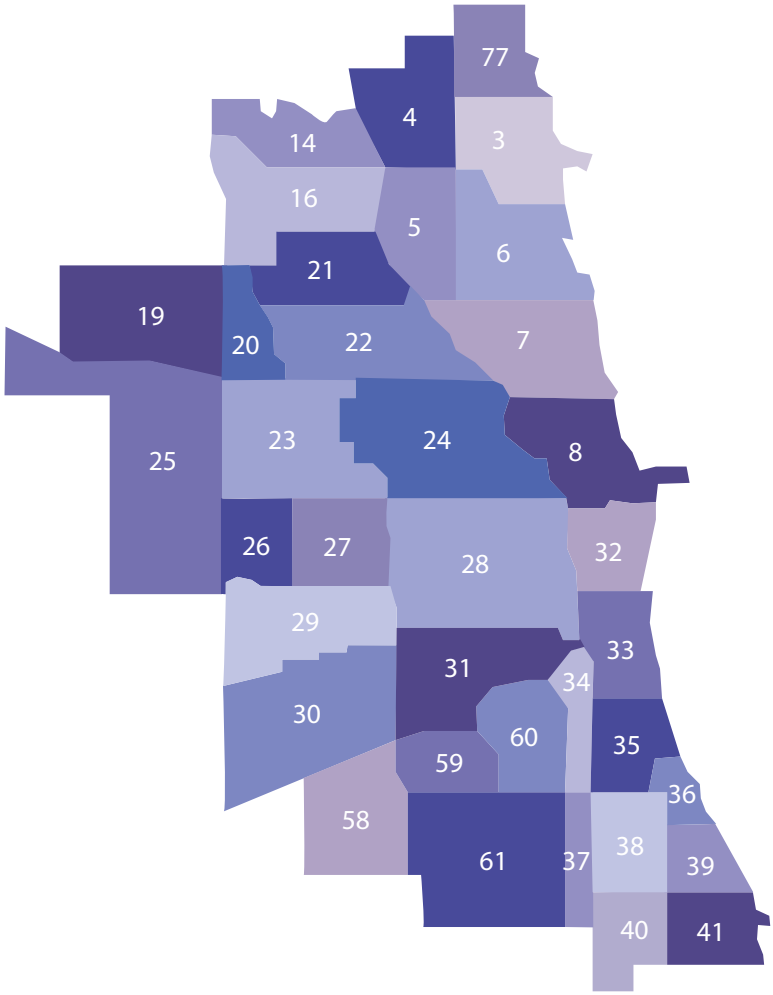
How the Community Service Area is Defined

The NMH CSA is defined as a 7-mile radius around NMH which accounts for 34 ZIP codes. This community area encompasses 92.30 square miles and is home to a total population of 1,558,749 residents, which comprises 57% of Chicago's total population. The population density is reported at 16,888 people per square mile and is predominantly urban.

NMH CSA ZIP Codes				
60601	60608	60615	60632	60651
60602	60609	60616	60639	60653
60603	60610	60618	60640	60654
60604	60611	60622	60641	60657
60605	60612	60623	60642	60660
60606	60613	60624	60644	60661
60607	60614	60625	60647	

NMH CSA Neighborhoods

The following 36 neighborhoods are comprised of these ZIP codes and represent the NMH CSA.



Number	Community Area
3	Uptown
4	Lincoln Square
5	North Center
6	Lake View
7	Lincoln Park
8	Near North Side
14	Albany Park
16	Irving Park
19	Belmont Cragin
20	Hermosa
21	Avondale
22	Logan Square
23	Humboldt Park
24	West Town
25	Austin
26	West Garfield Park
27	East Garfield Park
28	Near West Side
29	North Lawndale
30	South Lawndale
31	Lower West Side
32	Loop
33	Near South Side
34	Armour Square
35	Douglas
36	Oakland
37	Fuller Park
38	Grand Boulevard
39	Kenwood
40	Washington Park
41	Hyde Park
58	Brighton Park
59	McKinley Park
60	Bridgeport
61	New City
77	Edgewater

Methodology

Introduction

Development of the CHNA methodology was led by AHE's hospital members. The CHNA incorporated data from both quantitative and qualitative sources. Sources of information included primary data (e.g., the AHE Community Health Input Survey and Focus Groups) and secondary data (e.g., vital statistics and other existing health-related data). Quantitative components allowed for trending and comparison to benchmark data at the city, county and state levels. The data were collected, analyzed and reviewed by community health experts before they were presented to executive leadership and key community stakeholders for prioritization. All analyses conducted by AHE for this CHNA report are presented without citations. Data presented from other sources are cited as footnotes throughout the CHNA report.

Community Service Area

The NMH CSA is defined as a 7-mile radius around NMH which accounts for 34 ZIP codes and 36 neighborhoods within the City of Chicago. Additional information on the NMH CSA can be found on pages 9-11 of this report.

Primary Data Collection, Analysis and Timeline

AHE conducted a collaborative CHNA between March of 2018 and March of 2019. Primary and secondary data from diverse sources were utilized for robust analysis of community health needs in Chicago and Suburban Cook County. Additional data analysis was conducted by AHE, NMH and NU IPHAM from March through May of 2019 to identify community health needs within the NMH CSA.

Primary data for the CHNA was collected through four methods:

1. **Community input surveys:** Between October 2018 and February 2019, AHE collected 1,593 community input surveys from individuals 18 or older living in the NMH CSA.[2] The surveys, which were available on paper and online and were disseminated in English, Spanish, Chinese and Polish, included 16 questions on demographics, the health status of their communities, community strengths, opportunities for improvement and priority health needs. AHE member hospitals, community-based organizations and health departments distributed the surveys to community members with the intention of gaining insight from priority populations that are typically underrepresented in assessment processes. A list of these organizations can be found in Appendix D (AHE Report), page 5. Priority populations included communities of color, immigrants, LGBTQ+ community members, individuals with disabilities and low-income communities. Additional information regarding development of the survey tool, distribution and a copy of the instrument can be found in Appendix D (AHE Report), page 27.

2. **Community resident focus groups and learning map sessions:** Between August 2018 and February 2019, AHE held a total of 36 community focus groups within the NMH CSA. These focus groups took place with priority populations such as veterans, individuals living with mental illness, communities of color, older adults, caregivers, teens and young adults, LGBTQ+ community members, adults and teens experiencing homelessness, families with children, faith communities, adults with disabilities, and children and adults living with chronic conditions such as diabetes and asthma. Focus group facilitators asked participants about the underlying root causes of health issues that they see in their communities and specific strategies for addressing those health needs. Additional information regarding the community focus group sessions can be found in Appendix D (AHE Report), pages 30 and 31.

[2]"Community Health Needs Assessment Community Input Survey Report," (Chicago, IL 2019).

3. **Healthcare and social service provider focus groups:** These focus groups assessed community leaders and healthcare providers, including faith leaders, immigrant service providers and hospitals. Additional information regarding the provider focus group sessions can be found in Appendix D (AHE Report), pages 30 and 31.

4. **Stakeholder assessments led by partner health departments:** The Forces of Change Assessment evaluated trends, factors and events that currently affect or are anticipated to affect the public health system. This information was collected by the Chicago Department of Public Health and the Cook County Department of Public Health from community stakeholders through an online survey between November 2018 and January 2019. The Health Equity Capacity Assessment scored the capacity of the public health system to advance health equity. The tool used in this assessment consisted of 5-6 questions for each of the Ten Essential Public Health Services relating to five components of health equity: 1) community engagement and involvement; 2) organizational processes; 3) power and influence; 4) structural inequities; and 5) funding. On March 5, 2019, input was gathered from 80 stakeholders across Chicago and Suburban Cook County using this tool. Additional information regarding the stakeholder assessments can be found in Appendix D (AHE Report), page 31.

AHE provided analysis of primary data from the NMH CSA, including Community Input Survey demographics, response distribution and outcomes such as top health issues and top needs for a healthy community as identified by respondents. Major themes from focus group input within the NMH CSA were also summarized and specific examples of community comments were detailed.

Secondary Data Collection, Analysis and Timeline

Secondary data were identified, compiled and analyzed by epidemiologists from the Cook County Department of Public Health (CCDPH) and Chicago Department of Public Health (CDPH).

The following indicators were selected for the analysis:

- Social and Structural Determinants of Health
- Physical Environment
- Health Behaviors
- Health Care and Clinical Care
- Behavioral Health (Mental Health and Substance Use)
- Health Outcomes (Birth Outcomes, Morbidity, and Mortality)

A variety of existing (secondary) data sources were consulted, specifically focusing on the indicators listed above, including:

Peer-reviewed literature and white papers

Existing assessments and plans focused on key topic areas

Localized data compiled by several agencies including Chicago Department of Planning and Development, Chicago Metropolitan Agency for Planning, Housing Authority of Cook County, and state and local police departments

Localized data compiled by community-based organizations, including Greater Chicago Food Depository and Voices of Child Health in Chicago

Hospitalization and emergency department rates (COMPdata) provided by Illinois Health and Hospital Association and analyzed by the Conduent Healthy Communities Institute

Data compiled by state agencies, including Illinois Environmental Protection Agency, Illinois Department of Healthcare and Family Services, Illinois Department of Human Services, Illinois State Board of Education and Illinois Department of Public Health

Data from federal sources, including U.S. Census Bureau American Community Survey data compiled by Chicago Department of Public Health and Cook County Department of Health; Centers for Disease Control and Prevention; Centers for Medicare and Medicaid Services data accessed through the Dartmouth Atlas of Health Care; Health Resources and Services Administration; and United States Department of Agriculture

For analysis of secondary data from the NMH CSA, descriptive statistics were used to summarize the following: sociodemographic factors, prevalence of health conditions and exposures, incidence of health conditions (where available) and mortality related to health conditions (where available). Correlation coefficients were calculated to examine the relationship between social determinants of health and health outcomes within the NMH CSA. The same method was used to explore the correlation between measures of healthcare access and health outcomes. All measures of interest were mapped for the City of Chicago and NMH CSA using Geographic Information System (GIS) tools in ESRI ArcGIS and R, and maps were examined for spatial patterns. Contrasts between the NMH CSA and the rest of Chicago were also examined by calculated population-weighted averages to identify measures for which patient needs were different in the NMH CSA than in the rest of the city.

Benchmark Data

County and state risk factor data were utilized as an additional benchmark against which to compare NMH CSA findings. Source data included Behavioral Risk Factor Surveillance System (BRFSS) and Trend Data published by the CDC. State level vital statistics were also provided for comparison of secondary data indicators.

Information Gaps

AHE and NMH made substantial efforts to comprehensively collect and analyze CHNA data. However, there are limitations to consider while reviewing the findings.

Population health and demographic data are often delayed in their release, so data is presented for the most recent years available for any given data source.

There is variability in the geographic level at which data sets are available, ranging from census tract to statewide or national geographies. Whenever possible, the most relevant localized data is reported.

Due to variations in geographic boundaries, population sizes and data collection techniques for suburban and city communities, some datasets are not available for the same time spans or at the same level of localization throughout the county.

There are persistent gaps in data systems for certain community health issues such as mental health and substance use disorders (youth and adults), crime reporting, environmental health and education outcomes.

AHE partners, including NMH, are investigating strategies for addressing data system gaps for future assessment and implementation processes.

Public Dissemination

The NMH CHNA Report is available to the public and can be accessed through the following channels:

- **NMH Website:** https://www.nm.org/about-us/community-initiatives/community-health-needs-assessment
- **Hardcopy:** A free, paper copy of the NMH CHNA Report is available at NMH upon request and without charge by calling 312.926.2301, emailing communityhealth@nm.org, or by visiting the main customer service desk in the Feinberg Pavilion, first floor lobby, at 251 East Huron Street, Chicago, Illinois 60611

Public Comment

NMH made its prior CHNA Report publicly available in August 2016 through its website and by making a paper copy available upon request without fee. NMH welcomed comments and feedback from the public regarding the CHNA. At the time of this writing, NMH had not received written feedback or comments. However, through the community input survey, focus groups and key informant feedback, extensive input from the broader community was considered and taken into account for this CHNA when identifying and prioritizing the significant health needs of the community.

NMH will continue to use its website as a tool to solicit public comments and ensure that these comments are considered in the development of future CHNAs. Please submit comments to communityhealth@nm.org and include your name, organization (if applicable), and any feedback you have regarding the NMH CHNA report process or findings.

Key Findings

Demographics

The results of this mixed-methods evaluation highlight opportunities for improving health within the NMH CSA. The assessment found that the NMH CSA is complex and diverse, encompassing a range of socioeconomic characteristics such as race and ethnicity, household income, education attainment and foreign-born status.

Total Population

According to American Community Survey 5-year estimates, 2012-2016, the total population within the NMH CSA is 1,558,749 residents, which comprises 57% of Chicago's population.

Gender

There are 788,203 (51%) females and 770,546 (49%) males within the NMH CSA, which aligns with the City of Chicago (51% and 49% respectively).[3] Data for transgender population is limited; the Chicago Department of Public Health (CDPH) has done preliminary work and estimates that approximately 10,500 adults living in Chicago identify as transgender or gender non-confirming based on data from the Healthy Chicago Survey.

Age

Age Group	Population in NMH CSA	Percentage in NMH CSA	Percentage in City of Chicago
19 and Under	353,836	22.7%	23.8%
20-34	500,359	32.1%	27.4%
35-49	321,102	20.6%	20.4%
50-64	233,812	15.0%	16.8%
65-74	88,849	5.7%	6.8%
75-84	43,645	2.8%	3.5%
85 and Over	17,146	1.1%	1.5%

[3] U.S. Census Bureau, "2012-2016 American Community Survey 5-Year Estimates," (Washington, DC: U.S. Department of Commerce, 2016).

Race and Ethnicity

Similar to trends in Chicago, the NMH CSA is represented by a majority minority population.[4] Minority populations are concentrated on the south and west sides of the NMH CSA.

Race/Ethnicity	Population in NMH CSA	Percentage in NMH CSA	Percentage in City of Chicago
Non-Hispanic African American	343,022	22%	31%
Non-Hispanic Asian	121,644	8%	6%
Hispanic/Latinx	489,245	31%	29%
Non-Hispanic White	571,721	37%	32%

Access to Health Care

Access to health care is broadly defined as the "timely use of personal health services to achieve the best health outcomes."[5]

According to Healthy People 2020, there are three steps required to access healthcare services:

1. Gain entry into the healthcare system.
2. Access a location where needed healthcare services are provided.
3. Find a healthcare provider whom the patient trusts and can communicate with.

Healthcare access and quality can vary greatly between communities. Within the NMH CSA, 15% of adults age 18 to 64 are uninsured,[6] compared to 9% citywide.

[4] Alliance for Health Equity, "Community Health Needs Assessment for Chicago and Suburban Cook County."

[5] Institute of Medicine and Q. Institute of Medicine Committee on Monitoring Access to Personal Health Care Services. Committee on Monitoring Access to Personal Health Care Services, *Access to Health Care in America*, ed. Michael L. Millman (Washington, D.C.: National Academy Press, 1993).

[6] Alliance for Health Equity, "Community Health Needs Assessment for Chicago and Suburban Cook County."

Community Input:[7] Major theme related to access to health care

Several common barriers were mentioned that prevent respondents from accessing the healthcare system:

- The complexity of obtaining and keeping public benefit coverage;
- Policy changes that have led to delays in the distribution of medical cards from the state;
- Fear that obtaining benefits will impact their ability to acquire citizenship;
- The high cost of some private insurance plans;
- A lack of knowledge about available insurance and benefit options;
- Diminishing access to services that assist with obtaining coverage;
- Logistical issues related to making healthcare appointments and obtaining transportation;
- Provider shortages; and
- Structural racism and discrimination.

NMH CSA Social Determinants of Health

Health starts in our homes, schools, workplaces, neighborhoods and communities. We know that daily activities, such as eating well, staying active and not smoking, influence health. Health is also determined by access to social and economic opportunities, community resources, quality education, workplace safety, environmental factors and our relationships. The conditions in which we live, work and play are known as Social Determinants of Health (SDOH), and explain, in part, why some Americans are healthier than others.

Income and Poverty[8]

Neighborhoods on the south and west sides of Chicago are marked by significant and concentrated areas of poverty. In Illinois, the annual household income at 200% of the Federal Poverty Level (FPL) for a household of four was $51,500 in 2019. Nearly 40% of residents living in the NMH CSA have household incomes less than or equal to this amount.

Socioeconomic Status	Population in NMH CSA	Percentage in NMH CSA	Percentage in City of Chicago
Persons in Poverty	327,489	21%	19%
Persons Below 200% FPL	607,658	39%	40%

[7] Community Input Represents Information and Beliefs Obtained from Community Focus Groups and from Persons Representing the Broad Interests of the Community, Including Uninsured Persons Low-Income Persons, and Minority Groups.

[8] Alliance for Health Equity, "Community Health Needs Assessment for Chicago and Suburban Cook County."

Education

Education is an important determinant of health because poverty, unemployment and under employment are highest among those with lower levels of educational attainment.[9]

Within the NMH CSA, 12% (180,080) of adults age 25 and older have less than a high school diploma (or equivalent) as compared to 11% in the City of Chicago. Residents living on the south and west sides of the NMH CSA are less likely to have a bachelor's degree or have graduated from high school. Low levels of education are concentrated in the south and west sides of the NMH CSA.

Community Input:[10] Major themes related to education

More than half of all focus groups discussed education inequities. The major education-related concerns expressed by focus groups included:

- School closures and diminishing education opportunities on the West and South Sides of Chicago;
- Poor quality schools particularly on the South Side of Chicago and in the South Suburbs;
- Limited or nonexistent resources for learning trades;
- A lack of support programs such as quality, low-cost tutoring; and
- Limited adult education programs.

Employment

Financial security makes it easier to obtain resources of healthy living and predicts most health outcomes[11] such as life expectancy, infant mortality and chronic conditions such as asthma, cardiovascular disease and obesity.[12]

The NMH CSA had 75,523 unemployed individuals,[13] which accounted for 8.6% of the population over 16 years old in the civilian labor force. High levels of unemployment are geographically concentrated in the south and west sides of the NMH CSA.

Language

The U.S. Census Bureau estimates that 21% of Chicago residents are foreign-born. Within the NMH CSA, 15% of households are limited English speaking compared to 14% citywide. There are neighborhoods within the NMH CSA with at least 30% of residents with limited English proficiency.[14]

[9] Natalie McGill, "Educational Attainment Linked to Health Throughout Lifespan: Exploring Social Determinants of Health," The Nation's Healath 46, no. 6 (2016).

[10] Community Input Represents Information and Beliefs Obtained from Community Focus Groups and from Persons Representing the Broad Interests of the Community, Including Uninsured Persons Low-Income Persons, and Minority Groups.

[11] Office of Disease Prevention and Health Promotion, "Healthy People 2020 Social Determinants of Health Topic Area: Employment," U.S. Department of Health and Human Services, https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-health/interventions-resources/employment#8.

[12] Nikhil Prachand, "Overview of Chicago's Community Health Status Assessment," (Chicago, IL: Chicago Department of Public Health, 2019).

[13] Alliance for Health Equity, "Community Health Needs Assessment for Chicago and Suburban Cook County."

[14] U.S. Census Bureau, "2012-2016 American Community Survey 5-Year Estimates."

Structural Racism

Structural racism is defined as "the totality of ways in which societies foster [racial] discrimination, via mutually reinforcing [inequitable] systems…(e.g., in housing, education, employment, earnings, benefits, credit, media, health care, criminal justice, etc.) that in turn reinforce discriminatory beliefs, values, and distribution of resources", reflected in history, culture, and interconnected institutions.[15] Structural racism, also known as systemic racism, is racial bias among institutions and across society.[16] It involves the cumulative and compounding effects of an array of societal factors including the history, culture, ideology and interactions of institutions and polices that systematically privilege white people and disadvantage people of color. Additional information regarding structural racism and health inequities can be found in Appendix D (AHE Report, page 43).

Community Input:[17] Major themes related to structural racism

"It feels like this structural racism is impacting everything. I mean, whether we're talking about the meetings we can attend, whether we're talking about the properties we can buy because of redlining, whether we're talking about being able to afford insurance. It really permeates everything from economics to education to even the way that we think." (Garfield Park Community Council LMS)

Housing

In 2018, an estimated 16,626 households entered homelessness in the City of Chicago. About 5% of these households had previously been through the Housing Management Information System (HMIS). According to the CDPH Healthy Chicago Report 2019, there was a persistent and slightly widening gap of 7% in affordable housing in Chicago between 2012 and 2016.[18]

Housing, homelessness and housing conditions were major themes that emerged from focus groups within the NMH CSA. One participant from the Teen Living Program on the southeast side of Chicago stated, "Have more people that work in the field that understand what we have going on. With some of us being homeless, we don't have people to talk to." 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 social determinant of health.[19]

[15] N. Krieger, "Discrimination and Health Inequities," *Int J Health Serv* 44, no. 4 (2014).

[16] Z. D. Bailey et al., "Structural Racism and Health Inequities in the USA: Evidence and Interventions," *Lancet* 389, no. 10077 (2017).

[17] Community Input Represents Information and Beliefs Obtained from Community Focus Groups and from Persons Representing the Broad Interests of the Community, Including Uninsured Persons Low-Income Persons, and Minority Groups.

[18] Chicago Department of Public Health, "Healthy Chicago Report 2019," (Chicago, IL 2019).

[19] J. Krieger and D. L. Higgins, "Housing and Health: Time Again for Public Health Action," *Am J Public Health.* 92, no. 5 (2002).

Community Input:[20] Major themes related to affordable housing

- Segregation prevents communities from having diverse economics, racial/ethnic groups and resources;
- Gentrification pushes low-income families out of communities;
- Safe, quality housing is often not affordable and affordable housing is often not safe or of good quality;
- Older adults are still struggling to recover from the housing crisis; and
- Oversight of landlords and homeowners is lacking in many communities.

Food Security and Food Access

Food insecurity "is a household-level social and economic condition of limited or uncertain access to adequate food."[21] An inability to afford or access healthy food can lead to an inadequate diet, which plays a significant role in preventing or causing illnesses such as cardiovascular disease, some cancers, obesity, type 2 diabetes and anemia. Inadequate food intake can also adversely affect learning, development and physical and psychological health.

It is estimated that 231,963 Chicagoans have limited food access.[22] Food insecurity is concentrated on the south and west sides of the NMH CSA with 17% of residents in the NMH CSA receiving SNAP (Supplemental Nutrition Assistance Program) benefits. (SNAP is a federal nutrition program that provides assistance to anyone that is eligible. SNAP benefits can be used to purchase foods at grocery stores, convenience stores and farmers' markets.)

Community Input:[23] Major themes related to food security and food access

- Approximately 29% of respondents chose access to healthy food as the most important areas for improvement in their community.
- Participants reported difficulty accessing healthy foods, high proportions of fast food and limited access to grocery stores, which made it difficult to manage health conditions.

[20] Community Input Represents Information and Beliefs Obtained from Community Focus Groups and from Persons Representing the Broad Interests of the Community, Including Uninsured Persons Low-Income Persons, and Minority Groups.

[21] U.S. Department of Agriculture, "Definitions of Food Security," U.S. Department of Agriculture Economic Research Service, https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/definitions-of-food-security/.

[22] Nikhil Prachand, "Exploring Root Causes of Health Inequitites in Chicago," Chicago Department of Public Health, https://www.chicago.gov/content/dam/city/depts/cdph/policy_planning/Board_of_Health/BOH_Presentation_NPrachand_Jun192019.pdf.

[23] Community Input Represents Information and Beliefs Obtained from Community Focus Groups and from Persons Representing the Broad Interests of the Community, Including Uninsured Persons Low-Income Persons, and Minority Groups.

Health Status

Overview of Primary and Chronic Disease Needs and Other Health Issues

Overall, estimates of disease burden in NMH's service area are modestly higher than those reported at the city (Chicago) or county (Cook) level. The prevalence of health conditions in the NMH CSA is presented in the table below. Within the NMH CSA, a higher burden of disease was concentrated in the south and west areas. This was particularly true for certain conditions, including asthma, obesity, diabetes, substance use and maternal-child health outcomes. Health outcomes in the NMH CSA were consistently better in communities on the north side and along the lakefront. The same pattern of geographic disparities in mortality were evident, with a 17-year gap between the communities with the highest and lowest life expectancy (Near North Side and Fuller Park, respectively).

Health Condition	Prevalence (Magnitude)
Obesity	35.2%
Hypertension	30.6%
Diabetes	12.2%
Pre-term Birth	11.2%
Asthma	10.8%
Low Birth Rate	10.3%
HIV	1.7%
Cancer (incidence)	0.5%

The percent of adults (over age 18) reporting their overall health status[24] as excellent, very good or good ranges from 65% to 94% within the NMH CSA.[25,26]

Mental Health

Data from surveys and focus groups illustrated that mental health was the top concern among community residents in the NMH CSA. Respondents reported a high prevalence of chronic stress, substance use and trauma, while noting challenges accessing mental health services. Substance use was common in communities served by NMH, with rates of binge drinking ranging from 9% to 47%. While drug overdose was uncommon, mortality from this cause was more than two times higher in communities on the south and west sides of the NMH CSA.

Chronic Disease

Cardiovascular disease:

Heart disease represents the leading cause of morbidity and mortality in Chicago and the NMH CSA. Almost one-third of residents in the NMH CSA have hypertension, which represents a higher rate than that observed in the city of Chicago overall (27.6%). The burden of cardiovascular diseases was evident across the NMH CSA without large differences across communities.

[24] Alliance for Health Equity, "Community Health Needs Assessment Community Input Survey Report."

[25] Illinois Department of Public Health, "Illinois Behavioral Risk Factor Surveillance System (2000-2009)," (Springfield, IL: Illinois Center for Health Statistics).

[26] Chicago Department of Public Health, "Measuring Chicago's Health Findings from the 2014 Healthy Chicago Survey," (Chicago, IL 2015).

Cancer:

The prevalence of all cancers in the NMH CSA was 0.5%, which was similar to estimates of cancer prevalence in the city of Chicago overall (0.4%). While cancer is not a common disease in Chicago, it ranked second in mortality with a death rate of 164 per 100,000 residents.

Respiratory disease:

The most common respiratory disease in the NMH CSA was asthma, which was reported by 10.8% of residents. This represents a higher prevalence of asthma than that reported in the city overall (9.1%). Lung diseases did not emerge as a high priority in surveys and focus groups conducted in communities constituting the NMH CSA.

Diabetes:

Diabetes is a common chronic health condition, affecting 12.2% of community members in the NMH CSA and 9.1% of Chicago residents overall. Like many health conditions and exposures, diabetes rates were higher on the south and west sides of the NMH CSA, approaching 20% in some communities. In surveys of residents collected across the NMH CSA, diabetes ranked second in the list of most important health priorities.

Obesity:

Obesity was the most common health condition in the NMH CSA. Similar to patterns seen for other chronic diseases, rates of obesity were larger in the NMH CSA (35.2%) than in the city of Chicago overall (30.8%). Focus groups highlighted a number of factors contributing to high rates of obesity in the NMH CSA. These included poor access to healthy foods and safe spaces for recreation. While obesity ranked eighth in a list of priority health issues generated from surveys collected, focus group participants recognized the adverse impact of obesity and food insecurity on other chronic diseases, including diabetes.

Age-related Illness

- For the purposes of this report, age-related illness comprised Alzheimer's disease, arthritis, and vision and hearing impairment. In our survey of residents living within the NMH CSA, age-related illness emerged as the third most important health issue.
- Our analysis of secondary data revealed that Alzheimer's disease mortality was slightly higher in the NMH CSA (30 per 100,000 residents) relative to Cook County (26 per 100,000 residents).

Infectious Disease

- Human immunodeficiency virus (HIV): HIV affects approximately 1% of Chicago residents, with a similar rate observed in communities served by NMH. Within the NMH CSA, the highest prevalence of HIV was observed in Uptown (2.0%).
- Sexually transmitted diseases: A similar proportion of adults in the NMH CSA have gonorrhea and chlamydia, with rates as high as 3%. In contrast to HIV, the greatest burden of other sexually transmitted diseases was observed in East Garfield Park, West Garfield Park and North Lawndale on the west side of the NMH CSA. Ten percent of adults surveyed in this region reported that sexually transmitted infections constituted an important health issue in their communities.

Maternal and Child Health

Indicators related to maternal and child health were similar in the NMH CSA compared to the city of Chicago overall. Pre-term birth and low birth weight was experienced by 11.2% and 10.3% of births in the NMH CSA, respectively.

Injury and Violence

The root causes of community violence are multifaceted and include issues such as the concentration of poverty, education inequities, poor access to health services, mass incarceration, differential policing strategies and generational trauma.

The epidemic of injury and violence in Chicago is widely recognized, given widespread coverage in local, national, and international media. Our analysis of data from the NMH CSA reveals a similar story about the concentration of violence and injury in low-income communities of color. For example, the rate of firearm-related homicide was highest in East Garfield Park and West Garfield Park. This burden of firearm-related death was more than five times greater than that observed in more affluent communities with higher proportions of white residents (e.g., Near North Side and Lincoln Park). Patterns of injury and accidental death followed a similar geographic distribution. Results from focus groups and surveys conducted in the NMH CSA consistently demonstrated that violence is a top concern, and improving community safety represents a great opportunity for improving health and wellbeing.

Community Input:[27] Major themes related to violence, crime, and community safety

- Focus group participants related that the prevalence of violence in their communities has led to health issues such as chronic stress, decreased mental well-being, trauma among children and adults, and decreased physical activity due to a reluctance to exercise in unsafe neighborhoods.
- Overall, 37% of community survey respondents chose "safety and low crime" as one of the most important factors for a healthy community.
- Frequently, survey respondents recognized safety and low crime as one of the greatest strengths in a community, however, safety and low crime was also the most mentioned area for improvement in communities.

[27] Community Input Represents Information and Beliefs Obtained from Community Focus Groups and from Persons Representing the Broad Interests of the Community, Including Uninsured Persons Low-Income Persons, and Minority Groups.

Health Behaviors

Many behaviors impact the burden of disease in communities, including food choices, physical activity and substance use. There was a wide diversity observed in these behaviors across communities that constitute the NMH CSA, with less healthy behaviors reported in low-income communities of color. For example, fruit and vegetable consumption was lowest in Hermosa. The community with the greatest rates of sugar sweetened beverage use was Washington Park. And physical inactivity was greatest in East Garfield Park. Cigarette smoking was most common in Washington Park, with 45% of residents who reported that they smoke cigarettes every day or some days. These observations, which correspond with the higher burden of disease in many of the same communities, highlight structural inequalities that contribute to poor health. Interestingly, binge drinking was most common in more affluent communities with greater proportion of white residents (e.g., North Center and Lake View). Almost one-third of residents in the NMH CSA identified access to healthy food as a top priority for healthy communities (29%); and food insecurity emerged as an important theme from focus group interviews.

Cross-cutting Themes

Access to Care:

All data sources analyzed for this report highlighted the importance of access to healthcare and community services. Almost half of residents in the NMH CSA reported that this represented an important health priority, making it the top ranked issue. Access to mental health care emerged as a particular challenge for many in the NMH CSA. One focus group respondent stated: "[Chicago] is unlike any city I've been to. I drive to Wisconsin to see a psychiatrist once a month because I can't find a psychiatrist, even with insurance." Of all the indicators of healthcare access analyzed in this report, prenatal care had the strongest correlation with morbidity and mortality across health conditions.

Social Determinants of Health:

The World Health Organization defines the social determinants of health as "the conditions in which people are born, grow, live, work and age."[28] In our analysis, the distribution of poverty, low educational attainment, violence and poor health outcomes were most often concentrated in largely minority communities on the south and west sides of NMH's CSA. These data highlight structural inequalities, such as low-performing schools and few employment opportunities, which shape the health outcomes reported in these areas. We found that the following social determinants of health were strongly correlated with health outcomes: poverty, unemployment, unaffordable housing, violent crime, and participation in the Supplemental Nutrition Assistance Program. Importantly, these social determinants of health were associated with poor outcomes across all health conditions examined (e.g., diabetes, heart disease and respiratory disease).

[28] World Health Organization, "About Social Determinants of Health," https://www.who.int/social_determinants/sdh_definition/en/.

Community Stakeholder Input Summary

Community Input Survey

AHE collected 1,593 survey responses from the NMH CSA. Additional information regarding the demographics of the survey respondents, such as age, race/ethnicity, sexual orientation, children in the household, disability and annual income, can be found in Appendix E (NMH Data Book).

The following factors that promote a healthy community were selected by 25% or more of the survey respondents:

1. Access to health care and mental health services (48%)
2. Safety and low crime (38%)
3. Access to community resources (31%)
4. Affordable housing (30%)
5. Access to healthy food (29%)

The following issues were selected as the most important health concerns by 25% or more of the survey respondents:

1. Mental Health (43%)
2. Diabetes (42%)
3. Age-related Illness (33%)
4. Substance Use (29%)
5. Cancers (28%)
6. Violence (27%)

In response to an open-ended question regarding the greatest strengths in the community, respondents in the NMH CSA most commonly stated community cohesion, immigrant health, transportation, safety, parks and recreation and accessibility.

In response to an open-ended question regarding improvements needed in the community, respondents in the NMH CSA most commonly stated safety and low crime, economic development, community cohesion, affordable housing, access to health care and food accessibility.

Focus Group Input

AHE conducted 36 focus groups in the NMH CSA. These groups included representatives from the following organizations:

Focus Groups within the NMH CSA (36 total)[29]		
Affinity Community Services	El Valor	New Morning Star MB Church (2 groups)
After School Matters (2 Groups)	Enlace Chicago	Northwest Side Housing Center
Alivio Medical Center	Friedman Place	Oakley Square Apartments (3 groups)
AMITA Saints Mary and Elizabeth Medical Center	Garfield Park Community Council	Saint Stephen AME
Breakthrough	Greater Galilee Baptist Church	Teen Living Program
BUILD, Inc.	Habilitative Systems	Temple of Faith MB Church
By the Hand	Instituto Health Science Career Academy	Timothy Community Corporation, TCA Health Inc.
Chicago Youth Programs	Kedvale New Mount Zion M.B. Church	UCAN Community Residents
Coalition of Hope	NAMI Chicago Family Members	UCAN Youth
CristoRey High School	NAMI Chicago Individuals	
Deborah's Place	New Moms (AHE Focus Group)	

[29] Focus groups held within the NMH CSA included participants and organizations that partially or substantially represent the broad interests of the community, including uninsured persons, low-income persons, and minority groups.

The following themes were identified during focus group sessions:

Mental Health and Substance Use Disorders

- Chronic stress
- Connections between mental health, substance use disorders, other health conditions, and social determinants of health
- Mental health education and awareness
- Access to treatment
- Consequences of untreated conditions
- Abuse and other forms of trauma

Social and Structural Determinants of Health

- Economic inequities
- Employment opportunities
- Education

Access to Health Care and Community Resources

- Obtaining benefits
- Availability of services
- Healthcare quality

Chronic Disease

- Social determinants of health as underlying, root causes of chronic disease and barriers to disease management
- Community education about prevention, risk factors and when to seek medical help
- Patient and caregiver stress
- Community-based support
- Food access and access to resources for physical activity

Cross-cutting themes

- Community cohesion
- Community safety/violence
- Structural racism and structural inequities

Areas of Opportunity for Community Health Improvement

The following areas of opportunity were identified through this CHNA and represent potential areas to consider for intervention.

Topic	Identified Needs
Social and Structural Determinants of Health	• Economic Vitality and Workforce Development • Education and Youth Development • Food Security and Food Access • Affordable Housing • Structural Racism and Structural Inequities • Violence, Crime and Community Safety
Access to Health Care, Community Resources and System Improvements	• Increased Timely Linkages to Appropriate Care, including Behavioral Health and Social Services • Resources, Referrals, Coordination and Connection to Community-Based Services • Immigrant Health and Culturally Competent Care
Health Conditions	• Age-related Illness • Asthma • Cancer • Chronic Disease — Diabetes — Heart Disease — Obesity • Maternal and Child Health • Mental Health • Sexually Transmitted Infections • Substance Use Disorders

Interpreting and Prioritizing Health Needs

Community Health Council

Following completion of the CHNA, NMH leadership convened the Community Health Council (CHC) to review the findings. This multidisciplinary committee was made up of key internal stakeholders who were selected based on strong collaborative efforts to improve the health of the community, including medically underserved, minority and low-income populations. The varied backgrounds of the committee members provided diverse insight into prioritizing identified health needs. Departments represented and rationale for inclusion are outlined below:

NMH Department	Rationale
External Affairs	Knowledge of community relationships, data and hospital resources
Analytics	Knowledge of patient data, IS systems and analytics
Case Management	Knowledge of social determinants of health, patient barriers and communities
Emergency Medicine	Knowledge of patient needs and social determinants of health
Hospital Operations	Knowledge of hospital and staff operations
Human Resources	Knowledge of diversity and inclusion strategies
Medical Staff	Knowledge of medical staff operations
Nursing	Knowledge of patients, barriers and community nursing
Philanthropy	Knowledge of community programming and fundraising opportunities
Process Improvement	Knowledge of process improvement strategies
Quality	Knowledge of hospital quality data and resources
Strategy	Knowledge of business development and strategies

Community Stakeholders

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

Northwestern Memorial Hospital External Steering Committee (ESC)	
Bright Star Community Outreach	Near North Health Services Corporation
Chicago Public Library, Richard M. Daley Branch	Neighborhood Housing Services
CommunityHealth	Salvation Army Freedom Center
Erie Family Health Centers	West Humboldt Park Development Council
Kelly Hall YMCA	

Northwestern University's Alliance for Research in Chicagoland Communities (ARCC) Steering Committee	
Access Living	Hana Center
Apostolic Faith Church	Health and Medicine Policy Research Group
The Blue Hat Foundation	Lurie Children's Hospital of Chicago
CALOR	The Night Ministry
Cambodian Association of Illinois	Northwestern University Feinberg School of Medicine
Chicago Department of Public Health	Puerto Rican Cultural Center
Chicago Public Schools	Renz Addiction Counseling Center
Chicago Youth Programs	Robert H. Lurie Comprehensive Cancer Center of Northwestern University
CJE SeniorLife	Shirley Ryan AbilityLab
Endeleo Institute	

A description of the populations served by these organizations can be found in Appendix A.

Prioritization Process

A structured process was used to inform prioritization of the identified health needs. The NMH CHC as well as external community stakeholders representing the broad interest of the community were engaged to review guiding principles, examine CHNA findings (including the 16 primary areas of opportunity), apply the prioritization factors when completing the pairwise survey and participate in robust conversations regarding potential priority health needs for the NMH CSA. The prioritization process took place from May 8 through June 28, 2019.

All available data identified during the CHNA were utilized in the identification and prioritization process, including primary and secondary data and community input.

This process also assessed alignment with guiding principles in response to community need, including:

Importance of the problem to the community

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

Availability of tested approaches or existing resources to address the issues

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

Opportunity for collective impact

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

Applicability of NMH as a change agent (e.g., partner, researcher, educator or the role of knowledge sharing, providing direct funding, etc.)

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

Estimated resources, timeframe and size of impacted population

Based on the findings of the AHE and NMH CHNA, the following 16 areas of opportunity were considered in the prioritization process.

1. Access to Health Care and Community Resources
2. Affordable Housing
3. Age-related Illness (including Dementia and Alzheimer's Disease)
4. Asthma
5. Cancer
6. Chronic Disease (including Obesity, Diabetes, and Cardiovascular Diseases)
7. Economic Vitality and Workforce Development
8. Education and Youth Development
9. Food Security and Food Access
10. Immigrant Health and Culturally Competent Care
11. Maternal and Child Health
12. Mental Health
13. Sexually Transmitted Infections
14. Substance Use Disorders
15. Structural Racism and Structural Inequities
16. Violence, Crime and Community Safety

A data book was developed to detail findings of each area of opportunity, including prevalence, morbidity and mortality of the condition, for easy comparison across needs. This data book was distributed to the CHC outlining the following prioritization factors for objective analysis:

- **Magnitude:** How many people in the community are/will be impacted?
- **Seriousness and impact:** How does the identified need impact health and quality of life?
- **Feasibility:** What capacity/assets currently exist to address the need?
- **Consequences of inaction:** What impact would inaction have on the population health of the community?
- **Trend:** How has the need changed over time?

Prioritization Survey Tool

NMH developed a survey tool to formally solicit input from both the NMH CHC as well as external community stakeholders who represent the broad interests of the NMH CSA. This survey tool, known as a pairwise comparison, utilized a validated methodology to compare two identified needs to judge which need is the priority.[30] The pairwise voting process was conducted through www.allourideas.org, and allowed all 16 areas of opportunity to be randomly paired against each other and ranked based on the responses. Participants were asked to vote for the need that best responds to the question: "Based on your own experience and knowledge of community data, which is the greater health priority for NMH's CSA?" Participants were reminded and encouraged to vote based on their knowledge of the need's magnitude, seriousness and impact, feasibility, consequences of inaction and trend.

[30] Matthew J. Salganik and Karen E. C. Levy, "Wiki Surveys: Open and Quantifiable Social Data Collection," *PLOS ONE* 10, no. 5 (2015).

Prioritization Timeline and Input

On May 8, 2019, CHNA findings were presented and the pairwise survey was conducted with the ARCC steering committee. Through this process, NMH received 1,151 responses to the survey representing 13 community and faith-based organizations, two public agencies and four campus partners. The results are listed below:

NMH ARCC Pairwise Survey: www.allourideas.org/NMH	
Area of Opportunity	**Score**
Structural Racism and Structural Inequity	75
Mental Health	75
Access to Health Care and Community Resources	71
Affordable Housing	68
Violence, Crime and Community Safety	68
Economic Vitality and Workforce Development	54
Chronic Disease (including Obesity, Diabetes and Cardiovascular Disease)	54
Education and Youth Development	52
Food Security and Food Access	52

On May 21, 2019, CHNA findings were presented and the pairwise survey was conducted with the NMH CHC. Through this process, NMH received 1,030 responses to the survey representing the feedback of 18 internal leaders. The results are listed below:

NMH CHC Pairwise Survey: www.allourideas.org/NMHCHC	
Area of Opportunity	**Score**
Mental Health	82
Violence, Crime, and Community Safety	69
Access to Health Care and Community Resources	68
Economic Vitality and Workforce Development	63
Substance Use Disorder	57
Affordable Housing	55
Chronic Disease (including Obesity, Diabetes and Cardiovascular Disease)	54
Education and Youth Development	54
Food Security and Food Access	51

On June 19, 2019, CHNA findings were presented and the pairwise survey was conducted with the NMH ESC. Through this process, NMH received 852 responses to the survey representing five community and faith-based organizations, one public agencies and three FQHC partners. The results are listed below:

NMH ESC Pairwise Survey: www.allourideas.org/NMHESC	
Area of Opportunity	**Score**
Structural Racism and Structural Inequity	74
Violence, Crime and Community Safety	74
Access to Health Care and Community Resources	74
Education and Youth Development	65
Mental Health	63
Affordable Housing	59
Economic Vitality and Workforce Development	59
Chronic Disease (including Obesity, Diabetes and Cardiovascular Disease)	54
Food Security and Food Access	50

Pairwise survey results were compiled, compared and shared across the ARCC steering committee, ESC and the NMH CHC. Together with these committees, after robust conversation and consideration of community and stakeholder input, the highest priority health needs were determined. Priority health needs were defined as those that could be impacted the most by the work of NMH and partner organizations collaborating to improve community health.

Priority Health Needs

NMH identified four priority health needs that will enable us, in partnership with the community, to maximize the health outcomes generated by our collective resources over the next few years.

In selecting these priorities, we considered the degree of the community need, capacity and available resources to meet the need and the suitability of our own expertise to address the need. In particular, we identified health needs that would be best addressed through a coordinated response from a range of healthcare and community resources. We believe these health needs will be impacted through the integrated efforts of our organization and our community partners.

Through this process, the 2019 NMH priority health needs were identified as follows:

1. Access to Health Care and Community Resources
   a. Chronic Disease
   b. Mental Health
2. Social Determinants of Health
   a. Economic Vitality and Workforce Development
   b. Structural Inequities
   c. Violence and Community Safety

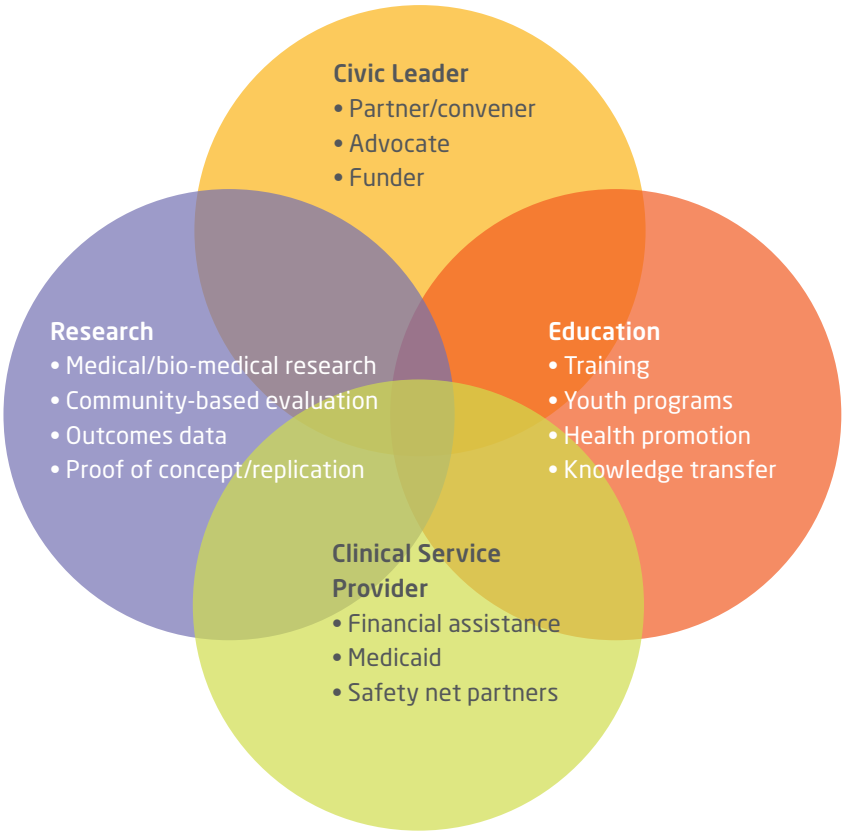
Development of the Implementation Plan

NMH will continue to work with the NMH CHC and external community stakeholders to develop a comprehensive Community Health Implementation Plan (CHIP) that will address each priority health need.

NMH and its community health partners share a vision of a healthy community and are committed to working together to address significant health needs. NMH is committed to providing culturally competent care that is responsive to the needs of our community. NMH will collaborate with community partners, including health and social service partners, to develop community-based health initiatives designed to address health disparities.

As part of an academic health system, NMH can support efforts to positively change the health status of our community by taking on a variety of roles:

NMH Roles



The CHIP will specify resources NMH and its community partners will direct toward each priority health need.

A general list of collective assets that could potentially be directed toward impacting priority health issues includes:

Clinical care resources and facilities of NMH and its community partners

Established, replicable community-based health promotion programs addressing both highly prevalent and targeted chronic health conditions

Research and education expertise

Financial assistance programs at NMH

Policies and procedures that broaden and simplify access to health care for the uninsured or underinsured

Advocacy resources at NMH and its community partner organizations

Planning and oversight resources

Management expertise in quality improvement and information technology

Existing Resources

NMH recognizes that a large number of healthcare facilities and organizations within the NMH CSA respond to health needs and support health improvement efforts. A list of resources potentially available to address priority health needs identified through the CHNA is included in Appendix B. These resources were found through publically available information sources as of June 2019.

Actions Taken to Address the 2016 CHNA Priority Health Needs

Introduction

An aging population, coupled with a rise in the incidence of chronic disease, challenges all U.S healthcare providers to think outside of the box when it comes to the future of health care. Maintaining awareness of a community's health needs is imperative in an environment as dynamic and diverse as the City of Chicago, especially when it involves planning and responding to the needs of a demographically diverse population.

The successful implementation of any community benefit strategy requires a comprehensive assessment of needs coupled with the knowledge of key community stakeholders and existing health collaboratives. No single institution can comprehensively address all community health needs, nor can it work independently of key community stakeholders and initiatives.

A quality CHNA and its ensuing Implementation Plan must consider the strengths and expertise of its organization in addition to its ability to mobilize effective partnerships, which will result in the maximized use of every dollar expended to address unmet community needs. NMH and its community partners share the common goal of creating a healthier community. Many healthcare, social services, public health and policy organizations play a role in achieving this goal, each contributing its own unique and valuable expertise, history, perspective and relationships within the community. NMH and its partners have established relationships and approach community health needs with awareness and respect for each organization's strengths and capacities.

In 2016, NMH identified four priority health needs in response to the CHNA. In selecting priorities, NMH considered the degree of community need for additional resources, the capacity of other agencies to meet the need, and the sustainability of its own expertise and resources to address the health need. The priority health needs identified for targeted efforts were:

1. Access to Health Services
2. Chronic Disease
3. Mental Health
4. Violence

NMH and key community partners collaborated to address the above priority health needs. This status report summarizes the impact of the strategies outlined in the NMH 2016 CHNA Implementation Plan.

Implementation Plan Outcomes

Priority Health Need: Access to Health Services

Access to comprehensive, quality healthcare services is important for the achievement of health equity and for increasing quality of life. It impacts overall physical, social and mental health status, as well as prevention of disease and disability; detection and treatment of health conditions; preventable death; and life expectancy. Improving healthcare services depends in part on ensuring that people have a usual and ongoing source of care. People with a usual source of care have better health outcomes and fewer disparities and costs. Improving healthcare services also includes increasing access to

and use of evidence-based preventive services. Clinical preventive services are services that prevent illness by detecting early warning signs or symptoms before they develop into a disease (primary prevention) or detect a disease at an earlier and often more treatable stage (secondary prevention).

NMH aims to improve access to quality, culturally appropriate healthcare services among underserved populations in the NMH CSA. Efforts to address this priority need include improved alignment of current NMH care coordination programs; IT solutions to improve care coordination for Medicaid patients through the Emergency Department; continued innovation and process improvement to reduce barriers (such as office hours) relating to access to care for medically underserved populations; and collaboration with external workgroups and agencies to support efforts that increase access to care.

Strategy 1: Improve alignment of current NMH care coordination programs.

Transitioning between care settings or providers can be especially difficult for medically complex and vulnerable patients. Recognizing the need to improve care coordination for our vulnerable populations, NMH developed the Innovations in Managing Patients Across Care Transitions (IMPACT) initiative in FY17. Aligned with our mission to put patients first, IMPACT is a collaboration of care transition programs that address the needs of our most medically and psychosocially complex patients. The collaboration is composed of seven distinct programs focused on managing patients across care transitions. These programs include: Complex Discharge Team (CDT), Complex High Admission Management Program (CHAMP), CHI-CARE, Geriatric Home Visit, Heart Failure Bridge and Transition Team (HF BAT), Intensive Case Management (ICM) and Transitional Care (TC). Each IMPACT program focuses on a different patient population with unique individual needs. Patients who may be unable to succeed with standard health system resources are identified as eligible by the IMPACT team or by their care team and referred to the appropriate IMPACT program.

By building trusting relationships, identifying and addressing barriers, providing patient-centered comprehensive care and connecting with community resources, IMPACT is able to sustain partnerships with our patients across the healthcare continuum. More than 9,900 patients have been connected with an IMPACT team since the start of the program. Additional patient demographics are listed in the following table.

	Metric	Value
Patient Count	Active patient	1059
	Overlapping patient	335
	Total patient	9923
Demographics	% Female	45.1%
	% Homeless	0.0%
	Average age	61
	Average readmission risk score	0.12
	CMI	2.50
	Race- % Asian	2.9%
	Race- % Black	33.6%
	Race- % Other	9.3%
	Race- % Unknown	5.3%
	Race- % White	48.8%

	Metric	Value
Insurance	% Commercial	2.0%
	% Managed Care	6.3%
	% Medicaid	27.1%
	% Medicare	40.9%
	% Uninsured	23.7%
	% Uninsured to insured	65.2%
Mortality	Mortality rate	13.2%

Over the last year and a half, IMPACT collaborated with community-based organizations in Chicago in an effort to address the underlying social determinants of health that impact care coordination and to improve the health of our patients. One basic and powerful social determinant of health is access to safe, quality housing and the supports necessary to maintain that housing. To help address this need, in 2018 IMPACT collaborated on two housing pilots with the Center for Housing and Health (CHH) and Thresholds, which are Chicago-based social, mental health and housing service providers. Through these pilots, eligible patients in IMPACT are provided with supportive housing, ongoing case management and additional support services.

In December of 2018, the CHH pilot program, entitled Better Health through Housing (BHH), was launched. NM provided $72,000 in funding to support the CHH BHH initiative. Through this pilot, CHH outreach workers assessed patients to ensure they met housing eligibility. Patients that were responsive were then linked to bridge housing. This pilot linked six IMPACT patients experiencing homelessness to bridge housing and, to date, four of those patients have been transitioned to permanents, supportive housing.

As of April 2019, the following information was gathered on five of the six patients:

During the 12 months prior to receiving bridge housing, these patients accumulated:

— 174 emergency department visits (ranging from seven to 92 visits per person)

— 21 hospital admissions (ranging from three to 10 admissions per person)

Since moving into bridge and supportive housing (data length ranging from three weeks to four months), these patients experienced a reduction in hospital utilization as seen by the visits they have accumulated:

— Six emergency department visits (ranging from zero to three per person)

— Two hospital admissions (one patient had two admissions; the other four patients had zero admissions)

Operation Warm Blanket (OWB) is a one-year, joint pilot program between NMH, Thresholds, and Lawson House. In addition to operating OWB, funding provided by NMH supports two beds at Lawson House which are managed by Thresholds. Through this pilot, willing patients are brought to NMH's Transitional Care clinic from the emergency department for an intake assessment, warm breakfast and an introduction to the clinic. Thresholds staff then screen patients for housing at the Lawson House and supplement or follow up on emergency department social work referrals to shelters, food pantries, soup kitchens, clothing outlets, substance use treatment programs and community mental health resources. Since the initiative launched in February of 2019, 107 patient encounters have occurred across 20 OWB sessions. This includes 51 unique patients (51 new visits and 56 return visits) with the following demographics:

- Gender: 32 males; 19 females
- Average age: 49.53 years old (minimum age 21, maximum age 79)

Both beds at the Lawson House are in use. NMH is proactively addressing the needs of our patients by improving care coordination of patient transfers among care sites and the community and by addressing the social determinants of health.

Strategy 2: Assess and implement information technology (IT) solutions to improve care coordination for Medicaid patients through the Emergency Department.

Vulnerable populations required a diverse set of clinical and social services. The inability to address these needs has proven to lead to unnecessary emergency department utilization and preventable readmissions for patients. NMH identified the need for an easy-to-use, standardized and measureable solution to increase access to social services and improve care coordination. In 2017, NowPow was selected as NMH's IT solution to improve care coordination and connect patients to reliable community resources. NowPow has the ability to identify and assess patients at high-risk for social needs, keep an accurate, accessible list of community and system-based resources, develop a process through the EMR to facilitate bidirectional referrals with community-based organizations and analyze the effectiveness of those referrals and their impact on patient outcomes. In 2018, the commitment between NowPow and NMHC was finalized, and the infrastructure was established to launch the NowPow pilot in 2019. In 2019, teams met to identify common metrics and workflows across the system. During the pilot phase, 30 staff received access to the tool, including physicians, social workers and nurses from a variety of departments, such as geriatrics, intensive case management, women's health, emergency department, transitional care, inpatient units and care coordination. These users completed a training and began to refer and track patients, which included receiving confirmation of appointment completion with health partners such as CommunityHealth and Near North health Services Corporation.

In addition to securing a digital solution to standardize the process to address social needs of patients and the community, NMH identified the need for referring providers at two federally qualified health centers (FQHC) based in the community — Near North Health Service Corporation and Erie Family Health Centers — to achieve direct ordering into the NMH care system through Epic Care Link. This access removes barriers related to patient scheduling such as a potential lack of patient knowledge regarding the procedure name or ordering physician, a lost fax order and language barriers. Epic Care Link removes these barriers by automatically adding an external order directly into the NMH system so that the patient only has to know his or her own name when calling to schedule an appointment. This system was launched in 2018, including training and communication to the referring FQHC providers. There were many challenges with the system including verifying ICD10 codes and patient name differences (e.g., patients may use maiden name at NM but married name at the FQHC). Throughout 2018 and 2019, the team continued working with FQHC partners to resolve these issues.

Strategy 3: Continued innovation and process improvement to reduce barriers (such as office hours) relating to access to care for medically underserved populations.

NMH has longstanding relationships with two major federally qualified health centers (FQHC), Erie Family Health Centers (Erie) and Near North Health Services Corporation (Near North), and one free health clinic, CommunityHealth. NMH provides grant funding and care coordination to each of these organizations to support expanded access to health services for underserved patients in Chicago and the surrounding areas. Through support from NMH, Erie, Near North and CommunityHealth are able to enhance their efforts to provide quality care in a local and culturally competent setting. This includes expanded access to clinical care, improved care coordination, and Education-Centered Medical Home (ECMH) student clinics. An ECMH embeds teams of medical students into primary care, community-based clinics to care for a panel of complex patients over time. The ECMH model serves the dual purpose of increasing the capacity of community clinics as well as providing early and comprehensive educational exposure to team-based medicine in an authentic outpatient environment. In collaboration with Northwestern University's Feinberg School of Medicine, NMH underwrote the cost of ECMHs at Erie, Near North and CommunityHealth in 2018.

Through our collaborations with community health services providers, NMH learned that the greatest need of patients receiving care in the community setting is often access to subspecialty care and diagnostic services. To help address this need, much of the care provided to our patients who have been referred from a community partner is provided by our physician groups. By building capacity for community organizations to provide primary care, while simultaneously increasing access to subspecialty care and diagnostic services at our physician groups, these collaborations ensure that the patient receives quality, efficient care in the most appropriate setting. Many patients who are referred to NMH for care from our community affiliations receive free or substantially discounted services. The broad range of clinical specialties includes rheumatology, cardiology, vascular medicine, gastroenterology and hospital-based diagnostic services. In FY18, there were 23,421 encounters from FQHC patients. To enhance access to care, NMHC continues to refine processes to make the transition of patients from community organizations to NMHC entities more efficient and to continue to incorporate presumptive eligibility requirements.

Strategy 4: Collaborate with external workgroups and agencies to support efforts that increase access to care.

Together with AHE, NMH partnered with external organizations to advance health equity and wellness through strategies that address pressing issues in our communities to achieve greater collective impact. NMH participated on the AHE Access to Care committee in order to support efforts that reduce barriers and increase access to health care and community resources. This committee focused on transportation issues as a barrier to care and strategies for NMH to increase transportation to appointments. Additional information on the activities and accomplishments of the Access to Care committee can be found in Appendix D (AHE Report), page 33.

Priority Need: Chronic Disease (Diabetes, Heart Disease, Stroke and Obesity)

Heart disease is the leading cause of death in the United States, with stroke following as the fifth and diabetes as the seventh cause of death.[31] These chronic conditions are among the most widespread and costly health problems facing the nation today. Fortunately, they are also among the most preventable. The risk of Americans developing and dying from certain chronic diseases would be substantially reduced if major improvements were made across the U.S. population in diet (including access to healthy foods), physical activity (including access to safe and walkable communities) and

[31] Centers for Disease Control and Prevention, "Leading Causes of Death," CDC/National Center for Health Statistics, https://www.cdc.gov/nchs/fastats/leading-causes-of-death.htm.

control of conditions such as high blood pressure. In addition, chronic diseases are significantly influenced by physical and social environments and public policies that affect the quality and safety of these environments. This includes access to educational opportunities, employment opportunities, affordable quality housing, safe working conditions and availability of community resources and affordable, quality health care.

NMH continues to be a trusted source for health education and provides community programs that increase awareness and knowledge. NMH partners with area hospitals and community-based organizations to reduce the rate of heart disease, diabetes, and obesity through increased access to care and education interventions. Efforts include continued support and expansion of diagnostic and specialty care services related to stroke; continued support of community health partners efforts to reduce the rate of heart disease, diabetes, and obesity; continued support and expansion of the Healthy Community Initiative; and collaboration with external workgroups and agencies to support efforts that impact chronic disease prevention.

Strategy 1: Continue to support and expand diagnostic and specialty care services related to stroke.

Launched in 2013, the Northwestern Medicine Telestroke Network now provides direct access to board-certified vascular neurologists via dedicated telemedicine technology 24 hours per day, seven days per week, every day of the year. In 2018, there were seven NM Telestroke Network hospitals in the Chicagoland area — NM LFH (Lake Forest and Grayslake locations), Northwest Community Hospital, CGH Medical Center, Weiss Memorial Hospital, Swedish Covenant Hospital, Loretto Hospital and Saint Anthony Hospital. Expansion of the NM Telestroke Network is planned for 2019 and beyond.

Through videoconference and advanced diagnostic tools, the NMHC vascular neurologist sees and consults with the emergency room physician and patient at the NM Telestroke Network hospital, which allows the vascular neurologist to determine what treatment should be administered in the emergency department, what should happen after the emergency department visit and whether the complexity of the stroke indicates the need to transfer to a designated stroke specialty hospital. NMH provides capital equipment including technology, upgrades and on-site training in telestroke protocols to NM Telestroke Network hospitals. Technology is provided to participating hospitals below cost, and technical support, maintenance and staff training are provided at no cost. Because many insurance companies will not pay for remote consults, NMH reimburses the vascular neurologists for consult services.

In 2018 alone, the NM Telestroke Network provided more than 1,600 consults and transferred more than 225 patients for neurovascular intervention or to a dedicated neuro ICU setting for monitoring, regardless of their insurance status. Since the program began in 2013, the network has provided more than 4,300 consults and 575 transfers. Rapid decision-making for tPA administration has led to decreased door-to-needle time at every member hospital of the NM Telestroke Network. In 2018, 62 percent of NM Telestroke Network tPA cases achieved door-to-needle time in less than one hour. This is well ahead of the national average of about 30 percent.

In partnership with the NM Telestroke Network, NM LFH, Weiss Memorial Hospital and Swedish Covenant Hospital maintained certification as Primary Stroke Centers. Northwest Community Hospital is certified as a Comprehensive Stroke Center. These certifications and the work of the network hospitals in receiving certification are a reflection of the hospitals' commitment to improving the quality of patient care in their respective communities and enables them to receive reimbursement commensurate with higher levels of certification and to fulfill regulatory requirements. In 2018, NMH also implemented RAPID software at Northwest Community Hospital and Saint Anthony Hospital. Supported by two stroke treatment trials, this software provides an intuitive and easily interpretable real-time view of brain perfusion. Use of the software allows the hospitals the opportunity to offer stroke treatment for up to 24 hours.

Strategy 2: Continue to support community health partner efforts to reduce the rate of heart disease, diabetes and obesity.

NMH continued work to improve coordination of care for heart disease and stroke through strengthened high-quality, patient-centered medical homes. Programs such as the Keep Your Heart Healthy (KYHH) initiative were designed to identify Chicago residents most at risk for developing heart disease and work on an individual basis to empower those individuals to make lifestyle changes to reduce their health risks. This free program links individuals with healthcare services and medical homes through referrals in an effort to control health risk factors. Northwestern University's Institute for Public Health and Medicine (IPHAM) led the program, which was funded in part by grant funding from NMH. In June of 2018, Northwestern University Institute for Public Health and Medicine completed a pragmatic evaluation of the reach, adoption, implementation, effectiveness, and cost of the KYHH program. This evaluation found that from August 2013 through December 2016, KYHH reached 48,862 community residents through 1,534 screening events held in 27 Chicago community areas.

Strategy 3: Continue to support and expand the Healthy Community Initiative.

NMH is dedicated to improving the health of our community by advancing initiatives that positively impact individuals who are at risk for diabetes, heart disease and other chronic diseases. To help promote healthy lifestyle behaviors in Humboldt Park, NMH has collaborated with community partners to create programs uniquely tailored to the neighborhood. The Humboldt Park Healthy Community Initiative (HCI) was developed to improve the health of the residents of Humboldt Park based on the specific needs and challenges of the community, which include limited health literacy, violence and language barriers. The model was grounded in improved access to health information as well as safe, convenient and affordable options for learning about nutrition and engaging in physical activity in an effort to impact chronic disease.

The HCI consists of a variety of community organizations that collaborate to expand a healthy lifestyle framework and develop a comprehensive, sustainable and replicable model that will lead to measurable improvements in health outcomes. The goal of this work is to reduce risk factors and prevent/delay chronic disease; promote wellness and improve management of chronic conditions; and monitor, evaluate and make recommendations to strengthen established processes to ensure achievement of our shared community goals.

Over the last seven years, the HCI committee promoted healthy lifestyle behaviors through free nutrition programs, physical activity classes and wellness events to the residents of Humboldt Park. In 2018 alone, 750 physical fitness classes that reached approximately 7,500 participants; 36 nutrition programs that reached approximately 393 participants; three resource fairs that reached approximately 400 attendees each; and 16 Farmers Markets that reached approximately 650 attendees. Also during 2018, NMH piloted adolescent mental health services in collaboration with Hartgrove Hospital and the Salvation Army. HCI continued to refine and utilize an electronic tool to track fitness and nutrition outcomes in order to gather valuable metrics to better understand the needs of the community.

In 2019, HCI launched Safe Summer 2019 to promote health and safety in the Humboldt Park community through local events and activities that address violence prevention, health promotion and social cohesion. NMH continues to be a trusted source for health promotion and works to increase awareness, encourage healthy lifestyle choices and address root causes of health conditions to increase impact.

Strategy 4: Collaborate with external workgroups and agencies to support efforts that impact chronic disease prevention.

In order to collectively address the root cause of many chronic diseases, NMH participated on AHE's SDOH committee. This committee addressed social and structural determinants of health and identified collective impact objectives, including food access, housing, workforce development and access to care. Additional information on the activities and accomplishments of the SDOH committee can be found in Appendix D (AHE Report), page 33.

Priority Need: Injury and Violence

NMH aims to identify and implement best practices for addressing violence in collaboration with community-based organizations. Efforts include continued utilization of effective models for ensuring victims of violent trauma have clinical and mental health support following emergency department or inpatient care; participation in community-led efforts to address violence; and collaboration with external workgroups and agencies to support efforts that impact violence prevention.

Strategy 1: Continue to utilize and seek effective models for ensuring victims of violent trauma have clinical and mental health support following Emergency Department or inpatient hospital-based care.

NMH continued to partner with Cure Violence, previously known as CeaseFire, an organization founded in Chicago, to reduce retaliatory actions following violent trauma. As one of only five level I trauma centers in Chicago, NMH provides care to hundreds of Chicago residents who have violence-related traumatic injuries each year. NMH pays an annual fee to Cure Violence and integrates its intervention services into the treatment protocol for appropriate violent trauma cases. Trained "violence interrupters" meet with violent trauma victims and their families at NMH and attempt to defuse feelings of anger as well as discourage victims and their families from retaliating. The violence interrupters work in tandem with violence interrupters in the victim's home community.

Strategy 2: Participate in community-led efforts to address violence.

In 2014, leaders from NMH joined with Bright Star Community Outreach (BSCO) and other healthcare leaders and community partners to support the launching of a community-based effort to reduce the rate of violence in the Bronzeville neighborhood on the south side of Chicago. The Urban Resilience Network (TURN) Model (formerly known as the Bronzeville Dream Center) offers a bridge to mental health services and focuses on the five core competencies of counseling, workforce, parenting, mentorship and advocacy, which collectively focus on reducing violence and providing opportunities to the residents of Greater Bronzeville. TURN utilizes local faith leaders to implement evidence-based programs based on the NATAL-Israel Trauma model and the Communities That Care (CTC) model.

Over the last five years, NMH has played an active role in developing the TURN Model. In addition to providing over $900,000 in direct funding, NMH provided leadership and knowledge-transfer, convened community support, established governance and operational structures, and supported fundraising efforts, including the development of grant applications. The TURN Model Trauma Counseling Program offers a bridge to mental health services. TURN utilizes local faith and community leaders to implement evidence-based programs based on the NATAL-Israel Trauma model and the Communities That Care (CTC) model. In July 2017, BSCO successfully launched its Trauma Helpline. The Helpline had 20 unique callers in its first year of operation. In 2018, that number increased to 52 callers. In 2019, BSCO continues to build capacity, including training a second cohort of faith and community leaders capable of staffing the Trauma Helpline. The team anticipates handling an increase in call volume commensurate to this increased capacity. Additionally, BSCO has worked with CPS Network 9, Chicago Police Department (CPD), funeral staff and other neighborhood entities to build resilience and trauma-informed counseling within the community.

Strategy 3: Collaborate with external workgroups and agencies to support efforts that impact violence prevention.

In order to collectively address violence and community safety, NMH participated on AHE's Community Safety committee. This committee was established to address violence prevention and worked in 2018 to identify the scope and scale of the work plan. NMH worked collaboratively with community leaders to develop health policies and was committed to helping communities identify targeted interventions that reduce and prevent violence. Additional information on the activities and accomplishments of the Community Safety committee can be found in Appendix D (AHE Report), page 33.

Priority Need: Mental Health

Mental health is a state of successful performance of mental function, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt to change and cope with challenges. Mental health is essential to personal well-being, family and interpersonal relationships, and the ability to contribute to society. Mental disorders are health conditions that are characterized by alterations in thinking, mood, and/or behavior that are associated with distress and/or impaired functioning. Mental disorders contribute to a host of problems that may include disability, pain or death. The resulting disease burden of mental illness is among the highest of all diseases. The existing model for understanding mental health and mental disorders emphasizes the interaction of social, environmental and genetic factors throughout the lifespan. In behavioral health, researchers identify risk factors (which predispose individuals to mental illness), and protective factors (which protect them from developing mental disorders). Researchers now know that the prevention of mental emotional, and behavioral (MEB) disorders is inherently interdisciplinary and draws on a variety of different strategies.

In support of national and local mental health service objectives, NMH provides leadership, invests in resources and works collaboratively with community partners to address mental health needs and increase access to culturally competent mental health services for underserved populations in the City of Chicago. Efforts include implementation of behavioral healthcare services within the primary care setting; feasibility evaluation of co-locating primary care and mental health services within the outpatient psychiatry clinic to increase alignment with best practices in mental health care; increased access to mental health services such as counseling and education programs; advocacy for adequate mental health services and reimbursement; and collaboration with external workgroups and agencies to support efforts that impact violence prevention.

Strategy 1: Implement behavioral healthcare services within the primary care setting.

Due to insurance limitations, a nationwide shortage of psychiatrists, and a tendency for patients to see their primary care physician (PCP) for mood disorders, psychiatric care may not be pursued as often as it should be. In response, NMH implemented a pilot program, based on the Collaborative Care Model, to strengthen the linkage between primary care and mental health in an effort to improve access and reduce obstacles to receiving mental health services. The program brings psychiatric care to patients by embedding behavioral health screenings and services within the primary care setting. If the patient is a fit for the program based on depression screening scores and symptoms, the PCP refers the patient to the behavioral healthcare manager (BHCM) who coordinates treatment with the consulting psychiatrist and communicates the plan to both the PCP and the patient. The team is in constant communication to address the patients' symptoms, medications, and progress. Treatment provided in the program is outcomes-oriented. The goal for the program's patients is to get to remission which is defined as having minimal to no symptoms of depression. Success of the program was defined as an increase in access to depression treatment within the primary care setting, as well as a reduced wait-time to be seen by a behavioral health resource.

In FY17, a total of 116 patients were enrolled in the program with 80 active patients and three pending patients. Every patient enrolled was screened with the PHQ-9, and qualified for the program if their score was 10 or higher. The average result of the initial PHQ-9 was 14.1, while the results of the most recent PHQ-9 was 7.2. The duration of treatment for all patients enrolled was an average of 5.5 months, while patients in the program who have stayed for greater than four months (67 patients) had an average duration of 8.4 months of treatment. Of these 67 patients, 67 percent had a positive response (defined as a reduction from their initial PHQ-9 score by 50 percent), and 33 percent of those patients achieved depression readmission (defined as at least two separate PHQ-9 scores of less than five over the past two months). The average decrease in PHQ-9 scores from the initial to the most recent screening was about 50 percent. By December 1, 2017, 36 patients had completed the program successfully.

In 2018, NMH branded the collaborative care model as the Collaborative Behavioral Health Program (CBHP) and prepared to expand the program to 12 Northwestern Medical Group (NMG) primary care clinics. New processes were implemented to convert this to a billable service and to allow for more robust data collection and analysis that eliminates the need for manual chart review. With these changes presently being implemented, data reporting is currently unavailable. Ultimately, CBHP will report the following metrics:

#	Measure	Purpose/Description	Numerator	Denominator
1	Patients with Depression Diagnosis	Identify patients who have been diagnosed with depression	Number of patients with an active diagnosis of depression i.e. active problem on problem list or 2 or more encounters diagnosed within 18 months	Number of patients who have had at least one visit to NMG primary care practice within the past 18 months
2	Patients Referred to Program- Depression	Identify patients who have been referred to CBHP for depression	Number of patients who have program status category of Referral	Number of patients with depression diagnosis and have had at least one visit to NMG primary care practice within the past 18 months (per measure definition defined above)
3	Patients Enrolled in Program- Depression	Identify patients who are enrolled in program	Number of patients who have program status categories: Initial Evaluation, Awaiting Recommendation, CBHP-Meds, CBHP-Therapy, or CBHP-Meds and Therapy	Number of patients with depression diagnosis and have had at least one visit to NMG primary care practice within the past 18 months (per measure definition defined above)
4	Actively Engaged in Program- Depression	Identify patients who are actively engaged in the program	Patients who are actively engaged (i.e. have at least 3 PHQ-9s, including initial PHQ-9, completed by BCM in the past 90 days)	Number of patients with a program status categories: Initial Evaluation, Awaiting Recommendation, CBHP-Meds, CBHP-Therapy, or CBHP-Meds and Therapy
5	LOS in CBHP- GRADUATED	Identify LOS for patients enrolled to successfully graduate from the program	Median: Calculate time (days) between point patient had initial PHQ-9 with BCM to date of completed program status (take median)	Number of patients with program status category: Completed Program

#	Measure	Purpose/Description	Numerator	Denominator
6	Positive Response	Identify patients who have a positive response to CBHP treatment	Number of patients whose most recent PHQ-9 was reduced by >50% from initial PHQ-9 score OR the most recent PHQ-9 is <10	Number of patients with a program status categories: Initial Evaluation, Awaiting Recommendation, CBHP-Meds, CBHP-Therapy, or CBHP-Meds and Therapy
7	Qualified for Graduation- Still in CBHP	CBHP Goal: To graduate patient from program (this is a modified metric- remission is <5)	Number of patients with at least 2 separate PHQ-9 scores of <10 AND achieved a reduction of 50% or more from initial PHQ-9 score. (All PHQ-9s in the 4 week span must have met prior criteria above.)	Number of patients with a program status categories: Initial Evaluation, Awaiting Recommendation, CBHP-Meds, CBHP-Therapy, or CBHP-Meds and Therapy
8	Return CBHP patients	Identify patients who have returned to the program within 180 days of Completed Program or Left Before Completing (lower is better)	Number of patients who have achieved a program status of categories: Completed Program or Left Before Completing within 180 Days of the most recent Initial Evaluation date (most recent Initial Evaluation date must be documented after program status categories: Completed Program or Left Before Completing)	Number of patients who have had at least one visit to NMG primary care practice within the past 18 months with program status categories: Initial Evaluation, Awaiting Recommendation, CBHP-Meds, CBHP-Therapy, or CBHP- Meds and Therapy
9	Depression Screening and Follow-Up Plan for Primary Care	Improve rate of depression screenings and follow-up when appropriate	Number of patients who have had at least one screening for clinical depression using a standardized tool during calendar year, and documentation follow-up plan, if positive	Number of patients who have had at least one visit to NMG primary care practice within the past 18 months
10	Appropriateness of Referral-PCP screened patient with PHQ-9 prior to referral	Patients referred to CBHP must have a PHQ-9 of 10+ completed by the PCP prior to initial evaluation by BCM	Number of patients who have a PHQ-9 completed by a PCP with a result of 10+ within 3 months from the date of program status category: Referral	Number of patients who have had at least one visit to NMG primary care practice within the past 18 months with program status categories: Referral, Initial Evaluation, Awaiting Recommendation, CBHP-Meds, CBHP-Therapy, or CBHP- Meds and Therapy
11	BCM Monthly Outreach	BCM should have at least 1 outreach to patient per month	Number of patient who have at least one encounter with BCM per month. This can be telephone encounter or in office visit encounter.	Number of patients with a program status categories: Initial Evaluation, Awaiting Recommendation, CBHP-Meds, CBHP-Therapy, or CBHP- Meds and Therapy

During 2019, CBHP was implemented at two sites, with plans to launch at an additional site during July 2019. CBHP services will begin at the remaining NMG primary care clinics during FY20 and FY21. In addition to the NMG primary care expansion, Obstetrics and Gynecology has begun providing Collaborative Care Management services to perinatal patients.

As of March 1, 2019, NM is the first academic medical center to bill for Collaborative Care Management. Billing for these services will allow CBHP to expand and provide behavioral health care to patients at all NMG Central Region Primary Care clinics. Collaborative Care Management addresses some of the insurance issues commonly found in the provision of behavioral health care as this care model is classified by CMS as a medical service. As such, medical benefits apply to these charges rather than being routed to mental health carve-outs. Ultimately, this means approximately 88% of NMG Central Region Primary Care patients are insured by plans that cover Collaborative Care Management and effectively minimizes one of the primary barrier to accessing behavioral health care.

Strategy 2: Evaluate the feasibility of co-locating primary care and mental health services within the outpatient psychiatry clinic to increase alignment with best practices in mental health care.

In 2017, NMH provided funding and began work to evaluate the feasibility of offering primary care services within the Norman and Ida Stone Institute of Psychiatry outpatient clinic. The goal of this initiative was to improve access to primary care and care coordination for individuals with serious and persistent mental illness; to promote healthy lifestyles including counseling on healthy eating, exercise, and tobacco cessation; and to implement guideline-based screening for common medical disorders in a chronically mentally ill population. The feasibility assessment would require a pilot project of physically locating two PCPs to staff one-half day of the clinic (one full day total). The pilot included a medical assistant to support the providers by rooming patients, obtaining vital signs, and providing other medical support. In addition to staff support, the proposal included a description of clinical services, medical guidelines, and infrastructure development such as scheduling and marketing. The following metrics were established: Number of patients referred; time from referral to clinical encounter; access to care measured by number of completed primary care visits; engagement in care measured by patient activation survey instruments; and tracking of preventive health screenings including blood pressure, weight, BMI, HbA1C, cholesterol, cancer screenings (including colon, breast, cervical and lung), smoking status, and percentage of patients that were offered smoking cessation treatment.

In 2018, the team continued to secure necessary equipment such as exam tables, blood pressure cuffs, and other medical supplies. The pilot launched in January 2019 and focused on increased primary care coordination for individuals with serious mental illness. Baseline data will be collected, and NMH anticipates increased access and engagement around preventable cardiac disease risk factors such as weight reduction, tobacco cessation and lipid control will enhance the overall health and well-being among this patient population.

Strategy 3: Increase access to mental health services (such as counseling and education programs) through the TURN model, a Bright Star Community Outreach initiative.

In 2018, due to funding provided by NMH, Bright Star Community Outreach (BSCO) was able to complete its second five-week training for an additional 10 faith and community leaders to provide counseling and access to mental health services via the TURN Trauma Helpline. This second cohort of leaders, which were trained as both Helpline Counselors and Community Ambassadors, graduated on the same day that the helpline celebrated its one-year launch anniversary.

After training, outreach work began to target organizations and individuals that had been directly impacted by trauma such as suicide or gun violence. This increased outreach, which includes workshops and fliers to over 8,000 individuals,

had a positive impact on the number of callers who accessed the Helpline. In 2018, TURN assisted 52 callers with over 250 total calls. This includes two successful discharges and 19 referrals to additional mental health services. In addition, BSCO continued to break down related barriers and de-stigmatize trauma and counseling through education and advocacy work. Continued growth and expansion of services offered by BSCO is expected over the next few years. NMH is committed to BSCO's mission and the TURN Model initiative. We will continue to support BSCO with dedicated funding, public health and mental health resources, and administrative support, and will continue to help plan for the delivery of mental health services.

Strategy 4: Advocate for adequate mental health services and reimbursement.

NMH engages in advocacy efforts aimed at increasing access to behavioral health services. Through AHE's Mental Health and Substance Use Disorders committee, NMH worked with other community healthcare leaders to implement strategies to address the most pressing issues in the community. In 2018, as part of the collaborative, NMH worked to identify gaps and opportunities to implement Mental Health First Aid training, as well as engaged in the development of a stigma awareness campaign to address the stigma surrounding mental health. Additional information on the activities and accomplishments of the Mental Health and Substance Use Disorders committee can be found in Appendix D (AHE Report), page 33.

Strategy 5: Collaborate with external workgroups and agencies to support efforts that impact mental health.

NMH collaborates with community-based organizations, including the Chicago Alliance to End Homelessness, Catholic Charities and Help Ease Local Poverty (HELP), where mental health employees serve meals to the homeless and identify and engage those who may benefit from mental health services. For many, NMH's mental health programs provide a critical link to public health and social support services. For individuals who are homeless or experience mental health conditions that impair cognitive abilities, the process of gaining access to social welfare programs and accessing health coverage is often beyond their capabilities. Without access to these supportive programs, individuals are unlikely to be able to manage a mental health or substance abuse problem and are at high risk for homelessness. NMH's mental health employees are trained in the SSI/SSDI Outreach, Access and Recovery (SOAR) program that provides training and tools for mental health professionals across the country to help them assist the homeless or those at risk of homelessness gain access to health, income support and housing programs. NMH also provides transportation and food vouchers to patients receiving treatment if needed. In addition, NMH recognizes that mental and behavioral health conditions can significantly impact the families of those receiving care. NMH hosts a support group of the Illinois chapter of NAMI and provides educational presentations to parents and siblings of adults with serious mental illness.

In 2017, NMH initiated a partnership with Calm Classroom to provide mindfulness strategies to youth in our communities. Mindfulness is the practice of bringing one's focus to the experience occurring in the present moment, which has been shown to positively impact health conditions and promote healthy behaviors. NMH engaged Calm Classroom, the largest provider of school-wide mindfulness programming in the U.S., to teach mindfulness practices to students in Chicago Public Schools (CPS) Network 9. Network 9 schools are primarily located in Bronzeville, a neighborhood on Chicago's South Side that is plagued by persistent, high rates of violence. Calm Classroom offers accessible mindfulness techniques that help promote self-awareness, mental focus and emotional resilience in the classroom setting. In 2018, the collaboration between NMH, Calm Classroom and CPS Network 9 served more than 5,000 CPS students and their teachers at eight schools. Through their train-the-trainer model, Calm Classroom equipped CPS teachers with mindfulness techniques that can be taught in three minutes in the classroom. These practices supplement CPS's trauma-informed approach to creating supportive schools. Following implementation of the mindfulness practices, teachers who engaged in the program were

surveyed and reported a positive impact on their students. Since practicing Calm Classroom, 90 percent of teachers reported their students seem calmer and more peaceful; 89 percent reported their students were more engaged and ready to learn; 81 percent believed the culture and the climate in their classroom had improved; and 76 percent stated students were better able to regulate their emotions. NMH will continue to sponsor Calm Classroom initiatives within CPS.

Appendix A
Description Vulnerable Populations Represented

Organization[32]	Description of medically underserved, low-income, and minority populations represented from publicly available sources (July 2019)
Alliance for Research in Chicagoland Communities (ARCC)	The Alliance for Research in Chicagoland Communities (ARCC) is a program of the Northwestern University Center for Community Health (CCH) and serves the Institute for Public Health and Medicine (IPHAM) and the Northwestern University Clinical and Translational Sciences Institute (NUCATS). Guided by a steering committee of community- and faith -based organizations, public agencies and Northwestern researchers, ARCC supports the full spectrum of community-engaged research (CEnR), including community-based participatory research (CBPR), by providing partnership facilitation, capacity-building workshops and one-on-one technical assistance, seed grants, monthly information and resource updates, advocacy for supportive institutional policies and other activities. Steering committee member organizations include: Access Living Apostolic Faith Church The Blue Hat Foundation CALOR Cambodian Association of Illinois Chicago Department of Public Health Chicago Public Schools Chicago Youth Programs CJE SeniorLife Endeleo Institute Hana Center Health and Medicine Policy Research Group Lurie Children's Hospital of Chicago The Night Ministry Northwestern University Feinberg School of Medicine Puerto Rican Cultural Center Renz Addiction Counseling Center Robert H. Lurie Comprehensive Cancer Center of Northwestern University Shirley Ryan AbilityLab
Bright Star Community Outreach	Since 2010, Bright Star Community Outreach (BSCO) has made significant contributions to the renewal of Chicago's most vulnerable communities as a 501(c)(3) nonprofit organization. Driven by our hope for change in this city, BSCO's presence has been marked by effective programming, social development, and advocacy; particularly in the 3rd and 4th wards of Chicago's south side. BSCO's strategy includes developing impactful community development initiatives aimed at facing our largest societal challenges: violence in our communities, poor economic opportunities, inadequate mental health services, homelessness, child safety and drug abuse. These efforts are designed to strengthen local families and communities, as well as leverage key partnerships with organizations and businesses that share our passion for seeing renewal in Chicago.

[32] Organizations listed in Appendix A partially or substantially represent vulnerable populations, including uninsured persons, low-income persons, and minority groups.

Organization[32]	Description of medically underserved, low-income, and minority populations represented from publicly available sources (July 2019)
Chicago Department of Public Health	The mission of the Chicago Department of Public Health is to make Chicago a safer and healthier place by working with community partners to promote health, prevent disease, reduce environmental hazards and ensure access to health care for all Chicagoans.
Chicago Public Library-Richard M. Daley Branch	The Chicago Public Library (CPL) welcomes and supports all people in their enjoyment of reading and pursuit of lifelong learning. Working together, CPL strives to provide equal access to information, ideas, and knowledge through books, programs and other resources. CPL believes in the freedom to reach, to learn and to discover.
CommunityHealth	While the Affordable Care Act (ACA) provides access to new healthcare options for millions of Americans, many of the patients CommunityHealth serves still need our help. It is estimated that, despite new health coverage options, as many as 513,000 residents of Cook County will remain uninsured in 2018. CommunityHealth serves these vulnerable individuals who fall through the cracks of our healthcare system. To be eligible for care, individuals must have no health insurance and establish that their income does not exceed 250% of the Federal Poverty Line (FPL) – which was $62,750 for a family of four. Most of our patients live at or below 100% of the FPL ($25,100 for a family of four). Income verification is conducted annually for all patients. A great percentage of CommunityHealth's patients are minorities – populations that are disproportionately living with chronic illnesses and are in need of ongoing care. The need for essential health services for the uninsured in the Chicago area remains urgent. CommunityHealth is deeply committed to expanding access to high-quality care for those who need it most – and we are truly privileged to serve as their medical home.
Erie Family Health Centers	Erie's mission has remained the same for the last 60 years: to deliver high quality healthcare services to the Chicago region's medically underserved residents with compassion, cultural understanding and respect – regardless of their ability to pay. Patient demographics from July 2019 are as follows: • 74% of Erie's patients are Hispanic • 46% are best served in Spanish • 64% are female • 46% are under the age of 19 • 29% are school-aged children (ages 5-18) • 58% come from households with incomes that fall below the FPL • Payor Mix: 62% Medicaid; 26% Uninsured; 10% Commercial; 2% Medicare Erie is a regional healthcare resource serving nearly 70,000 patients a year at 13 health centers spanning the west side of Chicago to Waukegan. These sites include four large primary care centers that offer integrated medical and dental health services, three additional large primary care centers, the region's oldest and largest comprehensive teen and young adult health center, and five school-based health centers.

Organization[32]	Description of medically underserved, low-income, and minority populations represented from publicly available sources (July 2019)
Kelly Hall YMCA	Since January 2009, this safe haven provides key services to the severely underserved community of West Humboldt Park.
Near North Health Services Corporation	Near North Health Service Corporation (Near North) is a 501(c)(3) non-profit Federally Qualified Health Center (FQHC). It is one of the largest providers of community-based primary care in Chicago, providing health care, social services and nutrition education to the medically indigent and uninsured residents of the Near North side, West Town, Humboldt Park, West Garfield Park, Austin, Kenwood/Oakland, Douglas, Grand Boulevard and Uptown communities. Patient demographics from July 2019 are as follows: • 97% of Near North's patients are minority • 62% are low income • Payor Mix: 52% Medicaid; 35% Uninsured
Neighborhood Housing Services	Neighborhood Housing Services (NHS) is a non-profit neighborhood revitalization organization committed to helping homeowners and strengthening neighborhoods throughout Chicago, South Suburban Cook County and Elgin. NHS's mission is to create opportunities for people to live in affordable homes, improve their lives, and strengthen their neighborhoods.
The Salvation Army Freedom Center	The Salvation Army programs and services differ in order to meet the unique needs of the people in the communities they serve. They take a holistic approach to *Doing the Most Good* where there is the most need without discrimination, whether it be disaster relief, emergency assistance, substance abuse rehabilitation or educational programs for children. They are the largest direct provider of social services to people in need in Illinois and have been serving our local community for more than 125 years. The Salvation Army makes an impact every day in three areas of critical importance to people across Chicagoland – homelessness, violent crime and education. Those who find themselves in need, whether that need be practical, recreational, spiritual or emotional, may seek assistance.
West Humboldt Park Development Council	West Humboldt Park Development Council's mission is to work collaboratively to develop, implement and sustain processes that improve the quality of life for people, families and businesses in the West Humboldt Park community.

Appendix B
Healthcare facilities and organizations in Cook County, Illinois

(Resources found through publicly available information sources as of June 2019)

Acute-Care Hospitals and Emergency Rooms

- Advocate Illinois Masonic Medical Center
- Advocate Trinity Hospital
- AMITA Health Resurrection Medical Center
- AMITA Health Saint Joseph Hospital
- AMITA Health Saints Mary and Elizabeth Medical Center
- Ann and Robert H Lurie Children's Hospital of Chicago
- Holy Cross Hospital
- Jackson Park Hospital and Medical Center
- John H. Stroger, Jr. Hospital of Cook County
- La Rabida Children's Hospital
- Little Company of Mary Hospital
- Loretto Hospital
- Louis A. Weiss Memorial Hospital
- Mercy Hospital and Medical Center
- Methodist Hospital of Chicago
- Mt. Sinai Hospital Medical Center
- Northwestern Memorial Hospital
- Norwegian-American Hospital
- Provident Hospital of Cook County
- Roseland Community Hospital
- Rush University Medical Center
- South Shore Hospital
- St. Anthony Hospital, Chicago
- St. Bernard Hospital, Chicago
- Swedish Covenant Hospital
- Thorek Memorial Hospital
- University of Chicago Medical Center
- University of Illinois Hospital at Chicago
- Kindred Hospital, Central
- Kindred Hospital, Chicago Lakeshore
- RML Specialty Chicago

Federally Qualified Health Centers and Other Safety Net Providers

- Access Community Health Network
- Alivio Medical Center
- American Indian Health Service of Chicago, Inc.
- Asian Human Services Family Health Center
- Aunt Martha's Youth Service Center, Inc.
- Beloved Community Family Wellness Center
- Chicago Family Health Center
- CommunityHealth
- Erie Family Health Centers
- Esperanza Health Centers
- Friend Family Health Center, Inc.
- Heartland Health Outreach, Inc.
- Heartland Health Centers
- Howard Brown Health Centers
- Lawndale Christian Health Centers
- Mercy Family Health Centers
- Mile Square Health Centers
- Near North Health Service Corporations
- PCC Community Wellness Centers
- PrimeCare Community Health, Inc.
- TCA Health, Inc.

Home Healthcare

- 1st Home Healthcare, Inc.
- 24-Seven Health Care Services, Inc.
- A and B Home Healthcare Services, Inc.
- A Caring Touch Nursing Services
- Abbey St. Claire Quality Care Co.
- ABN Care Home Health, LLC
- Abridge Home Care Services, Inc.
- Acacia Home Health Agency

Home Healthcare (continued)

- Access Life Care, Ltd.
- Ace Home Health Provider Inc.
- Achieve Health Care Services, Inc.
- Advance Care Home Health, Inc.
- Advance Home Health Care, Ltd.
- Affordable Home Care Services, Inc.
- Agile Home Health Care, Inc.
- All Family Health Care, Inc.
- Allgreen Home Health Care, Inc.
- Allied Home Health Care
- Alpha Home Health, Inc.
- Alphazeta Healthcare Services, LLC
- Al-Shafa Health Care, Inc.
- Amedisys Illinois, LLC
- American Allied Home Healthcare, Inc.
- Americare HomeHealth Services, LLC
- Amity Home Health Care, LLC
- Angel Care, Inc.
- Angel Touch Home Healthcare, Inc.
- Angels Homecare and Medical Services, Inc.
- Apex Home Health Services, Inc.
- Apple Home Healthcare, Ltd.
- Ardent Home Health Care
- Aspen Home Health Care
- Aster Home Health Services, LLC
- At HomeHealth, Inc.
- Atlas Healthcare Management, Inc.
- Atrium Healthcare Services, LLC
- Atrium Home Care, Inc.
- Attentive Services Home Health II, Inc.
- Auspex Home Health Care Services, Inc.
- Awesome Home Health Care, Inc.
- Beatrice Home Health
- Benchmark Home Health Care
- Best Home Health Services, LLC
- Best Home Healthcare Network, Inc.
- Blessing Home Health Services, Inc.
- Brighter Days Home Health Agency
- Bronze Key Home Health Care
- Cardio-Care, Inc.
- Care Collaborative Home Health Services, Inc.
- Care Connect Home HealthCare, Inc.
- Care Specialists, Inc.
- Caring Nurses, Inc.
- Caring Professionals Home Care, Inc.
- Carren Home Care, Inc.
- Celestial Home Health Care, Inc.
- Central Healthcare, Inc.
- Chicago Health, Inc.
- Chicago Home Healthcare Agency, Ltd.
- Chicago Home Healthcare, S.C.
- Chicago VNA, Inc.
- Classic Home Healthcare, Inc.
- Comfort Care LLC
- Compassionate Home Care, Inc.
- Complete Home Health Care, LLC
- Comprehensive Home Care, Inc.
- Comprehensive Home Healthcare, Inc.
- Comprehensive Quality Care, Inc. Foundation
- Cornerstone Home Healthcare, LLC
- Covenant Healthcare Services and Staffing Inc.
- Creative Healthcare Professionals, Inc.
- Crescent Home Healthcare, Inc.
- Crown Home Health Agency, Inc.
- Dcare Home Health Service
- Deliverance Home Health Care, Inc.
- Direct Home Healthcare, Inc.
- DirectCare Home Health, Inc.
- DirectMed Health Services
- Divine Home Health Care, Inc.
- Divine Providence Home Health Agency, Inc.
- DL Comprehensive HealthCare Inc.
- EC-MOS Prolific Home Healthcare
- Essential Preventive Health Care, LLC
- Essex Home Health Services, Inc.
- Evangel Home Health Services, Inc.
- Excell Home Health Services, Inc.
- Extraordinary Care HHA LLC
- Faith Home Care, Inc.
- Family Choice Home Health, Inc.
- Family Community Health Services, Inc.
- Family Healthcare, Inc.
- Family Home Health Care Professionals, Inc.
- FICC Home Health Care, Inc.
- First Choice Home Care, Inc.

Home Healthcare (continued)

- Focus Home Health Care, Inc.
- GJM Home Health Care Agency
- Gold Coast Home Health, Inc.
- Good Health Home Care, Inc.
- Good Life Home Health Care, Inc.
- Good Shepherd Healthcare, LLC
- Goodwill Health Care Services and Staffing, Inc.
- Grace Home Health Care, Inc.
- Grand Home Health Care, Inc.
- Great Lakes Healthcare, LLC
- Great Paragon Healthcare, Inc.
- Guaranteed Medical Services, Inc.
- Guardian Home Health Services, Inc.
- Happy Home Health Care PC
- Healing Hands Home Care, Inc.
- Horizon Home Health Care, Inc.
- iCare Home Health
- ICG Home Health Care Services
- Illinois Home Health Services, Inc.
- Immaculate Home Health, Inc.
- Immanuel Home Care Services, Inc.
- Infinity Home Health Care, Inc.
- Integrity Nursing Service, Inc.
- Kingsway Home Health Services, Inc.
- Liberty Home Health Care, Inc.
- Life Options Health Services, Inc.
- Life Plus Health Care, Inc.
- Lincoln Park Home Health Care, Inc.
- Link Homehealth Care Inc.
- Living Waters Home Health Care, Inc.
- Medcare Home Health Services, Inc.
- Medex Home Health Care, Inc.
- MedStar Home Health Services
- Mid America Home Health Care, Inc.
- Mother's Care and Health Equipment, Inc.
- New Visions Home Healthcare, Inc.
- Nightingale of Chicago, Inc.
- Normalcy Home Health, Inc.
- Nu-Day Home Health Care Service
- Optimum Healthcare Services, Inc. of Illinois
- Optimum Professionals Home Health Care, Inc.
- Pacific Home Health Care, Inc.
- PEKO Healthcare and Consulting Services
- Premier Home Health Care, Inc.
- Premier Point Home Health, Inc.
- Prestige Home Health Services, Inc.
- Private Home Care Unlimited, Inc.
- Pure Hearts Home Health Services, Inc.
- Quality Home Care Services, Ltd.
- Redley's Competent Home Health Care, Inc.
- Romyst Home Health Care, Inc.
- Saint Thomas Home Health, Inc.
- Salud Y Vida Health Care, LLC
- Serendipity Home Health Care, Inc.
- Shuree Home Healthcare, Inc.
- Simply Home Health, LLC
- Spectrum Home Health Care, Inc.
- St. Francis of Assisi Healthcare, Inc.
- Star Home Health Services, Inc.
- StarLights Home Health Care Corp.
- Stellar Home Health Care, Inc.
- Supreme Home Healthcare, LLC
- Swedish Covenant Hospital Home Health Care
- Tender Touch Home Health Care, Inc.
- The Ultimate Home Health Care, Inc.
- Total Home HealthCare, Inc.
- US Home Health Care, Inc.
- US Hospice and Home Health Corp.
- Wailai Home Health Services
- We Care Home Health, Inc.

Hospice Care

- Comfort Hospice and Palliative Care, LLC
- Horizon Hospice and Palliative Care, Inc.
- Hospice of Illinois
- Loving Hands Hospice, Inc.
- Maximum Hospice and Palliative Care, Inc.
- Northwestern Memorial Hospital Palliative Care
- Unity Hospice of Chicagoland, LLC
- Vitas Healthcare Corporation of Illinois

Mental Health Services and Facilities

- Community Counseling Centers of Chicago
- Englewood Mental Health Center (CDPH)
- Greater Grand/MID-South Mental Health Center (CDPH)
- Greater Lawn Mental Health Center (CDPH)

Mental Health Services and Facilities (continued)

- Lawndale Mental Health Center (CDPH)
- North River Mental Health Center (CDPH)
- Roseland Neighborhood Health Center (CDPH)
- Thresholds

Nursing Homes, Adult Care, and Long-Term Care

- Alden Lincoln Rehabilitation and Health Care Center
- Alden Village North
- Alden-Northmoor Rehabilitation and Health Care Center
- Alden-Princeton Rehabilitation and Care
- Alden-Wentworth Rehabilitation and Health Care Center
- All American Nursing Home
- Ambassador Nursing and Rehabilitation Center
- Arbour Health Care Center, Ltd.
- Astoria Place Living and Rehabilitation Center
- Atrium Health Care Center, Ltd.
- Avenue Care Nursing and Rehabilitation Center
- Balmoral Home
- Belhaven Nursing and Rehabilitation Center
- Bethesda Home and Retirement Center
- Birchwood Plaza Nursing and Rehabilitation
- Brightview Care Center
- Bronzeville Park Skilled Nursing and Living Center
- Bryn Mawr Care
- Buckingham Pavilion
- California Gardens Nursing and Rehabilitation Center
- Carlton at the Lake
- Center Home for Hispanic Elderly
- Central Nursing and Rehabilitation Center
- Central Plaza Residential Home
- Chalet Living and Rehabilitation Center
- Chicago-Read Mental Health Center
- Clark Manor Convalescent Center
- Clayton Residential Home
- Columbus Manor Residential Care Home
- Columbus Park Nursing and Rehabilitation Center
- Community Care Center, LLC
- Continental Nursing and Rehabilitation Center
- Danforth House
- Davis House
- El Valor Residence
- Fairmont Care Centre
- Glen Elston Nursing and Rehabilitation Centre
- Glencrest Healthcare and Rehabilitation Center
- Grasmere Place
- Hammond House
- Harmony Healthcare and Rehabilitation Center
- Heritage Nursing Home
- Imperial Grove Pavilion
- International Nursing and Rehabilitation Center
- Symphony of Chicago West
- Lake Shore Healthcare and Rehabilitation Centre
- Lakefront Nursing and Rehabilitation Center
- Lakeview Rehabilitation and Nursing Center
- Little Sisters of The Poor
- Margaret Manor - North Branch
- Margaret Manor Central
- Marian Center for Adult Residents
- Mayfield Care Center
- Mcauley Residence
- McGowan House
- Methodist Hospital Skilled Nursing Facility
- Mid America Care Center
- Monroe Pavilion Health and Treatment Center
- Montgomery Place Health Care Pavilion
- Norwood Crossing
- Park House Nursing and Rehabilitation Center
- Parkshore Estates Nursing and Rehabilitation Center
- Peterman House
- Peterson Park Health Care Center
- Presidential Pavilion
- Rainbow Beach Care Center
- Symphony at 87th Street
- Symphony at Midway
- Symphony at South Shore
- Symphony of Morgan Park
- Resurrection Life Center
- Ridgeview Rehabilitation and Skilled Nursing Center
- Schwab Rehabilitation Hospital
- The Selfhelp Home
- Sheridan Shores Care and Rehabilitation
- Southpoint Nursing and Rehabilitation Center
- Southview Manor
- St. Agnes Health Care Center
- St. Joseph Village of Chicago

Nursing Homes, Adult Care, and Long-Term Care (continued)

- St. Paul's House
- Swedish Covenant Hospital
- The Clare at Water Tower
- The Danish Home
- The Grove at Lincoln Park
- The Methodist Home
- The Waterford Nursing and Rehabilitation
- The Villa at Windsor Park
- Warren Barr Pavilion
- Warren Park Health and Living Center
- Smith Village
- Waterfront Terrace, Inc.
- Westwood Manor, Inc.
- Wilson Care
- Winston Manor Convalescent and Nursing Home
- Woodbridge Nursing Pavilion

Appendix C
NMH 2019 CHNA Timeline

Phase	Description	Date
Assessment and Analysis	Overall	March 2018 – May 2019
	Community Input Survey	October 2018 – February 2019
	Focus Groups	August 2018 – February 2019
	Forces of Change Assessment	November 2018 – January 2019
	Health Equity Capacity Assessment	March 5, 2019
Prioritization	Overall	May 2019 – June 2019
	ARCC (persons representing the broad interest of the community)	May 8, 2019
	NMH Community Health Council (internal)	May 21, 2019
	External Steering Committee (persons representing the broad interest of the community)	June 19, 2019
Approval	NMH Board of Directors	July 24, 2019
Report Made Widely Available to the Public	Website	August 30, 2019
	Paper copy available for inspection upon request without charge at NMH	August 30, 2019
Public Comment	NMH 2019 CHNA	August 30, 2019 – August 31, 2025
	NMH 2016 CHNA	August 31, 2016 – August 31, 2022

Appendix D
AHE CHNA Report:

allhealthequity.org/2019-chna-reports/

www.nm.org/-/media/Northwestern/Resources/patients-and-visitors/chna-report-alliance-for-health-equity

Appendix E
NMH CHNA Data Book:

www.nm.org/-/media/Northwestern/Resources/patients-and-visitors/nmh-chna-data-book-2019

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