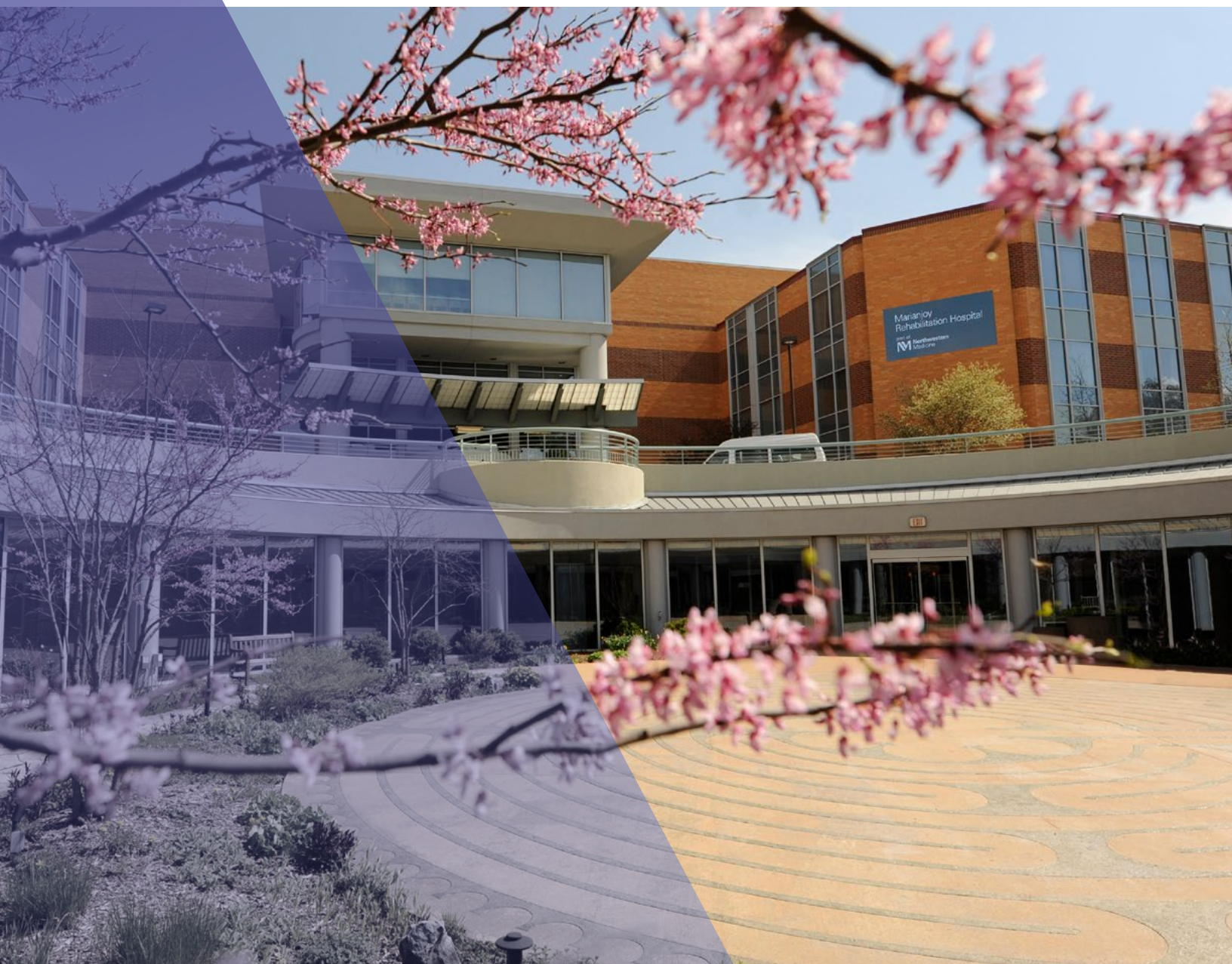


Marianjoy  
Rehabilitation Hospital

part of  
**M** Northwestern  
Medicine

# 2018 Community Health Needs Assessment

Implementation Plan for Marianjoy Rehabilitation Hospital,  
part of Northwestern Medicine



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# Introduction

Northwestern Memorial Healthcare (NMHC) is the not-for-profit corporate parent of Marianjoy Rehabilitation Hospital. Working together under the brand Northwestern Medicine, 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.

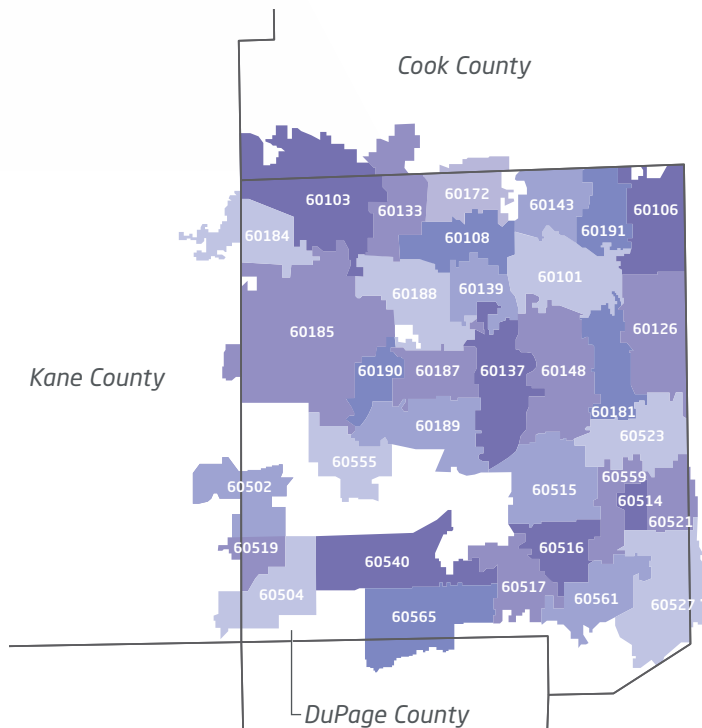
Marianjoy Rehabilitation Hospital, part of Northwestern Medicine (MRH) has a rich history of responding to and caring for the rehabilitative needs of residents in the Chicagoland area. The 127-bed rehabilitative facility located in Wheaton, Illinois, provides advanced rehabilitation and care not only to members of the immediate community, but also serves as a regional destination hospital for individuals in need of state of the art rehabilitative care.

MRH provides 100 acute inpatient rehabilitation beds and 27 Medicare-licensed, subacute beds for adult and pediatric patients recovering from illness or injury who require intensive therapy to regain their function and independence. The main hospital is a 170,000 square foot facility with a number of unique inpatient and outpatient offerings, including specialty programs focusing on the treatment of stroke, spinal cord injury, brain injury, pediatrics, and orthopaedic/musculoskeletal conditions. MRH's comprehensive approach to rehabilitation addresses a patient's body, mind and spirit through personalized treatment programs including inpatient, comprehensive outpatient, subacute care and physician clinics that specialize in rehabilitation medicine. Marianjoy provides inpatient and outpatient pediatric rehabilitation programs and is the only CARF-accredited pain management program in Illinois. The hospital includes a full-size Chartres labyrinth, therapeutic enabling gardens, meditation room, two-story chapel, and many other unique features designed to enhance the healing sanctuary for which Marianjoy is known.

# Community defined for the assessment

Located within DuPage County, MRH's primary service area includes the ZIP codes predominately identified below. However, because of the specialty nature of the hospital, MRH also serves as a destination hospital receiving patient referrals from surrounding counties including Cook, Will, Kane, Kendall, DeKalb and LaSalle.

The study area for the CHNA survey effort was based on patient origination and includes the following residential ZIP codes predominately associated with DuPage County, Illinois.



# Overview of the assessment process

Northwestern Memorial Hospital and Northwestern Region hospitals joined forces with a coalition of other health systems within DuPage, Cook and Lake Counties to complete a comprehensive community health needs assessment (CHNA). The Metropolitan Chicago Healthcare Council (MCHC) facilitated the assessment on behalf of a coalition of regional member hospitals and health systems. The coalition contracted Professional Research Consultants (PRC), a nationally recognized healthcare consulting firm, to conduct a comprehensive, population-focused community health needs assessment. It was envisioned that the multifactorial assessment would not only fulfill each organization's regulatory requirements, but also provide a standardized database to guide the development of individual CHNAs while also promoting opportunities for member organizations to plan and work collaboratively to address the health needs of county residents.

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To specifically assess the needs of individuals with disabilities in the Marianjoy Rehabilitation Hospital service area, input was also solicited from the following groups through an online survey conducted by PRC:

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individuals who received healthcare services from Marianjoy Rehabilitation Hospital network within the past two years and provided a valid e-mail address;

individuals who registered with AbilityLinks, a national, web-based community where qualified job seekers with disabilities gain access to valuable networking opportunities; and

organizations that provide services and resources to people with disabilities that are affiliated with Marianjoy who seek assistance following return to the community.

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Data from these surveys was integrated into this report.

# Prioritization process

A planned and structured process was used to facilitate prioritization of the identified health needs. Tools and data utilized in the process included the CHNA data, DuPage County IPLAN data, an organizational asset inventory and alignment with guiding principles for response to community need.

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The prioritization process included an analysis of:

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## **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 measurable 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 other organizations already addressing the health issue?

## **Applicability of MRH as a change agent (such as acting as a partner, researcher or educator, or in a position to share knowledge or funding)**

- Does MRH have the research or education expertise/resources that address the identified health need?
- Does MRH have clinical services or other expertise/resources that address the identified health need?

## **Estimated resources, timeframe and size of impacted population**

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Attention was also focused on assessment of internal and external capabilities. An asset analysis included a review of current initiatives and exploration of ways to better coordinate efforts. The potential for duplicative efforts and existing gaps was identified.

# Identification of priority health needs

A CHNA provides information to assist hospitals in identifying health issues of greatest concern among residents within their service area. It also guides in the decision to best commit their resources to those areas, thereby resulting in the greatest possible impact on community health status. The MRH CHNA was conducted using a data-driven approach, utilizing both online key informant surveys in addition to vital statistics and other existing health-related data. It spotlighted disparate/vulnerable populations including the disabled, individuals experiencing mental health/substance abuse concerns, decreased access to affordable healthcare services and limited-English proficient individuals.

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## Ten potential areas of opportunity for community health improvement were identified in the CHNA, including:

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Access to healthcare services	Nutrition, physical activity and weight
Heart disease and stroke	Potentially disabling conditions
Immunization and infectious disease	Access to health promotion activities
Mental health	Substance abuse
Injury and violence	Meeting the specialty needs of disabled individuals

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## Factors considered in the prioritization process included:

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Magnitude of the population impacted	Consequences of inaction
Seriousness and impact of the health concern	Trend/magnitude of change over time
Feasibility/capacity and existing assets	Existence of other community resources more suited to address the problem

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## Through this process, it was determined that the 2018 MRH priority health needs would include:

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Access to care	Promoting independence in individuals with disabilities
Chronic disease management and rehabilitation	Injury prevention

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# Response to non-prioritized health needs

In selecting the above-mentioned priorities, we considered not only the level of need, but also the expertise and scope of services that MRH is uniquely qualified to provide. Further consideration was also given to the existing resources and expertise available through other providers - both within and outside of the Northwestern Medicine Network. This included government, public health, federally qualified health centers and community groups. This process guided us not only in developing our own community benefit priorities but also in determining how our resources could be best used in support of community partners who are more uniquely experienced and suited to address the remaining needs through their strategic and collaborative efforts. The goal is to provide the greatest overall community benefit impact from our collective investments while avoiding duplication of efforts.

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Therefore, an identified need was not addressed as a 2018 priority health need if MRH was not best positioned to help due to the following situations:

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MRH has limited expertise, services or resources in the identified area of need

Other organizations have infrastructure and plans already in place to better meet the need

Public health or other organizations typically address the need

Broader initiatives in the Implementation Plan will address or significantly impact the need

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## **Mental health and substance abuse**

The DuPage Behavioral Health Collaborative was formed in response to the mental health findings and needs noted in the DuPage County IPLAN. The mission of the group is to work collaboratively to identify and implement data-driven strategies that improve access and quality of behavioral health services for all DuPage County residents, advocate for aligning resources and funding, and to educate the community about the signs and symptoms of mental health issues. The collaborative is composed of two teams - the Treatment Leadership Team (behavioral health) and the Prevention Leadership Team (substance abuse). Northwestern Medicine Central DuPage Hospital (NMCDH) leadership and staff serve as integral members of both teams, working both independently and collaboratively to address mental health and substance abuse issues in DuPage County. Both the Treatment Leadership Team and the Prevention Leadership Team are comprised of members from local hospitals, public health, private and community sectors and represent a broad cross-section of the community united to respond to both issues.



Additionally, the DuPage County Health Department Crisis Intervention Unit is a mental health support system that deals with mental health emergencies on a 24-hour basis. This unit deals with urgent mental health issues that require immediate attention such as suicidal thoughts, homicidal threats, and symptoms of serious mental illness including depression, schizophrenia, bipolar disorder, anxiety and other issues that may require hospitalization. Individuals can contact the unit at any time and set up an appointment either by phone or in person. The Crisis Program also has a ten-bed respite unit available for short-term stabilization. Psychiatric evaluations and short-term crisis counseling intervention are also available on a scheduled basis as needed.

In the area of inpatient care, NMCDH offers immediate help, providing short-term psychiatric care for adults and teens (13 years of age and older) in a hospital setting. Short-term inpatient care is provided in three secure hospital psychiatric units to help people who pose a risk to themselves or others and those who are unable to care for themselves. Following stabilization, NMCDH offers a full range of treatment including outpatient partial hospitalization, individual and family therapy, group therapy and follow-up services in the community. NMCDH also offers a full range of substance abuse services including inpatient detoxification, residential treatment and rehabilitation services, along with continued counseling to support long-term recovery.

#### **Immunization and infectious disease**

The DuPage County Health Department is responsible for monitoring the incidence of infectious diseases and providing childhood and adult immunizations. Immunization Services are offered at the CPHC (Wheaton), SEPHC (Westmont) and EPHC (Lombard) offices. Childhood immunizations are available for all children who do not have insurance, or have insurance that does not cover immunizations, through the State of Illinois' Vaccines for Children (VFC) program. Additionally, immunizations and selected testing are also offered by the County's Federally Qualified Health Centers (FQHCs), thereby assuring multiple opportunities for residents to receive screening and immunizations.

#### **Health promotion and chronic disease**

MRH works collaboratively to support the provision of health promotion and health education sessions to clients residing in the community. It is widely recognized that the most effective way to address chronic disease is to address the problem across its lifespan in a coordinated effort. Health education programs are offered by NMCDH and MRH in an effort to focus on health promotion and disease prevention. Local primary care providers (PCPs) and FQHCs provide medical homes and routine care aimed at screening, early detection and prompt treatment of disease and other health concerns. Local hospitals provide immediate and emergently needed acute care. Programs such as Access DuPage and Engage DuPage ensure access to routine healthcare, screening, PCPs, specialists, medications and medical homes.

MRH will continue to support and work collaboratively with existing local organizations who are providing affordable primary health care to individuals experiencing the remaining healthcare issues noted above, as we believe they are best positioned to lead the provision of these services.

#### **Nutrition, physical activity and weight**

The problems related to poor nutrition, inadequate physical activity and overweight/obesity are included within the broader category of chronic disease within our Implementation Plan. These factors are considered key root causes of chronic disease and were included in the causal analysis and response.

# Implementation Plan development/ guiding principles

It is widely recognized and accepted that the gold standard for community benefit planning and the response to community need is largely dependant upon the support of organizational leadership and the integration and alignment of community benefit planning into the organization's mission and strategic plan. To that end, Northwestern Memorial Healthcare has developed a set of guiding principles that are in alignment with the organization's strategic plan.

Implementation Plan Development		
Deliver Exceptional Care	Develop People, Culture and Resources	Advance Medical Science and Knowledge

**NMHC Strategic Plan Alignment**

Ensure that residents of our defined communities have access to high-quality, medically necessary healthcare services in the most appropriate setting, in response to assessed needs	<p>Create pathways to healthcare professions and ensure a well-trained healthcare workforce is in place for our communities</p> <p>Support community-based partners through collaboration, and providing tools and resources</p>	Support the discovery of new knowledge through research that can prevent, detect and cure disease and reduce suffering
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**NMHC Community Benefit Plan Alignment**

Develop and support culturally competent clinical and educational programs to prevent disease, promote health and wellness and address disparities in health	<p>Provide youth with education, mentoring and exposure to healthcare professions</p> <p>Provide support for community-based healthcare and wellness programs by collaborating, convening, leading and funding</p>	Provide support for the research and education efforts of Northwestern Medicine
Develop and support models of care that ensure adequate primary care capacity and access to medically necessary diagnostic and specialty care, especially for the medically underserved	<p>Train healthcare students and professionals in the classroom and clinical settings</p> <p>Share technical, fundraising and management expertise to foster a culture of quality among our community-based healthcare partners</p>	Provide clinical settings for research at our care locations and through partnership with community healthcare organizations
Develop and maintain programs to address affordability of and accessibility to healthcare services	<p>Develop programs to address current and projected healthcare workforce shortages</p> <p>Support continuing education to ensure a well-trained healthcare workforce is in place</p>	<p>Promote access to clinical trials</p> <p>Disseminate knowledge of clinical discoveries to the medical science community, our communities, and within our system</p> <p>Engage and support community partners in conducting research in response to identified healthcare needs</p>

These guiding principles were utilized in the development of the Implementation Plan for each of the priority health needs discussed below.

## Priority health need: Access to healthcare services

### Introduction and need overview

A person's ability to access health services has a profound effect on every aspect of one's health yet, according to Healthy People 2020 (HP 2020), almost one in four Americans do not have a PCP or health center where they can receive regular medical services. Approximately one in five Americans (children and adults under age 65) do not have medical insurance. People without medical insurance are more likely to lack a usual source of medical care, such as a PCP, and are more likely to skip routine medical care due to costs, increasing their risk for serious and disabling health conditions. When they do access health services, they are often burdened with large medical bills and out-of-pocket expenses. Increasing access to both routine medical care and medical insurance are vital steps in improving the health of all Americans. Access to health services affects a person's health and well-being.

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#### Regular and reliable access to health services can:

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Prevent disease and disability	Reduce the likelihood of premature (early) death
Detect and treat illnesses or other health conditions	Increase life expectancy (HP 2020, Leading Health Indicators)
Increase quality of life	

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The MRH CHNA includes data from two surveys. The comprehensive assessment data presented below is reflective of all individuals within the MRH service area. A second survey—the Supplemental Disability Survey—was conducted among individuals with disabilities who received health care from the MRH network within the past two years.

### Comprehensive assessment data

A total of 5.4 percent of survey respondents age 18-64 reported having no healthcare coverage, as compared to 10.7 percent statewide and 13.7 percent nationwide. Major payor sources for MRH patients included Medicare and HMO/PPO.

### Barriers to healthcare access

A total of 35.6 percent of survey respondents reported some type of difficulty or delay in obtaining services in the past year. Women, individuals ages 40 to 64 years, low income, Hispanic and Asian individuals reported the most difficulties accessing healthcare services.

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#### Notable barriers to healthcare access included:

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Inconvenient office hours	Cost of prescriptions
Difficulty obtaining a provider appointment	Difficulty finding a doctor
Cost of a doctor visit	Lack of transportation

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A total of 18.4 percent of key informants noted access to healthcare services as a major problem in the community citing reasons such as access to care for the undocumented, system issues such as Medicare/Medicaid managed care plans and high deductibles, social determinants such as housing, education/literacy levels and language/cultural barriers. Key informants also identified mental health care, specialty care and substance abuse treatment as the most difficult to access in the community.

### Primary care services

Due to the collaborative efforts of Northwestern Medicine Central DuPage Hospital, MRH, the DuPage County Health Department and multiple health/human service organizations, service area residents have access to significantly more PCPs than throughout the state or nation. DuPage County provides 145.6 PCPs per 100,000 population, as compared to between 80 and 95 PCPs at the state and national level.

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#### Additionally:

80.2 percent of survey respondents acknowledged a specific source of primary care	71.8 percent have visited their healthcare provider for a checkup in the past year
71.1 percent utilize their doctor’s office for medical care	84.6 percent of respondent’s children have visited a PCP for a routine checkup in the past year

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A total of 5.5 percent of survey respondents acknowledged use of the emergency room more than once in the past year due to:

Emergency situations (51.6 percent)	Access problems (3.4 percent)
Weekend/after-hours situations (22.4 percent)	

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### Supplemental disability survey

As noted previously, a supplemental survey was conducted by MRH to specifically assess the needs of individuals with disabilities in the MRH service area. The goal of the additional survey was to gain input from constituencies who look to MRH for service or partnership and better understand overall health concerns and needs in the community, especially for persons with disabilities and impairments. The surveys were developed and administered by MRH; results were shared with PRC for inclusion in the CHNA.

### Access to health services

A total of 7.7 percent of respondents stated that they were unable to get medical care in the past year. Affordability of prescriptions was of greatest concern to community respondents.

### Health insurance coverage

A total of 48.5 percent of respondents reported Medicare as their primary source of health insurance, followed by health insurance through work/union (23.6 percent).

## **Analysis of access to care concerns**

Social determinants of health include factors such as socioeconomic status, education and employment. These factors significantly affect an individual's ability to access health care. Individuals with minimal or no health insurance are least likely to access health care until their conditions are severe and costly. Lack of routine care and preventive screening may result in poor outcomes and decreased life expectancy. Lack of knowledge regarding how to access affordable health care contributes to limited access to health care. It is incumbent upon healthcare providers to not only provide financial assistance, but it is also critical to develop pathways and safety nets to facilitate access to care. This need becomes even more significant and complex when providing care to disabled individuals.

## **Community assets**

The development and implementation of the DuPage County Access to Health Services Action Plan is led by the DuPage Health Coalition. Formerly known as Access DuPage, the Coalition is a collaborative effort by thousands of individuals and hundreds of organizations in DuPage County to provide access to medical services to the county's low-income, medically uninsured residents. Since the program began in 2001, more than 60,000 DuPage County residents have received high-quality, compassionate health care through Access DuPage. This year, Access DuPage will serve approximately 6,000 members.

Access DuPage represents an exceptional partnership of hospitals, physicians, local government, human services agencies, and community groups working together locally to build an efficient and effective health safety net. Every dollar of direct service provided through Access DuPage is matched by more than ten dollars in donated health care generously provided by every hospital in DuPage County as well as thousands of volunteer physicians and health clinics.

Access DuPage sits within a growing network of health services coordinated by the DuPage Health Coalition. The DuPage Health Coalition also operates the Silver Access Program, which provides financial help to lower income families purchasing health insurance through the Affordable Care Act's Healthcare Marketplace. In early 2017, the DuPage Health Coalition opened the DuPage Dispensary of Hope, a new free pharmacy program in Wheaton, offered in partnership with DuPage County. MRH leadership and staff work collaboratively with the DuPage Health Coalition to promote affordable access to care for all residents of DuPage County.

The DuPage Federation on Human Services Reform is a collaboration of government and key community organizations that identify ways in which local communities can address their human service needs by maximizing their own resources.

## **Existing MRH hospital programs**

Northwestern Memorial Healthcare and its Affiliates, including Marianjoy Rehabilitation Hospital, are committed to meeting the healthcare needs of those within the NMHC community who are unable to pay for medically necessary or emergency care. When needed, NMHC provides medically necessary care free of charge or at discounted rates ("Financial Assistance").

To manage its resources and responsibilities, and to provide financial assistance to as many people as possible, NMHC has established program guidelines for providing financial assistance. However, NMHC will always provide emergency care, regardless of a patient's ability to pay.

### Range of possible interventions

A broad range of interventions exist to address the problem of access to care. The DuPage Health Coalition and the DuPage Federation have coordinated efforts to develop a DuPage Safety Net Plan for Health and Human Services.

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Major goals of this joint strategic plan include:

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Comprehensive assessment and enrollment in appropriate services

Timely access to essential human services

Timely access to essential health services

Effective management of the social determinants of health, with an emphasis on poverty

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### Benchmarks

National - HP 2020

#### Goal

Improve access to comprehensive, quality healthcare services.

#### Related objectives:

AHS-1: Increase the proportion of persons with medical insurance.

AHS-3: Increase the proportion of persons with a usual PCP.

AHS-4: Increase the number of practicing PCPs.

AHS-5: Increase the proportion of persons who have a specific source of ongoing care.

AHS-6: Reduce the proportion of persons who are unable to obtain or delay in obtaining necessary medical care, dental care or prescription medicines.

AHS-7: Increase the proportion of persons who receive appropriate evidence-based, clinical preventive services.

### Local - DuPage County Health Department 2015 IPLAN

Outcome Objective 1: Build capacity and access to medical homes

Outcome Objective 2: Enhance access to low-cost prescription medications

Outcome Objective 3: Demonstrate improved health status of the uninsured in DuPage County

## Implementation strategy

**Goal:** Marianjoy will continue to support national and local efforts to increase access to care by providing leadership, investing resources and working collaboratively with other community organizations throughout the county. In conjunction with DuPage Health Coalition's Access DuPage program and independent medical providers, MRH will support the maintenance of an efficient and effective continuum of care for individuals with disabilities, offering inpatient and outpatient rehabilitation services to those in need. Additionally, Marianjoy will offer a comprehensive financial assistance program to patients who are unable to afford the cost of necessary medical care. Marianjoy will also seek to engage and maintain a multicultural workforce of PCPs, specialists, mid-level practitioners, registered professional nurses and other specialties committed to working in an evidence-based practice setting by providing a clinical site for educational experiences.

Strategy	Resources/Programs/ Partnerships	Anticipated Impact/Metrics	Evaluation Plan
1. MRH will offer financial assistance policies that are easily accessible, user-friendly, respectful and meet all regulatory requirements.	1. Leadership and staff from MRH; patient financial assistance program	1a. MRH will conduct an internal audit of financial assistance policies, procedures and application materials annually.  1b. MRH will conduct an internal audit of signage, website and compliance with all regulatory requirements.	1a-b. MRH staff will report annually to leadership the results of an internal review of website, policies, forms and signage to ensure accessibility, user-friendliness and compliance with all regulatory requirements.
2. MRH will continue to provide medically necessary inpatient and outpatient hospital services to uninsured and underinsured patients in accordance with the hospital's financial assistance policies.	2. Leadership and staff from MRH; patient financial assistance program	2. MRH will promote access to needed healthcare services by offering financial assistance to qualified individuals who are unable to afford the cost of their medical care.	2a. MRH staff will track and report the number of individuals rendered financial assistance annually.  2b. MRH staff will track and report the amount of financial assistance rendered annually.
3. MRH will continue to address the needs of individuals identified as potentially eligible for public health insurance by facilitating their application for government-sponsored healthcare coverage via a trained in-person staff who will assist in facilitating enrollment.	3. MRH patient financial assistance program	3. MRH staff will assess and refer potentially eligible patients for public benefits.	3. MRH financial services staff will report an annual quantitative summary of the number of patients referred and costs related to the provision of these services.



## Implementation strategy (continued)

Strategy	Resources/Programs/Partnerships	Anticipated Impact/Metrics	Evaluation Plan
4. MRH leadership will continue representation on various task forces and work groups related to the collaborative work occurring on access to care issues.	4. MRH leadership, DuPage Health Coalition, DuPage Federation, Health Safety Net Plan partners	4. MRH will create and/or participate in programs and initiatives focused on meeting the IPLAN and Safety Net objectives to promote access to care.	4. MRH will prepare an annual summary of activities and work completed towards responding to this strategy.
5. MRH will provide low-cost transportation to outpatient appointments.	5. MRH staff	5. Patient access to care will be promoted by addressing and responding to transportation barriers.	5. MRH staff will track and report the number of rides provided annually, along with the percent of cancelled appointments due to transportation barriers.
6. MRH will continue to provide free inpatient and outpatient care to all Access DuPage clients in accordance with presumptive eligibility and existing MRH financial assistance policies.	6. MRH and Access DuPage	6. Low-income residents will receive needed services in a timely, coordinated and efficient manner.	6a. MRH staff will track and report charges related to the provision of free inpatient care rendered to Access DuPage clients. 6b. MRH staff will track and report charges related to the provision of free outpatient care and other services rendered to Access DuPage clients.
7. MRH will serve as a training center for physicians, nursing and other allied health professions.	7. MRH staff and local nursing and allied health professions training programs	7. Serving as a training center ensures the provision of a culturally sensitive, competent workforce in the future.	7. MRH staff will track and report a quantitative summary detailing number and types of internships and staff's time commitment.
8. MRH will provide trained professional healthcare interpreters and offer language assistance programs.	8. MRH staff and phone line language assistance services	8. Utilization of trained professional healthcare interpreters decreases barriers to care, promotes access and ensure high-quality care.	8. MRH staff will track and report a quantitative summary detailing types of interpretive services and related costs.

## Priority health need: Chronic disease management and rehabilitation

### Introduction and need overview

Together, cardiovascular disease (heart disease and stroke) and cancers accounted for more than one-half of all deaths in DuPage County. An individual can develop a disabling impairment or chronic condition at any point in life.

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According to HP 2020, people with disabilities are more likely to:

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Experience difficulties or delays in getting the health care needed	Use tobacco
Not have had an annual dental exam	Be overweight or obese
Not have had a mammogram in the past two years	Have high blood pressure
Not have had a PAP test within the past three years	Experience symptoms of psychological distress
Not engage in fitness activities	Receive less social-emotional support
	Have lower employment rates

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Further, there are many social and physical factors that influence the health of people with disabilities. The following three areas for public health action have been identified, using the International Classification of Functioning, Disability, and Health (ICF) and the three World Health Organization (WHO) principles of action for addressing health determinants.

Improve the conditions of daily life by encouraging communities to be accessible so all can live in, move through, and interact with their environment; encouraging community living; and removing barriers in the environment using both physical universal design concepts and operational policy shifts.

Address the inequitable distribution of resources among people with disabilities and those without disabilities by increasing appropriate health care for people with disabilities; education and work opportunities; social participation; and access to needed technologies and assistive supports.

Expand the knowledge base and raise awareness about determinants of health for people with disabilities by increasing the inclusion of people with disabilities in public health data collection efforts across the lifespan; the inclusion of people with disabilities in health promotion activities; and the expansion of disability and health training opportunities for public health and healthcare professionals.

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## Comprehensive assessment data

### Cardiovascular disease

Heart disease is the leading cause of death in the United States, with stroke following as the third leading cause. Together, heart disease and stroke are among the most widespread, costly and debilitating health problems facing our nation today, accounting for more than \$500 billion in healthcare expenditures. HP 2020 stresses that the risk of Americans developing and dying from cardiovascular disease would be substantially reduced if changes were made in diet, physical activity and management of high blood pressure, cholesterol and smoking. Fortunately, they are most preventable especially if intervention is provided across the lifespan of the disease—from early education, prevention and screening to early diagnosis, prompt treatment and comprehensive aftercare. In planning responses to the priority needs of their communities, hospitals can positively impact the health burdens of all chronic diseases by addressing the disease across the continuum of its lifespan.

Together, cardiovascular disease (heart disease and stroke) accounted for 27.9 percent of all deaths in DuPage County.

A total of 6.2 percent of survey respondents acknowledged having been told by their healthcare provider that they either had heart disease or had a stroke - trending similar to 2012 and 2015 rates.

A total of 33.4 percent of adults reported being told at some point that their blood pressure was high, exceeding the HP 2020 target of 26.9 percent or lower. This finding represented an increase from 32.7 percent in the 2015 MRH CHNA.

Among adults with multiple high blood pressure readings, 83.0 percent reported taking action to control their levels.

A total of 36.5 percent of adults reported a diagnosis of high cholesterol. This represents a notable increase from 34.3 percent in our 2015 assessment and an HP 2020 target of 13.5 percent or lower.

Among adults with self-reported high blood cholesterol readings, 81.3 percent reported taking action to control their levels.

Regarding total risk of cardiovascular disease, 83.6 percent of respondents reported one or more risk factors including overweight, smoking cigarettes, physical inactivity, high blood pressure or high cholesterol levels. Risk and/or behaviors were highest in:

- Men (88.4 percent)
- Individuals 65 years and over (90.9 percent)
- Low-income individuals (93.8 percent)
- Hispanics (98 percent)

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Heart disease and stroke were rated as a major (31.3 percent) and moderate (34.4 percent) problem by key informants, citing concerns such as:

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General wellness, physical activity and nutrition being ignored

Stress

Fast-paced lives

Diet

Genetics

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## Other potentially disabling conditions

### Arthritis

There are more than 100 types of arthritis, and it commonly occurs in combination with other chronic conditions such as diabetes, heart disease and obesity. Interventions to treat pain and reduce functional limitations enable people with these chronic conditions to be more physically active. According to HP 2020, arthritis affects one in five adults and continues to be the most common cause of disability, costing in excess of \$128 billion annually. Interventions include increased physical activity, self-management, and weight loss in overweight/obese adults. When queried regarding arthritis, 26.6 percent of survey respondents age 50 and over indicated having been diagnosed with the condition, as compared to 38.3 percent nationwide.

### Osteoporosis

Osteoporosis is a disease marked by reduced bone strength leading to an increased risk of fractures. According to HP 2020, an estimated 5.3 million people age 50 and over in the U.S. have osteoporosis. When queried regarding osteoporosis, 7.7 percent of survey respondents age 50 and over indicated having been diagnosed with the condition, as compared to 9.4 percent nationwide.

### Chronic back pain

HP 2020 reported that 80 percent of Americans experience low back pain in their lifetime. It is estimated that 15-20 percent develop protracted back pain, 2-8 percent have chronic back pain, 3-4 percent of the population is temporarily disabled due to back pain, and 1 percent of the working-age population is disabled completely and permanently as the result of low back pain. Americans spend at least \$50 billion annually on low back pain. Low back pain is the 2nd leading cause of lost work time, 3rd most common reason to undergo a surgical procedure, 5th most frequent cause of hospitalization. When queried regarding chronic back pain, 15.4 percent of survey respondents age 50 and over indicated having been diagnosed with the condition, as compared to 22.9 percent nationwide.

Among key informants, 43.3 percent perceived arthritis, osteoporosis and chronic back pain as problems in the community, citing lack of nutrition and education as key contributing factors.

### Vision impairment

Vision is an essential part of everyday life and affects how Americans of all ages learn, communicate, work, play and interact with the world. Yet, according to HP 2020, millions of Americans live with visual impairment, and many more remain at risk for eye disease and preventable eye injury. When queried regarding the prevalence of blindness/visual impairment, 3.5 percent of survey respondents indicated having been diagnosed with the condition, as compared to 3.4 percent statewide and 9.1 percent nationwide.

### Hearing and other sensory impairment

An impaired ability to communicate with others or maintain good balance can lead to social isolation, unmet health needs, and limited success in school or on the job. Biological causes of hearing loss and other sensory or communication disorders include genetics, viral or bacterial infections, sensitivity to certain drugs, injury or aging. HP 2020 predicts that as the nation's population ages, and survival rates for medically fragile infants and for people with severe injuries and acquired diseases improve, the prevalence of sensory and communication disorders is expected to rise. When queried regarding the prevalence of hearing/other sensory impairments, 2.7 percent of survey respondents indicated having been diagnosed with the condition, as compared to 10.5 percent nationwide.

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Among key informants, 26.7 percent rated vision and hearing as a moderate problem in the community, citing concerns such as:

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Many social service clients have hearing and vision issues.

Many refugees have undiagnosed hearing and vision deficits.

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### Supplemental disability survey data

#### Transportation

A majority of respondents (72.5 percent) reported that transportation was not a problem. However, 29.6 percent of respondents acknowledged difficulty in the use of public transportation.

#### Employment

A total of 42.3 percent of respondents reported being retired or not working. Additionally, respondents noted lack of jobs that accommodate disabilities was a primary reason for unemployment.

#### Housing

A total of 11.5 percent of individuals reported currently lacking housing that meets their needs. Cost was reported as the main factor. When asked about independent living, 88.2 percent of respondents reported that their homes allow for independent living.

#### Re-education

A total of only 4.4 percent of respondents are pursuing an education. Additionally, 44.3 percent of respondents disagree that there are enough student programs that focus on job placement.

### Analysis of chronic disease concerns and impact on the healthcare system

Chronic conditions are responsible for 70 percent of deaths and 75 percent of healthcare spending. Chronic disease is a leading cause of disability and lost income. Chronic disease disproportionately affects low-income and minority populations. In DuPage County, 25.8 percent of adults have been told they have high blood pressure; 31.9 percent have been told they have a high cholesterol reading; 25.6 percent are obese; and diabetes is the eighth leading cause of death.

It is widely recognized by public health experts that one of the most effective methods of addressing chronic disease concerns is via the use of the Interventions Model of care, which considers the evolution of chronic disease across its lifespan.

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When addressing the problem of chronic disease, there are three points of intervention:

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**Primary** intervention involves the provision of disease prevention and health promotion strategies focused on the prevention or delay of onset of the disease. This level of intervention focuses heavily on education and prevention.

**Secondary** intervention involves the strategies related to regular screening, and early diagnosis and prompt treatment of disease to limit or minimize its associated disability.

**Tertiary** intervention involves the provision of services to assist individuals with a chronic disease to live and function at an optimum state of wellness. This level of intervention focuses heavily on chronic disease management and rehabilitation.

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The successful management of chronic disease is dependent upon timely access to health care—especially primary care. Root causes and social determinants such as poverty, limited income, lack of affordable healthcare insurance, illiteracy and inadequate education frequently prevent individuals from seeking routine primary care, which provides health education and screening. These same determinants also provide barriers to receiving sick or urgent care and adequate chronic disease management, thereby exacerbating the chronic disease and increasing the costs related to care and decreasing quality of life. These challenges, coupled with the need to respond to the unique needs of the disabled, challenge healthcare providers to also address factors that pay special attention to chronic disease management and assist clients to return to an optimum state of wellness.

The return to an optimum state of wellness is dependent upon an individual's ability to attain an optimum state of health, coupled with being able to adapt to his/her environment. Factors such as transportation, employment, housing and education (job training) all contribute to an individual's ability to successfully adapt after a life-changing, debilitating disease.

### **Community assets**

Programs described in the previous section of this document that address access to care are vital to the management of chronic disease. Programs such as Access DuPage and Engage DuPage ensure access to routine health care, screening, PCPs, specialists, medications and medical homes.

### **Existing hospital programs**

MRH offers a comprehensive financial assistance program to individuals unable to afford the cost of their acute medical care. In addition, the hospital offers a comprehensive array of community education programing and services to support both primary and tertiary interventions.

### **Range of possible interventions**

A broad range of intervention exists to address the issue of chronic disease including health education, health screenings, supporting linkages to medical homes and chronic disease management programs.

### **Benchmarks**

National - HP 2020

### **Diabetes goal**

Reduce the disease burden of diabetes mellitus (DM) and improve the quality of life for all persons who have, or are at risk for DM.

**Related objectives:**

D-2: Reduce the diabetes death rate

D-5: Improve glycemic control among persons with diabetes

D-16: Increase prevention behaviors in persons at risk for diabetes - including weight loss (D-16.2)

**Heart disease goal**

Improve cardiovascular health and quality of life through prevention, detection, and treatment of risk factors for heart attack and stroke; early identification and treatment of heart attacks and strokes; prevention of repeat cardiovascular events; and reduction in deaths from cardiovascular disease.

**Related objectives:**

HDS-1: Increase overall cardiovascular health in the U.S. population.

HDS-5: Reduce the proportion of persons in the population with hypertension.

HDS-16: Increase the proportion of adults aged 20 years and older who are aware of the symptoms of and how to respond to a heart attack.

HDS-17: Increase the proportion of adults aged 20 years and older who are aware of the symptoms of and how to respond to a stroke.

HDS-24: Reduce hospitalizations of older adults with heart failure as the principal diagnosis.

**Nutrition and weight status goal**

Promote health and reduce chronic disease risk through the consumption of healthful diets and achievement and maintenance of healthy body weights.

**Related objectives:**

NWS-2: Increase the proportion of schools that offer nutritious foods and beverages outside of school meals

NWS-8: Increase the proportion of adults who are at a healthy weight

NWS-9: Reduce the proportion of adults who are obese

NWS-13: Reduce household food insecurity and in doing so reduce hunger

**Local - DuPage County Health Department 2015 IPLAN:**

Chronic care-related objectives are woven into the DuPage County IPLAN priority objectives and are not specifically referenced as objectives.

## Implementation strategy

**Goal:** In support of national objectives to reduce the prevalence and burden of chronic disease, Marianjoy will continue to provide community education related to chronic disease in the areas of evidence-based primary interventions (disease prevention, health promotion), evidenced-based secondary interventions (screening) and evidenced-based tertiary interventions (education to individuals affected with a chronic disease in an effort to promote an optimum state of individual wellness). Marianjoy will also continue to bring leading-edge, chronic disease management and rehabilitative care to all individuals regardless of ability to pay.

Strategy	Resources/Programs/ Partnerships	Anticipated Impact/Metrics	Evaluation Plan
<p>1. MRH will offer evidence-based community health and wellness programming in the areas of chronic disease management and rehabilitation, overcoming the limitations of chronic disabilities, including but not limited to the following topics:</p> <ul style="list-style-type: none"> <li>• Overcoming the limitations of spasticity</li> <li>• Relaxation and meditation</li> <li>• Benefits of a post-stroke exercise program</li> <li>• Management and treatment of Parkinson’s disease</li> <li>• Life after an amputation</li> <li>• Behavioral coaching for pediatric patients</li> <li>• Fall risk assessment, balance, and falls</li> <li>• Understanding pediatric spasticity</li> </ul>	<p>1. MRH staff, physicians and clinicians</p> <p>Program venues include clinician-led educational offerings, self-help groups and rehabilitation services programs.</p>	<p>1. Programs provided will increase knowledge related to chronic disease management to increase self-management and improve patient outcomes.</p>	<p>1a. MRH staff will develop course objectives, learner outcomes, and implement tools to measure learned behavior and planned change.</p> <p>1b. MRH will monitor and track the program outcomes, as well as the number of classes offered and individuals attending.</p>
<p>2. MRH will provide access to the Emerging Fitness Center, including specialty group classes for individuals with specific exercise needs.</p>	<p>2. Marianjoy Aquatic and Fitness Center</p>	<p>2. Access to physical activity programs will increase activity levels, decrease risk of obesity and enhance quality of life for participants.</p>	<p>2. MRH staff will track and annually report participant volume and related outcomes.</p>



## Implementation strategy (continued)

Strategy	Resources/Programs/ Partnerships	Anticipated Impact/Metrics	Evaluation Plan
<p>3. MRH will offer evidence-based support programs in the areas of chronic disease management programmatic venues including, but not limited to, self-help and support groups.</p>	<p>3. Support group facilitators and MRH staff</p>	<p>3. Attendees will complete program evaluations validating that participant outcomes have been met.</p>	<p>3. MRH staff will track the number of programs offered and the number of attendees.</p> <p>MRH staff will develop group objectives and learner outcomes, while measuring learned behavior and planned change.</p> <p>MRH staff will work collaboratively with self-help and support group community contacts to ensure that best practices outlined assess participant impact of programming.</p>

## Priority health need: Promoting independence in individuals with disabilities

### Introduction and need overview

Individuals with disabilities represent 18.7% (about 56.7 million people) of the U.S. population, per HP 2020. Disability is part of human existence, occurring at any point in life, with conditions ranging from mild to severe even among those with the same diagnosis. A diagnosis of impairment or disabling condition does not define individuals, their talents and abilities, or health behaviors and health status. Consistent with the WHO's model of social determinants of health, HP 2020 recognizes that what defines individuals with disabilities, their abilities, and their health outcomes more often depends on their community, including social and environmental circumstances. To be healthy, all individuals with or without disabilities, must have opportunities to take part in meaningful daily activities that add to their growth, development, fulfillment and community contribution. This principle is central to all objectives outlined in the care of individuals with disabilities. Meeting the HP 2020 disability and health objectives over the decade will require that all public health programs develop and implement ways to include individuals with disabilities in program activities.

### Activity limitations

A total of 12.0 percent of survey respondents identified a limitation in activities in some way due to a physical, mental or emotional problem. Limitations were higher in women (13.6 percent) than men (10.3 percent) and highest among the 65+ year range (14.7 percent). Additionally, the prevalence was higher in low-income individuals (27.6 percent) and Hispanics (21.5 percent). Individual activity limitation indicators included:

- Difficulty walking or climbing stairs

- Difficulty concentrating, remembering or making decisions

- Difficulty doing errands alone

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### Supplemental disability survey

#### Activity limitations

A total of 39.6 percent of respondents required assistance with basic needs. Family members or friends provided the greatest level of assistance (50 percent).

#### Disability prevalence

Mobility/physical disability was the most prevalent health condition reported (61.6 percent). It was also noted that only 15.7 percent of respondents were born with their disability, and a total of 60 percent rated their disability as moderate to somewhat severe.

#### Supportive/special equipment

When questioned regarding the need for special equipment that was not already owned, 18.4 percent of respondents acknowledged the need for additional equipment.

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Barriers to obtaining equipment included:

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Affordability

Don't know where to get it

Never tried to get it

Declined by insurance not comfortable using it

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### **Analysis of issues related to promotion of independence in individuals with disabilities**

There are many factors that determine or influence one's health. HP 2020 organizes the social determinants of health around five key domains: (1) economic stability, (2) education, (3) health and health care, (4) neighborhood and built environment, and (5) social and community context. Within each of these domains, compared to individuals without disabilities, individuals with disabilities are more likely to experience challenges finding a job, being included in regular educational classrooms or attending college, receiving preventive healthcare services, being able to visit homes in the neighborhood, using fitness facilities, using health information technology and obtaining sufficient social-emotional support.

Last year, 3,012 patients with chronic disabling conditions were discharged home from MRH, thus supporting the need for comprehensive discharge planning and follow-up services that ensure the successful transition of individuals returning to the community.

### **Community assets**

MRH works closely with its community partners to promote independence of disabled individuals. Partners include, but are not limited to, the DuPage County Health Department, DuPage Federation on Human Service Reform, local school districts, Office of the Secretary of State, DuPage Workforce Board and AbilityLinks, a national, web-based community where qualified job seekers with disabilities gain access to valuable networking opportunities.

### **Existing MRH hospital programs**

MRH offers a variety of programs, both through inpatient and outpatient services, to support and promote the independence of disabled individuals. These services will be outlined further under the Strategy section in this document.

### **Range of possible interventions**

A broad range of possible interventions exists to support and promote the independence of disabled individuals, including the following WHO's principles of action to achieve health equity among individuals with disabilities.

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These are achieved through:

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1. Improving the conditions of daily life by:
    - Encouraging communities to be accessible so all can live in, move through and interact with their environment
    - Encouraging community living
    - Removing barriers in the environment using both physical universal design concepts and operational policy shifts
  2. Addressing the inequitable distribution of resources among individuals with disabilities and those without disabilities by increasing:
    - Appropriate health care for individuals with disabilities
    - Education and work opportunities
    - Social participation
    - Access to needed technologies and assistive supports
  3. Expanding the knowledge base and raising awareness about determinants of health for individuals with disabilities by increasing:
    - The inclusion of individuals with disabilities in public health data collection efforts across the lifespan
    - The inclusion of individuals with disabilities in health promotion activities
    - The expansion of disability and health training opportunities for public health and healthcare professionals
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## Benchmarks

National - HP 2020

### Goal

Maximize health, prevent chronic disease, improve social and environmental living conditions, and promote full community participation, choice, health equity, and quality of life among individuals with disabilities of all ages

### Related objectives:

- DH-4: Reduce the proportion of adults with disabilities aged 18 years and older who experience delays in receiving primary and periodic preventive care due to specific barriers.
- DH-8: Reduce the proportion of adults with disabilities aged 18 and older who experience physical or program barriers that limit or prevent them from using available local health and wellness programs.
- DH-11: Increase the proportion of all occupied homes and residential buildings that have visitable features.
- DH-13: Increase the proportion of adults with disabilities aged 18 years and older who participate in leisure, social, religious or community activities.
- DH-14: Increase the proportion of children and youth with disabilities who spend at least 80 percent of their time in regular education programs.
- DH-16: Increase employment among people with disabilities.

**Local - DuPage County Health Department 2015 IPLAN:**

Promoting independence in individuals with disabilities were not specifically referenced as objectives.

**Implementation strategy**

**Goal:** In support of national objectives to promote independence individuals with disabilities, Marianjoy will offer programming to support and promote independence among disabled individuals.

Strategy	Resources/Programs/ Partnerships	Anticipated Impact/Metrics	Evaluation Plan
<p>1. MRH will provide aquatic programs in a group class setting for adults and children.</p>	<p>1. Aquatic Therapy Center</p>	<p>1. Individuals are evaluated by a therapist to ensure that aquatics are a safe and appropriate intervention, and individual goals are set. Benefits of warm-water aquatic therapy include:</p> <ul style="list-style-type: none"> <li>• Post-operative pain reduction</li> <li>• Joint pain reduction</li> <li>• Low-impact resistive exercises</li> <li>• Spasticity reduction</li> <li>• Buoyant support for improved balance</li> <li>• Graded-depth, weight-bearing exercises</li> </ul>	<p>1. Participants will be evaluated and assessed for improvement toward their individual goals. MRH staff will annually report outcomes.</p>
<p>2. MRH will provide services through the Tellabs Center for Neurorehabilitation and Neuroplasticity, an innovative rehab technology designed to support a wide range of patient conditions which benefit from the creation of lasting neuro-pathway changes derived through repetition.</p>	<p>2. Tellabs Center for Neurorehabilitation and Neuroplasticity</p>	<p>2. This program assists patients in reorganizing damaged neural connections and enhances overall functional ability.</p>	<p>2. The Tellabs Center will annually report the number of patients served as well as overall progress toward patient goals.</p>

## Implementation strategy (continued)

Strategy	Resources/Programs/ Partnerships	Anticipated Impact/Metrics	Evaluation Plan
<p>3. The Marianjoy Driver Rehabilitation Program will work with clients utilizing specialized equipment to promote the ability to drive for individuals with disabilities. Participants are provided with a comprehensive appraisal of a person's ability to drive safely. The Marianjoy Driver Rehabilitation Program also provides behind-the-wheel training for students that qualify, and will assist in obtaining the requirements for a driver's license.</p>	<p>3. Marianjoy Driver Rehabilitation Program</p>	<p>3. This program promotes independence in individuals with disability by identifying ways that a vehicle can be adapted to meet their needs and assist them in obtaining a driver's license.</p>	<p>3. The Marianjoy Driver Rehabilitation Program will annually track and report the number of students served in the program and the number that were able to obtain their driver's license.</p>
<p>4. MRH will provide the GoBabyGo program, where therapists and engineers collaborate to retrofit powered toy vehicles to meet the needs of children with disabilities.</p>	<p>4. GoBabyGo program</p>	<p>4. This program enhances mobility and socialization for children with disabilities.</p>	<p>4. The GoBabyGo team will annually track and report the number of patients served in the program.</p>
<p>5. MRH will offer evidence-based community health and wellness programming in the areas of chronic disease management and rehabilitation, overcoming the limitations of chronic disabilities, including but not limited to the following topics:</p> <ul style="list-style-type: none"> <li>• Life after an amputation</li> </ul>	<p>5. Community outreach programming</p>	<p>5. Programs provided will increase knowledge about methods of chronic disease management to increase self-management and improve patient outcomes.</p>	<p>5a. MRH staff will develop course objectives, learner outcomes and implement tools to measure learned behavior and planned change.</p> <p>5b. MRH staff will monitor and track the program outcomes, as well as the number of classes offered and individuals attending.</p>

## Implementation strategy (continued)

Strategy	Resources/Programs/ Partnerships	Anticipated Impact/Metrics	Evaluation Plan
<p>6. MRH will offer evidence-based support programs in the areas of promoting independence in programmatic venues including, but not limited to, self-help and support groups.</p>	<p>6. Support groups</p>	<p>6. Attendees will complete program evaluations validating that participant outcomes have been met.</p>	<p>6a. MRH staff will track the number of programs offered and the number of attendees.</p> <p>6b. MRH staff will develop group objectives and learner outcomes, while measuring learned behavior and planned change.</p> <p>6c. MRH staff will work collaboratively with self-help and support group community contacts to ensure that best practices outlined assess participant impact of programming.</p>

## Priority health need: Injury prevention

### Introduction and need overview

Injuries and violence are widespread in society. HP 2020 notes that both unintentional injuries and those caused by acts of violence are among the top 15 killers for Americans of all ages. Poisoning (including accidental drug overdose), falls, motor vehicle accidents and suffocation accounted for the majority of accidental deaths in the hospital's service area in 2015. While considered "accidental," most events are predictable and preventable.

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Beyond their immediate health consequences, injuries and violence have a significant impact on the well-being of the community by contributing to:

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Premature death	High medical costs
Disability	Lost productivity
Poor mental health	

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The leading causes of accidental death in DuPage County between 2013 and 2015 were:

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Poisoning/noxious substances (37.8 percent)	Motor vehicle accidents (16.6 percent)
Falls (27.4 percent)	Suffocation (5.3 percent)

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Between 2013 and 2015, the average annual age-adjusted motor vehicle crash mortality rate was 4.0 per 100,000 residents in DuPage County – notably below state and national rates and significantly below the HP 2020 target of 12.4 or lower.

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Additional survey data noted:

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Among survey respondents, 90.4 percent reported "always" wearing a seat belt when driving or riding in a vehicle, and 92.5 percent of parents reported their child "always" wear a seat belt.

Among MRH service area children, 43.2 percent were reported to "always" wear a helmet when riding a bicycle. This is modestly lower than the 2015 report of 45.1 percent.

The annual average age-adjusted homicide rate was 0.9 deaths per 100,000 residents in DuPage County, notably below state and national rates.



Violent crimes were reported at a rate of 86.5 crimes per 100,000 residents, well below regional, state and national rates. Among DuPage County residents, 1.1 percent of survey respondents acknowledged having been a victim of a violent crime within the past five years.

Additionally, 8.8 percent of survey respondents reported having been hit, slapped or hurt in any way by an intimate partner. While this was lower than the U.S. rate of 14.2 percent, it was an increase from the 2015 assessment of 7.4 percent.

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Injury and violence were rated as major (6.3 percent) and moderate (31.3 percent) problems in the community, with one key informant noting that many of their clients are victims of violence.

### **Analysis of the issues related to injury prevention**

As noted in HP 2020, beyond their immediate health consequences, injuries and violence have a significant impact on the well-being of Americans by contributing to:

Premature death	Poor mental health
Years of potential life lost	High medical costs
Disability and disability-adjusted-life-years lost	Lost productivity

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The effects of injuries and violence extend beyond the injured person or victim of violence to family members, friends, coworkers, employers and communities. Numerous social determinants/ contributing factors, such as those discussed below, can affect the risk of unintentional injury and violence.

### **Individual behaviors**

The choices people make about individual behaviors, such as alcohol and drug use, or risk-taking, are often connected with factors in the social and physical environment and can increase injuries.

### **Physical environment**

The physical environment, both in the home and community, can affect the rate of injuries related to falls, fires and burns, road traffic injuries, drowning and violence.

### **Access to services**

Access to health services, such as systems created for injury-related care, ranging from prehospital and acute care to rehabilitation, can reduce the consequences of injuries, including death and long-term disability.

## Social environment

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The social environment has a notable influence on the risk for injury and violence through:

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Individual social experiences (i.e., social norms, education, victimization history)

Community environment (i.e., cohesion in schools, neighborhoods and communities)

Social relationships (i.e., parental monitoring and supervision of youth, peer group associations, family interactions)

Societal-level factors (i.e., cultural beliefs, attitudes, incentives and disincentives, laws and regulations)

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## Community assets

MRH works closely with its community partners to address the issue of injury prevention. Partners include, but are not limited to, the DuPage County Health Department, Northwestern Memorial Central DuPage Hospital and local school districts.

## Existing MRH hospital programs

MRH offers a variety of programs, both through inpatient and outpatient services to address injury prevention. These services will be outlined further under the Strategy section in this document.

## Range of possible interventions

HP 2020 stresses the importance of interventions that address the social and physical factors identified above as having the potential to prevent unintentional injuries and violence.

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Efforts to prevent unintentional injury may focus on:

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Modifications of the environment

Education and behavior change

Improvements in product safety

Technology and engineering

Legislation and enforcement

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In addition, programs such as bicycle helmet safety and education along with car seat safety and injury prevention programs are vital to the prevention of traumatic brain and motor vehicle injuries.

## Benchmarks

National - HP 2020

## **Goal**

Prevent unintentional injuries and violence, and reduce their consequences

### **Related objectives:**

IVP-1: Reduce fatal and nonfatal injuries.

IVP-2: Reduce fatal and nonfatal traumatic brain injuries.

IVP-11: Reduce unintentional injury deaths.

IVP-13: Reduce motor vehicle crash-related deaths.

IVP-15: Increase use of safety belts.

IVP-16: Increase age-appropriate vehicle restraint system use in children.

VP-22: Increase the proportion of motorcycle operators and passengers using helmets.

### **Local - DuPage County Health Department 2015 IPLAN:**

Injury prevention objectives were not specifically identified within the 2015 IPLAN.

## Implementation strategy

**Goal:** In alignment with HP 2020 objectives, Marianjoy will offer a compendium of injury prevention programs designed to focus on prevention, screening and rehabilitative concerns.

Strategy	Resources/Programs/Partnerships	Anticipated Impact/Metrics	Evaluation Plan
<p>1. MRH will offer evidence-based community health and wellness programming in the areas of chronic disease management and rehabilitation, overcoming the limitations of chronic disabilities, including but not limited to the following topics:</p> <ul style="list-style-type: none"> <li>• Core Yoga to increase strength and balance in individuals with disabilities</li> <li>• Understanding, identifying and preventing running injuries</li> <li>• How aging affects your balance</li> <li>• Therapeutic golf education to prevent repetitive injury</li> <li>• Aphasia Center</li> <li>• Pediatric therapeutic community programs</li> </ul>	1. Community outreach programming	1. Programs provided will increase knowledge about the importance of injury prevention, as well as techniques to prevent injuries.	<p>1a. MRH staff will develop course objectives, learner outcomes, and implement tools to measure learned behavior and planned change.</p> <p>1b. MRH staff will monitor and track the program outcomes, as well as the number of classes offered and individuals attending.</p>
2. MRH will offer the Autistic Drivers program focused on enhancing communication between autistic individuals and first responders	2. Community outreach programming	2. Sessions provided will provide autistic individuals with the skills necessary to respond calmly and communicate effectively during a traffic stop.	2. MRH staff will monitor and track the program outcomes, as well as the number of programs offered and individuals attending.
3. MRH will collaborate with NMCDH to offer evidence-based, community-based injury prevention programming.	3. Community outreach programming and NMCDH	3. Programs provided will increase knowledge about the importance of injury prevention, as well as techniques to prevent injuries.	3. MRH will monitor and track the program outcomes, as well as the number of classes offered and individuals attending.

# Marianjoy Rehabilitation Hospital

part of  
 **Northwestern**  
Medicine

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