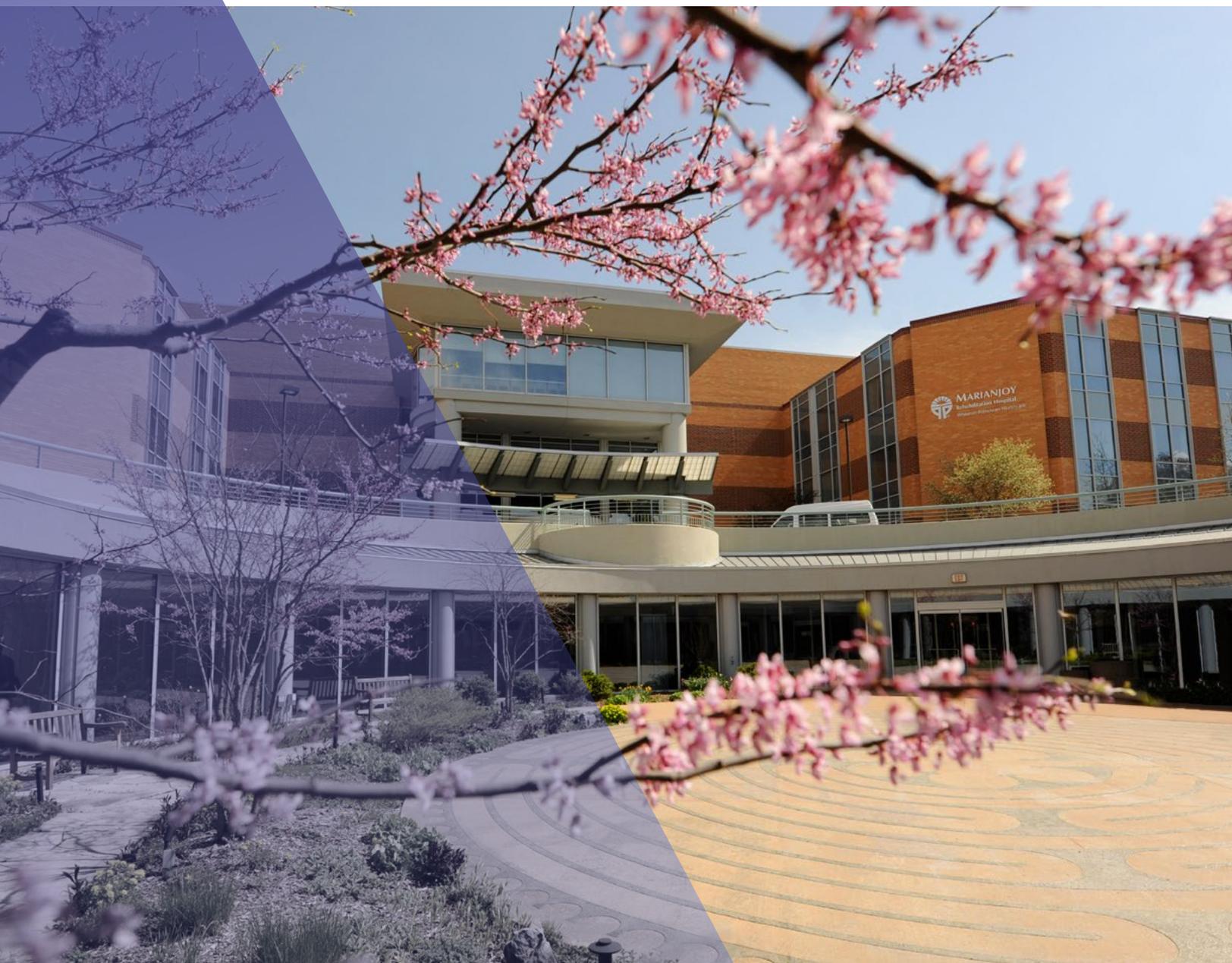


2016 Community Health Needs Assessment Report

Marianjoy Rehabilitation Hospital



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Introduction

Marianjoy Rehabilitation Hospital (Marianjoy), part of Northwestern Medicine, has a rich history of responding to and caring for the rehabilitative needs of residents in the Chicagoland area. The 127-bed facility located in Wheaton, Illinois, provides advanced rehabilitation and care to members of the immediate community. It also serves as a regional destination hospital for individuals in need of state-of-the-art rehabilitative care.

Marianjoy has 100 acute inpatient rehabilitation beds and 27 Medicare-licensed, sub-acute 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 focused on the treatment of stroke, spinal cord injury, brain injury, orthopaedic/musculoskeletal conditions, as well as conditions affecting pediatric patients.

Marianjoy addresses a patient's body, mind and spirit through personalized treatment programs including inpatient, comprehensive outpatient, sub-acute and physician clinics that specialize in rehabilitation medicine.

Marianjoy offers inpatient and outpatient pediatric rehabilitation programs and is the only pain management program in Illinois accredited by the Commission on Accreditation of Rehabilitation Facilities (CARF). The hospital includes a full-size Chartres labyrinth, therapeutic and enabling gardens, a meditation room, a two-story chapel and many other unique features designed to establish Marianjoy as a healing sanctuary.

Additionally, the Marianjoy Assistive Rehabilitation Technology Institute® (MARTI®) at Marianjoy Rehabilitation Hospital offers solutions to the everyday problems of daily living encountered by individuals with disabilities. MARTI consists of seven distinct centers that apply advancements in technology to benefit individuals with disabilities through maximizing functional independence and expanding educational, vocational, recreational and communicative opportunities. The institute offers a specially designed Fitness Center and a specialized Aquatic Therapy Center to support the needs of individuals striving to meet their therapy goals.

To identify the highest-priority health needs of community residents, Marianjoy has completed a comprehensive Community Health Needs Assessment (CHNA), which will be used to guide new and enhance existing efforts to improve the health of our community. As described in detail in this report, the goal of the CHNA was to implement a structured, data-driven approach to determine the health status, behaviors and needs of all residents within the Marianjoy service area, with a special emphasis on those populations served by Marianjoy.

Through this assessment, Marianjoy identified health needs that are prevalent among residents across all socioeconomic groups, races and ethnicities, as well as issues that highlight health disparities or disproportionately impact the medically underserved and uninsured.

Acknowledgments

Marianjoy gratefully acknowledges the participation of a dedicated group of organizations that gave generously of their time and expertise to help conduct and develop this 2016 Community Health Needs Assessment:

Ability Links

Anixter Center

Donka, Inc.

DuPage County Health Department

DuPage Federation on Human Services Reform

DuPage Workforce Board

Edward Hines VA Hospital

Elmhurst CUSD 205

Kensington International

Metropolitan Chicago Healthcare Council

Naperville School District 203

Office of the Secretary of State

People's Resource Center

SPR Consulting

Village of Addison

The Community Health Needs Assessment

Background

A Community Health Needs Assessment (CHNA) represents a systematic, qualitative and quantitative approach to determining the health status, behaviors and needs of residents within a hospital's given service area. Data gathered in a CHNA is utilized to inform decisions and guide efforts to improve community health and wellness, thereby affecting the greatest possible impact on community health status. The information utilized within this CHNA was conducted on behalf of Marianjoy as part of a larger project sponsored by the Metropolitan Chicago Healthcare Council (MCHC) and Professional Research Consultants, Inc. (PRC).

An external steering committee was established to ensure that organizations impacting health in central DuPage County and representing the broad interests of the community were meaningfully engaged in reviewing and interpreting the findings of the CHNA. The committee's purpose was to develop priorities among the identified areas of opportunity and assist in the formation of a collaborative plan to address the highest-priority health needs.

Members include representatives of:

Ability Links	Kensington International
Anixter Center	Metropolitan Chicago Healthcare Council
Donka, Inc.	Naperville School District 203
DuPage County Health Department	Office of the Secretary of State
DuPage Federation on Human Services Reform	People's Resource Center
DuPage Workforce Board	SPR Consulting
Edward Hines VA Hospital	Village of Addison
Elmhurst CUSD 205	

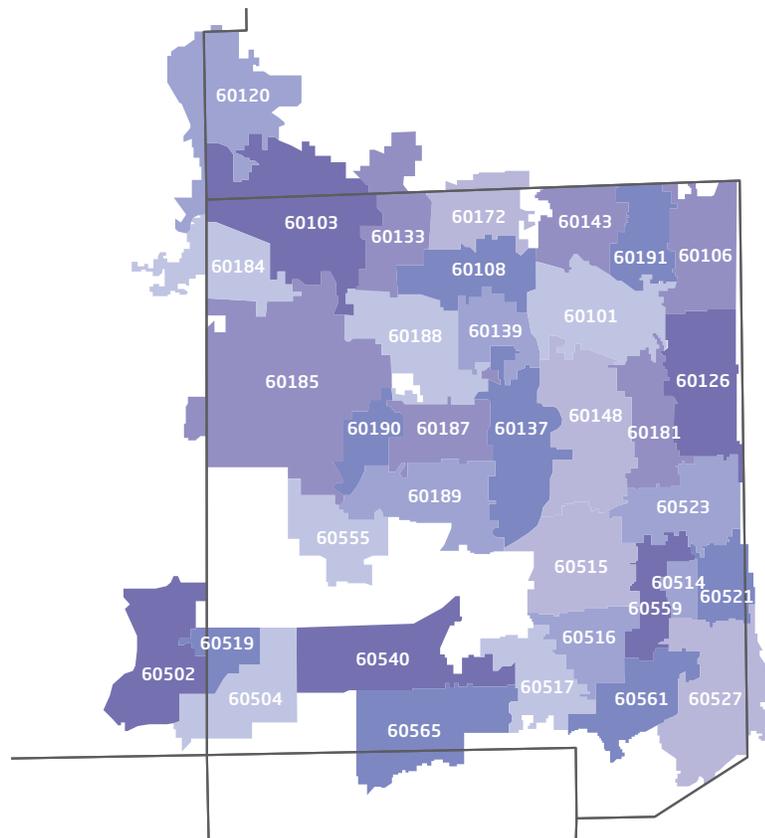
A description of the communities served by these organizations is included in [Appendix A](#).

Marianjoy service area

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

Marianjoy Service Area by ZIP Code

60103	60188	60137	60565	60514	60126
60184	60190	60555	60517	60559	60101
60185	60139	60502	60516	60515	60106
60133	60137	60519	60561	60523	60191
60172	60187	60504	60527	60181	60143
60108	60189	60540	60521	60148	



Goals and objectives

A CHNA provides information so that hospitals may identify health issues of greatest concern among all residents and decide how best to commit resources to those areas, thereby making the greatest possible impact on community health status.

The Marianjoy CHNA conducted in 2016 was performed with a systematic, data-driven approach to determine the health status, behaviors and needs of residents in the Marianjoy service area. This CHNA will serve as a tool toward reaching three related goals:

- 1 Improve residents' health status, increase their life spans and elevate their overall quality of life.** A healthy community is one where its residents suffer little from physical and mental illness and also enjoy a high quality of life.
- 2 Reduce the health disparities among residents.** By gathering demographic information along with health status and behavior data, it will be possible to identify population segments that are most at-risk for various diseases and injuries. Intervention plans aimed at targeting these segments may then be developed to combat some of the socioeconomic factors that have historically had a negative impact on residents' health.
- 3 Increase accessibility to preventive services for all community residents.** More accessible preventive services will prove beneficial in accomplishing the first goal (improving health status, increasing life spans and elevating the quality of life), as well as lowering the costs associated with treating late-stage diseases that result from a lack of preventive care.

Methodology

This assessment incorporates data from both quantitative and qualitative sources.

Quantitative data input includes primary research (Community Health Survey conducted by People's Resource Center [PRC] and Metropolitan Chicago Healthcare Council [MCHC]) and secondary research (vital statistics and other existing health-related data). These quantitative components allow for trending and comparison to benchmark data at the state and national levels.

Qualitative data input includes primary research gathered through an online key informant survey of various community stakeholders. All data is then compared to local, state and national trends in addition to alignment with Healthy People 2020 Objectives for a Healthy Nation.

Community health survey

Survey instrument

The survey instrument used for the PRC-MCHC Community Health Survey was based largely on the Centers for Disease Control and Prevention (CDC) Behavioral Risk Factor Surveillance System, as well as various other public health surveys. Customized questions addressed gaps in indicator data relative to health promotion and disease prevention objectives and other recognized health issues. The final survey instrument was developed by the PRC and MCHC.

Community defined for this assessment

The study area for the survey effort was based on patient origination as defined by the Marianjoy service area, analyzed at the ZIP code level.

Sample approach and design

A precise and carefully executed methodology is critical in asserting the validity of the results gathered in the PRC-MCHC Community Health Survey. Thus, to ensure the best representation of the population surveyed, a telephone interview methodology – one that incorporates both landline and cell phone interviews – was employed. The primary advantages of telephone interviewing are timeliness, efficiency and random-selection capabilities.

The design used for this effort consisted of a sample of 536 individuals age 18 and older in DuPage County. Because this study is part of a larger effort involving multiple regions and hospital service areas, the surveys were distributed among various strata. Once the interviews were completed, they were weighted in proportion to the actual population distribution to appropriately represent DuPage County. Administration of the surveys, data collection and data analysis were conducted by PRC. For statistical purposes, the maximum rate of error associated with a sample size of 536 respondents is +/- 4.2 percent at the 95 percent level of confidence.

Sample characteristics

To accurately represent the population studied and minimize bias, proven telephone methodology and random-selection techniques were applied. While this random sampling of the population produces a highly representative sample, it is a common and preferred practice to “weight” the raw data to further the representation. This was accomplished by adjusting the results of a random sample to match the geographic distribution and demographic characteristics of the population surveyed (post stratification) to eliminate any naturally occurring bias.

Specifically, once the raw data were gathered, respondents were examined by key demographic characteristics (namely gender, age, race, ethnicity and poverty status) and a statistical application package applied, weighting variables that produced a sample that more closely matched the population for these characteristics. While the integrity of each individual’s responses was maintained, one person’s responses may have contributed to the whole the same weight as, for example, 1.1 respondents. Another respondent, whose demographic characteristics may have been slightly oversampled, may have contributed the same weight as 0.9 respondents.

The poverty descriptions used in this report are based on administrative poverty thresholds determined by the U.S. Department of Health and Human Services. These guidelines define poverty status by household income level and number of persons in the household. (For example, the 2016 guidelines place the poverty threshold for a family of four at \$24,300 annual household income or lower).

The sample design and the quality control procedures used in the data collection ensure that the sample is representative. Thus, the findings may be generalized to the total population of community members in the defined area with a high degree of confidence.

Public health, vital statistics and other data

A variety of existing (secondary) data sources was consulted to complement the research quality of the CHNA. Secondary data for the Marianjoy service area was obtained from the following sources with specific citations included throughout the PRC report:

Centers for Disease Control and Prevention	U.S. Census Bureau, American Community Survey
Community Commons	U.S. Census Bureau, Decennial Census
ESRI ArcGIS Map Gallery	U.S. Department of Health and Human Services
OpenStreetMap (OSM)	U.S. Department of Labor, Bureau of Labor Statistics

Community stakeholder input

Online key informant survey

To solicit input from key informants—individuals who have a broad interest in the health of the community—an online key informant survey was implemented. A list of recommended participants was provided by local hospitals and MCHC, which included names and contact information of physicians, public health representatives, other health professionals, social service providers and a variety of other community leaders. Potential participants were chosen because of their ability to identify primary concerns of the populations with whom they work as well as the overall community.

Key informants were contacted by email, introducing the purpose of the survey and providing a link to take the survey online. Reminders were sent as needed to increase participation. In all, 10 community stakeholders took part in the online key informant survey—including representatives of the following organizations:

DuPage County Health Department	Naperville School District 203
DuPage Federation on Human Services Reform	People’s Resource Center
Elmhurst CUSD 205	Village of Addison
Metropolitan Chicago Healthcare Council	

Through this process, input was gathered from several individuals whose organizations work with low-income, minority and other medically underserved populations. Key informants were asked to rate the degree to which various health issues are a problem in their own community. Follow-up questions asked for a description of how these issues may be better addressed.

Supplemental disability surveys

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

People who received healthcare services from the Marianjoy network within the past two years and provided a valid email address

People who registered with AbilityLinks, a national, web-based community where qualified job seekers with disabilities gain access to valuable employment opportunities

Organizations affiliated with Marianjoy that are providing services and resources to people with disabilities who seek assistance following return to the community

Data from these surveys has been integrated into this report.

Information gaps

While this CHNA is quite comprehensive, it cannot measure all possible aspects of health in the community, nor can it adequately represent all possible populations of interest. These information gaps might in some ways limit the ability to assess all of the community's health needs.

For example, certain population groups—such as homeless or institutionalized persons, and those who only speak a language other than English or Spanish—are not represented in the survey data. Other population groups—for example, pregnant women, lesbian/gay/bisexual/transgender residents, undocumented residents, and members of certain racial/ethnic or immigrant groups—might not be identifiable or might not be represented in numbers sufficient for independent analysis.

In terms of content, this assessment was designed to provide a comprehensive and broad picture of the health of the overall community. However, certainly a great number of medical conditions are not specifically addressed.

Public dissemination

This CHNA is available to the public and may be viewed at marianjoy.org. A hard copy is available at the Marianjoy facility and may be viewed upon request.

Findings and opportunities

Community description

DuPage County encompasses 327.41 square miles and is home to a total population of 922,803 residents, according to latest census estimates. Between the 2000 and 2010 U.S. Censuses, the population of DuPage County increased by 13,014 persons, or 1.4 percent. The county's population density is reported at 2,818.47 residents per square mile. DuPage County is predominantly urban, with nearly all of the population living in areas designated as urban.

Demographics

It is important to understand the age distribution of the population, as different age groups have unique health needs that must be considered in planning to meet the needs of county residents. In DuPage County, 24.4 percent of residents are infants, children or adolescents (age 0 to 17). Another 63.5 percent are age 18 to 64, while only 12.1 percent are 65 and older. The median age in DuPage County is 38.4 years, compared to 36.8 statewide and 37.3 nationally.

Race and ethnicity

In looking at race independent of ethnicity, 80.3 percent of residents in DuPage County are White and 4.6 percent are Black. When considering ethnicity, 13.5 percent of DuPage County residents are Hispanic or Latino. The county has a higher proportion of White residents and a lower proportion of Black residents than the region, state and U.S. The percentage of Hispanic and Latino residents is also lower than that found in the region, state and U.S. However, the Hispanic population in DuPage County increased by 40,167 between 2000 and 2010. Additionally, a total of 5 percent of DuPage County residents age 5 and over live in a home in which no person age 14 or older is proficient in English.

Social determinants of health

Health starts in our homes, schools, workplaces, neighborhoods and communities. We know that taking care of ourselves (including eating well, staying active, not smoking and visiting a doctor regularly) influences our health.

Our health is also determined in part by access to social and economic opportunities, community resources, quality education, workplace safety, environmental factors and our personal relationships. The conditions in which we live explain, in part, why some Americans are healthier than others.

Poverty

The U.S. Census Bureau American Community Survey 5-Year Estimates (2009 to 2013) show 6.9 percent of the DuPage County population living below the Federal Poverty Level (100 percent).

A total estimated 18.6 percent of residents (168,845 individuals) live below 200 percent of the Federal Poverty Level. A total estimated 23.5 percent of DuPage County children age 0 to 17 (52,639 children) live below 200 percent of the Federal Poverty Level. Both of these statistics trend more favorably than the Chicago Metro Area (metro area), state and U.S. rates.

Education and employment

Among DuPage County residents age 25 and older, an estimated 7.9 percent (more than 48,000 people) do not have a high school education, which is more favorable than metro, state and national findings.

According to data derived from the U.S. Department of Labor, the unemployment rate in DuPage County was 4.8 percent in May 2015, trending more favorably than metro, state and national unemployment rates.

General health status

- A total of 61.8 percent of Marianjoy survey respondents rated their overall health as “excellent” or “very good.”
- Another 10 percent described their overall health status as “fair” or “poor.”
- The remaining 28.2 percent rated their health as “good.”
- When queried regarding activity limitations, 20.6 percent of respondents reported limitations due to a physical, mental or emotional problem.

Activity limitations

An individual can develop a disabling impairment or chronic condition at any point in life. According to Healthy People 2020 (HP2020), people with disabilities are more likely to:

Experience difficulties or delays in accessing health care	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

Further, many social and physical factors 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; increasing the inclusion of people with disabilities in health promotion activities; and expanding disability and health training opportunities for public health and healthcare professionals.

A total of 20.3 percent of survey respondents identified a limitation in activities in some way due to a physical, mental or emotional problem. This trend was lower than metro area and U.S. rates, but higher than state rates. Limitations were higher in men (21.7 percent) than women (18.8 percent) and highest among 40- to 64-year-olds (23.7 percent).

Mental health status

- A total of 71.3 percent of respondents reported their mental health as “excellent” or “very good,” with another 18.6 percent reporting “good” and 10.1 percent reporting “fair” or “poor.”
- Sixteen percent of adults reported being diagnosed with a depressive disorder—higher than metro area trends, but lower than national rates—and 25.2 percent of these same respondents reported symptoms of chronic depression lasting two or more years (lower than both metro area and U.S. rates).
- Sixty percent of adult respondents reported “moderate to extreme” daily stress.
- Inadequate sleep was reported by 64.9 percent of respondents.
- Between 2011 and 2013, the annual average age-adjusted suicide rate was 8.8 deaths per 100,000 residents in DuPage County—higher than regional rates, but lower than state and national rates.

Morbidity and mortality

Cardiovascular disease

When combined, cardiovascular disease (heart disease and stroke) and cancers accounted for more than half of all deaths in DuPage County in 2014.

Nearly all residents (98.8 percent) reported having had their blood pressure tested within the past two years, exceeding the HP2020 target of 92.6 percent.

A total of 32.7 percent of adults reported being told at some point that their blood pressure was high, exceeding the HP2020 target of 26.9 percent.

Ninety-six percent of respondents reported having had a blood cholesterol screening within the past five years; 34.3 percent reported elevated cholesterol levels.

Regarding risk of cardiovascular disease, 77.9 percent of respondents reported one or more risk factors including overweight, smoking cigarettes, physical inactivity, high blood pressure or high cholesterol levels.

Fifty percent of survey respondents rated heart disease and stroke as a major problem in the community.

Pulmonary disease

Asthma and chronic obstructive pulmonary disease (COPD) were also significant public health burdens.

Between 2011 and 2013, the annual average age-adjusted COPD mortality rate was 29.8 deaths per 100,000 residents in DuPage County.

Additionally, the pneumonia/influenza age-adjusted mortality rate was 16.4, exceeding the national rate.

Currently, 7.1 percent of adult survey respondents suffer from asthma.

Additionally, 8.1 percent of children within the Marianjoy service area were reported to have asthma.

Fifty percent of key informants rated respiratory disease as a major problem in DuPage County.

Injury and violence

Injuries and violence are widespread in society. Unintentional injuries and those caused by acts of violence are among the top 15 killers for Americans of all ages.¹ Poisoning (including accidental drug overdose), falls, motor vehicle accidents and suffocation accounted for the majority of accidental deaths in the Marianjoy service area in 2013.

Data shows that 17.2 percent of accidental deaths in DuPage County in 2013 were due to motor vehicle accidents.²

Between 2011 and 2013, 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 HP2020 target of 12.4 or lower.

Among survey respondents, 93.8 percent reported “always” wearing a seat belt when driving or riding in a vehicle and 99.2 percent of parents reported their child “always” wearing a seat belt.

More than 25 percent of Marianjoy service area children were reported to “always” wear a helmet when riding a bicycle.

Half of key informants rated unintentional injury as a minor problem in DuPage County.

From July 15, 2015, through June 16, 2016, Marianjoy reports total inpatient admissions of 355 patients with brain injuries and 110 patients with spinal cord injuries.

¹ Healthy People 2020

² Centers for Disease Control and Prevention

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.

Arthritis affects one in five adults and continues to be the most common cause of disability, costing in excess of \$128 billion annually.³ Interventions include increased physical activity, self-management and weight loss in overweight/obese adults.

A total of 34.8 percent of survey respondents age 50 and over indicated having been diagnosed with arthritis, as compared to 36.3 percent in the metro area and 37.3 percent nationwide.

County data demonstrate an increase in arthritis prevalence from 26.5 percent to 34.8 percent from 2009 to 2015.

Osteoporosis

Osteoporosis is a disease marked by reduced bone strength leading to an increased risk of fractures. According to HP2020, an estimated 5.3 million people age 50 and over in the U.S. have osteoporosis.

A total of 13.2 percent of survey respondents age 50 and over indicated having been diagnosed with osteoporosis, as compared to 10.0 percent in the metro area and 13.5 percent nationwide.

County data demonstrates an increase in osteoporosis prevalence from 8.6 percent to 13.2 percent from 2009 to 2015.

Chronic back pain

Eighty percent of Americans experience low back pain in their lifetime.⁴ It is estimated that 15 to 20 percent develop protracted back pain, 2 to 8 percent have chronic back pain, 3 to 4 percent are temporarily disabled due to back pain, and 1 percent of the working-age population is completely and permanently disabled from low back pain.

Americans spend at least \$50 billion annually on low back pain. Low back pain is the second leading cause of lost work time, the third most common reason to undergo a surgical procedure, and the fifth most frequent cause of hospitalization.

³ Healthy People 2020

⁴ Healthy People 2020

A total of 19.6 percent of survey respondents age 50 and over indicated having been diagnosed with low back pain, as compared to 18.3 percent in the metro area and 18.4 percent nationally.

County data demonstrates an increase in chronic back pain prevalence from 15.1 percent to 19.6 percent from 2009 to 2015.

Return home with disabling conditions

Last year, 2,163 patients with chronic disabling conditions were discharged home from Marianjoy, thus supporting the need for comprehensive discharge planning and follow-up care.

Vision and hearing impairment

Vision

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 HP2020, millions of Americans live with visual impairment, and many more remain at risk for eye disease and preventable eye injury.

A total of 4.7 percent of survey respondents indicated having been diagnosed with blindness/visual impairment, as compared to 8.7 percent in the metro area, 3.9 percent statewide and 8.5 percent nationwide.

From 2009 to 2015, county data demonstrate an increase in blindness/visual impairment prevalence from 4.1 percent to 4.7 percent.

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.

HP2020 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.

A total of 9.4 percent of survey respondents indicated having been diagnosed with hearing/other sensory impairments, as compared to 6.7 percent in the metro area and 10.3 percent nationally.

County data demonstrate an increase in hearing/other sensory impairment prevalence from 7.0 percent to 9.4 percent from 2009 to 2015.

Survey respondents age 65 and older also indicated a 29.8 percent prevalence of hearing impairment.

Fifty percent of survey respondents rated perceptions of vision and hearing as a moderate problem in the community.

Infectious disease

- Acute respiratory infections, including pneumonia and influenza, are the eighth leading cause of death in the U.S., accounting for 56,000 deaths annually.⁵
- Among survey respondents, 47.2 percent had received a flu shot within the past year—lower than metro area, state and national rates and the HP2020 target of 70 percent.
- Among adults age 65 and older, 75.5 percent have received a pneumonia vaccination at some point in their lives; this trend is higher than regional, state and national rates.
- Sixty-two percent of survey respondents rated perceptions of immunization and infectious diseases as a major to moderate problem in the community.

Factors contributing to premature death

The most prominent contributors to mortality in the U.S. in 2000 were tobacco use, diet, inactivity, alcohol, infectious disease, toxic agents, motor vehicles, firearms, sexual behavior and illicit use of drugs. Smoking remains the leading cause of mortality, although many researchers believe that poor diet and physical inactivity may soon overtake tobacco as the leading cause of death.

These findings, coupled with escalating healthcare costs and an aging population, indicate an urgent need to establish a more preventive orientation in today's U.S. healthcare model.

At Marianjoy, we believe that this is a shared responsibility between public health systems and the hospitals and medical centers that provide care to populations within their respective service areas. Utilizing a collaborative, evidence-based approach to prevention, screening and chronic disease management will allow for an optimum impact in the reduction/elimination of many of the prominent contributors to mortality in U.S. healthcare systems.

⁵ Healthy People 2020

Overweight/obesity

Obesity is a pervasive health problem throughout the population. Among adults, the prevalence is highest for middle-aged people and for non-Hispanic Black and Mexican-American women.⁶ Among children and adolescents, the prevalence of obesity is highest among older adults (age 45 and above) and Mexican-American children and non-Hispanic Black females. The association of income with overweight/obesity varies by age, gender and race/ethnicity.

A total of 33.8 percent of survey respondents indicated being a healthy weight (as evidenced by a body mass index between 18.5 and 24.9) as compared to 31.8 percent in the metro area, 33 percent statewide and 34.4 percent nationally.

From 2009 to 2015, county data demonstrates an essentially stable prevalence of individuals identifying themselves at a healthy weight.

A total of 63.9 percent of survey respondents indicated being overweight as evidenced by a body mass index of 25.0 or higher, as compared to 66.4 percent in the metro area, 64.7 percent statewide and 63.1 percent nationwide.

County data demonstrate an essentially stable prevalence of individuals identifying themselves as overweight from 2009 to 2015.

When queried regarding the prevalence of obesity as evidenced by a body mass index of 30.0 or higher, 25.9 percent of survey respondents indicated being overweight, as compared to 30.1 percent in the metro area, 29.4 percent statewide and 29 percent nationwide.

County data demonstrate an essentially stable prevalence of individuals identifying themselves as obese from 2009 to 2015.

Nutrition, physical activity and weight were noted as a major problem by 62.5 percent of survey respondents.

Physical activity

In another recent study of DuPage residents conducted by PRC, a total of 13.7 percent of respondents reported no leisure-time physical activity in the past month; this trend was better and more favorable than regional, state and national findings.

Additionally, a total of 59.5 percent of respondents participate in regular, sustained moderate or vigorous physical activity. However, residents age 40 and older were less likely to meet physical activity recommendations.

Accessing safe and affordable places for exercise was not a problem for the majority of respondents; however, 12.5 percent indicated that it was "somewhat" or "very difficult."

⁶ Healthy People 2020

Between 2008 and 2012, there were 14.5 recreation/fitness facilities for every 100,000 residents in DuPage County; this is in addition to more than 25,000 acres of open area in the DuPage County Forest Preserve District.

Among service area children age 2 to 17 years, 46.4 percent were reported to have had 60 minutes of physical activity on each of the seven days preceding the interview; these results are similar to both regional and national findings.

Girls were reported to engage in more physical activities than boys (52.2 vs. 40.1 percent, respectively), and activity time decreased with age.

For individuals with physical disabilities, participation in physical activities is especially hampered due to a lack of equipment specifically designed to accommodate them.

Substance abuse

HP2020 defines substance abuse as a set of related conditions associated with the consumption of alcohol and illicit use of drugs. Substance abuse has a major negative impact on individuals, families and communities, and its effects directly impact the rates of teenage pregnancy, domestic violence, child abuse, motor vehicle accidents, fights, crime, homicide and suicide. Marianjoy works closely with local hospitals to provide detoxification services prior to admission at Marianjoy.

Age-adjusted deaths from cirrhosis/liver disease and age-adjusted drug-induced deaths remained lower than regional, state and national rates.

A total of 18.5 percent of service area respondents acknowledged binge drinking, and 8.6 percent of adult respondents acknowledged using an illicit drug in the past month.

When queried regarding alcohol consumption during the past 30 days, 68 percent of respondents acknowledged consuming one or more alcoholic beverages, as compared to 60.6 percent in the metro area, 57.2 percent statewide and 56.5 percent nationally.

Additionally, 3.6 percent of respondents acknowledged consuming 60+ alcoholic drinks in the past month, with the incidence of 6.1 percent noted in men, as compared to 1.1 percent in women.

Seventy-five percent of respondents characterized substance abuse as a “major” problem in the community, citing self-imposed barriers, cost/insurance and access to care as barriers to treatment.

Key informants who rated substance abuse as a “major” problem most often identified alcohol, heroin/opioids and marijuana as the most problematic substances in the community.

Tobacco use

Tobacco use is the single-most preventable cause of death and disease in the U.S.⁷ Tobacco use causes cancer, heart disease, lung disease and premature birth.

A total of 13.4 percent of respondents currently smoke cigarettes.

Among households, 10.5 percent have someone who smokes cigarettes in the home.

Additionally, a total of 2.2 percent of service area adults use some type of smokeless tobacco.

Fifty percent of survey respondents identified tobacco use as a “moderate problem,” while an additional 25 percent identified it as a “major” problem, citing concerns such as the number of new teen smokers and proliferation of e-cigarettes and vapor smoking.

Access to care

Access to health services has a profound effect on every aspect of one’s health, yet almost one in four Americans does not have a primary care provider (PCP) or health center where he or she can receive regular medical services.⁸

Increasing access to both routine medical care and medical insurance is vital for improving the health of all Americans. Regular and reliable access to health services can:

- | | |
|---|--|
| Prevent disease and disability | Reduce the likelihood of premature (early) death |
| Detect and treat illnesses or other health conditions | Increase life expectancy ⁹ |
| Increase quality of life | |

Health insurance

Approximately one in five Americans (children and adults under age 65) does 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 the 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.

A total of 4.9 percent of survey respondents age 18 to 64 reported not having healthcare coverage, as compared to 8.1 percent in the metro area, 19.4 percent statewide and 15.1 percent nationwide. This number has notably decreased from 11.1 percent in 2009.

Payer sources for Marianjoy patients included Medicare (64.7 percent) and HMO/PPO (27.0 percent).

⁷ Healthy People 2020

⁸ Healthy People 2020

⁹ Healthy People 2020, Leading Health Indicators

Barriers to access

Survey respondents reported some type of difficulty or delay in obtaining services in the past year. These findings were similar to both regional and national findings. Adults under the age of 65 more often reported difficulties accessing healthcare services. Notable barriers to healthcare access included:

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

Fifty percent of survey respondents noted access to healthcare services as a moderate to major problem in the community. Reasons cited included undocumented status, system issues such as Medicare/Medicaid managed care plans and high deductibles, and social determinants such as housing, education/literacy levels and language/cultural barriers.

Key informants identified access to mental health care and specialty care as the most difficult to access in the community.

In 2012, DuPage County was served by 1,244 PCPs, translating to a rate of 134.1 per 100,000 population. This rate was well above the regional, state and national rates, but only 80.5 percent of service area adults reported a specific source of ongoing medical care. Additionally, 58.1 percent of respondents reported having had a dilated eye examination within the past two years.

Attendance at health promotion events

An important component of maintaining wellness includes emphasis on health promotion and disease prevention activities. Survey respondents were queried regarding participation in any organized health promotion activities such as health fairs, screenings or seminars within the past year. Twenty-four percent of respondents acknowledged participation in a health promotion activity within the past year. This was essentially consistent with metro area (21.1 percent) and U.S. (23.8 percent) rates.

Supplemental disability survey

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

- **Group 1/Community:** People who received health care from the Marianjoy network within the past two years and provided a valid email address.
- **Group 2/AbilityLinks:** People who registered with AbilityLinks, a national, web-based community where qualified job seekers with disabilities gain access to valuable networking opportunities.

- **Group 3/Organizations:** Organizations that are affiliated with Marianjoy and are providing services and resources to people with disabilities who seek assistance following return to the community.

The goal of this survey was to gain input from constituencies who look to Marianjoy for service or partnership and to better understand *overall* health concerns and need in the community, especially for persons with disabilities and impairments. The surveys were developed and administered by Marianjoy, and results were shared with PRC for analysis and inclusion into the CHNA. A total of 353 surveys were completed by respondents from Groups 1 and 2; seven organizations responded from Group 3.

Disability prevalence

Mobility/physical disability was the most prevalent health condition in both the community (61 percent) and AbilityLinks (34 percent) samples.

Only 9.6 percent of respondents from the community were born with their disability, as compared to 38 percent of AbilityLinks respondents.

Activity limitations

Although adaptive technology and transportation services were reportedly offered by 40 percent of the organizations surveyed, mobility was the most common activity limitation reported by 80.5 percent of community respondents and the second most common activity limitation (52.1 percent) for AbilityLinks respondents.

Working at a job placed second (36 percent) for community respondents and first (54.2 percent) for AbilityLinks respondents.

Assistance with basic needs was identified by 59.1 percent of community respondents and 73.5 percent of AbilityLinks respondents; 61.2 percent of AbilityLinks respondents reported that they did not have someone to provide them assistance.

Additional activity limitations noted by community respondents included independent living (34.6 percent), going outside the home alone (34.2 percent), self-care (33.1 percent), remembering/concentrating (24.6 percent), interacting socially (16.9 percent) and managing finances (16.5 percent).

Health insurance

A total of 0.4 percent of community respondents and 4.1 percent of AbilityLinks respondents did not have health insurance, which was reported to be mostly due to cost considerations.

More than three times as many AbilityLinks respondents (33.3 percent) than community respondents (10.4 percent) reported not obtaining necessary medical care in the past year, reportedly due to cost.

Organizational respondents agreed that poverty was a serious issue facing clients with disabilities.

Access to care

In general, the AbilityLinks group reported a greater level of dissatisfaction overall with local health services as compared to the community group. Affordability of prescriptions was least satisfying to community respondents. Three out of the five responding organizations disagreed that their disabled clients had adequate access to healthcare services.

Transportation

A majority of community respondents (72.9 percent) and AbilityLinks respondents (59.1 percent) reported that transportation was not a problem. However, with respect to public transportation, four out of five organizational respondents and 20 percent of all community and AbilityLinks respondents reported that public transportation was difficult to use because of their disabilities.

Employment

Approximately half of the community respondents reported being retired or not working; AbilityLinks respondents were split between unemployment, looking for work and working part-time.

Fifty percent of AbilityLinks respondents agreed that having a disability was perceived as a barrier to employment. Four out of five organizational respondents disagree that there are meaningful employment opportunities in the community for their clients with disabilities and also noted that the community does not appreciate the talents and abilities of individuals with disabilities.

A total of 27.6 percent of AbilityLinks respondents reported that a health problem prevents them from working, and nearly 25 percent report that they are unable to find employment that supports their disability.

Housing

A quarter of AbilityLinks respondents reported that their current housing does not meet their needs, as compared to 10.5 percent of Community respondents. The same proportions report that their current home does not allow for independent living.

The greatest barrier to obtaining adequate housing for AbilityLinks respondents was expense.

The proportion of AbilityLinks respondents requiring special equipment that they do not already have was twice as large as the proportion of Community respondents. Community respondents were in most need of exercise equipment and mechanized assists such as chairs and lifts, while AbilityLinks members were mostly in need of adaptive driving technology, communication devices, and walkers or canes. The greatest barrier to obtain this equipment was reported to be expense.

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 Need/Concern
Access to healthcare services	Barriers to access medical care: Finding a physician Inconvenient office hours Cost of physician visit Cost of prescriptions Access to health care ranked as a top concern in the online key informant survey. Cost and services not covered by insurance were main reasons that community and AbilityLinks members could not obtain medical care.
Heart disease and stroke	Second leading cause of death in DuPage County High blood pressure prevalence Heart disease and stroke ranked as a top concern in the online key informant survey.
Immunization and infectious diseases	Pneumonia/influenza deaths Flu vaccination (age 65+)
Mental health	Suicide Three-fourths of key informants ranked mental health as a top concern in the online key informant survey.
Injury and violence	Ongoing bicycle helmet education (children) Ongoing car seat safety education/injury prevention

Topic (continued)	Identified Need/Concern (continued)	
Nutrition, physical activity and weight	Physical activity, nutrition and weight ranked as a top concern in the online key informant survey.	
Potentially disabling conditions	Arthritis prevalence (age 50+) Mobility/physical disability was the most prevalent health condition in both the community and AbilityLinks samples.	
Access to health promotion activities	Only 24 percent of respondents participated in health promotion activities within the last year	
Substance abuse	Overall alcohol use and binge drinking Seeking help for alcohol/drug issues	Illicit drug use Substance abuse ranked as a top concern in the online key informant survey.
Special needs of disabled individuals	Promoting independence Access to fitness and physical activity Transportation	Employment training Specialized housing/equipment

Additional sources of input

DuPage County Health Department

Concurrent with the development of the Marianjoy CHNA, the DuPage County Health Department conducted a comprehensive needs assessment of residents in DuPage County. The Illinois Project for Local Assessment of Needs (IPLAN) is a community health assessment and planning process that is conducted every five years by local health jurisdictions in Illinois. Utilizing the Assessment Protocol for Excellence in Public Health (APEX-PH) model, IPLAN is grounded in the core functions of public health and addresses public health practice standards. The completion of IPLAN fulfills most of the requirements for Local Health Department certification under Illinois Administrative Code Section 600.400: Certified Local Health Department Code Public Health Practice Standards.

In August 2013, a group of community leaders formed Impact DuPage, a countywide initiative aimed at creating a common understanding of community needs, gaps and priorities that will advance the well-being of the DuPage County community. Utilizing the Mobilizing for Action through Planning and Partnership (MAPP) process, Impact DuPage completed four countywide assessments between June 2014 and December 2014. Partners are currently developing an Action Plan to address the priorities identified in these assessments. The assessments included:

Landscape review

Conducted in the fall of 2014, this assessment collected community voices to learn perceptions about the quality of life in DuPage County. This countywide survey received more than 2,000 responses.

Local system assessment

This assessment gathered partners in a day-long event that assessed the strengths and weaknesses of local systems that support the well-being of DuPage County residents. It provided valuable feedback regarding system performance and opportunities for improvement.

Forces of change assessment

During the forces of change assessment, community leaders brainstormed trends, factors and events that affected the quality of life, and considered the associated threats and opportunities.

Community profile

The community profile provided a snapshot of the well-being of DuPage County residents by displaying quantitative information on health status, quality of life and risk factors. Additional information regarding the Impact DuPage Community Assessment can be found [here](#).

Impact DuPage priorities

Data from the assessments described above formed the basis for the top five priorities identified by DuPage County:

Affordable housing

Access to health services

Healthy lifestyles

Mental health

Substance abuse

Interpreting and prioritizing health needs

External Steering Committee

Following completion of the CHNA, Marianjoy leadership convened the External Steering Committee (ESC) to review the findings. This multidisciplinary committee was made up of key stakeholders who were selected based on strong collaborative efforts to improve the health of the community, including the disabled, medically underserved, minority and low-income populations. The varied backgrounds of the committee members provided diverse insight into prioritizing identified health indicators.

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, IPLAN data, ESC feedback, an organizational asset inventory and alignment with guiding principles for response to community need. Organizational guiding principles included:

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 organizations already addressing the health issue?

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

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

Estimated resources, timeframe and size of impacted population

Marianjoy developed a survey tool to formally solicit input from ESC members and identify their organizations' priority health needs (defined as health needs that could be impacted the most by the work of Marianjoy and partner organizations participating on the ESC). Marianjoy leaders and ESC members were asked to identify top priorities from among the areas of opportunity identified by PRC using the following prioritization criteria:

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

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

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

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

Trend: How has the need been changing over time?

The survey results were compiled and shared with the ESC. Together with the committee, the highest-priority health needs were determined, taking into account the findings of the CHNA, the survey findings, and discussion around the guiding principles and prioritization criteria.

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 were identified.

An identified need is not addressed if Marianjoy is not best positioned to help due to the following situations:

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

Public health or other organizations typically address the need

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

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

Prioritization timeline

An initial invitation to join the ESC was extended to prospective members. The ESC reviewed and discussed the DuPage County IPLAN in addition to the Marianjoy CHNA. Information was provided to the group regarding the entire CHNA process including:

CHNA requirements/background	Community partner's role
Reporting process, timelines, goals and deliverables	Introduction to the 2016 CHNA findings

Upon review and discussion of the CHNA, it was the consensus of the group that Marianjoy's primary focus should emphasize a response to the need of disabled individuals.

Priority health needs

Americans are living longer, but they are sicker. While we are experiencing consistent increases in life expectancy, our longer lives are burdened with increasing chronic illnesses and resulting disabilities. Sedentary behavior and preventable chronic disease are compromising our community's health. More than one-quarter of the population is obese, and diabetes is at epidemic levels.

Hand-in-hand with a decreasing quality of life is an astounding increase in the economic impact of managing these diseases. The Robert Wood Johnson Foundation estimates that by the year 2030, annual medical costs associated with treating preventable obesity-related diseases are estimated to increase to \$66 billion, with a resultant loss in economic productivity of between \$390 and \$580 billion annually.

A 2012 CNN documentary, *Escape Fire*, drives home the stark reality that we can no longer afford to focus on acute care as the center of health care, but must also focus on prevention, education, chronic disease management, rehabilitation and case coordination to maximize the health of our nation's most valuable asset—our people. As healthcare providers, we must continue to challenge ourselves to provide high-quality, state-of-the-art health care to our community. As experts and leaders in the healthcare industry, we must also look outside our doors and reach out to the communities we serve, striving to enhance the quality of life by engaging in evidence-based activities that will promote health across the lifespan.

To that end, Marianjoy has identified four priority health needs that will enable us and our community partners to maximize the health benefits generated by our collective resources over the next few years. In selecting these priorities, we considered the degree of community health need, capacity and available resources of other agencies to meet the need, and the suitability of our own expertise in rehabilitative care and resources to address the need. In particular, we identified health needs that would be addressed through 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 2016 Marianjoy priority health needs were identified as follows:

1. Chronic disease management and rehabilitation
 2. Access to care
 3. Promotion of independence in individuals with disabilities
 4. Injury prevention
-

Development of Implementation Plan

Marianjoy will continue to work with the ESC to develop a comprehensive Implementation Plan that addresses each priority health need. Marianjoy and its community health partners share a vision of a healthy community and are committed to working together to address significant health needs.

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

A direct clinical service provider, through application of our research and education expertise

An educator, by sharing our knowledge of health literacy, quality improvement and information technology

A supporter, by providing indirect support to organizations that can impact health

A funder, by funding initiatives undertaken by others

The Implementation Plan will specify resources Marianjoy and its community partner organizations will direct toward each priority health need.

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

Clinical care resources and facilities of Marianjoy and its community partner organizations

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

Research and education expertise among Northwestern University Feinberg School of Medicine physician scientists

Financial assistance programs at Marianjoy

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

Advocacy resources at Marianjoy and its community partner organizations

Planning and oversight resources

Management expertise in quality improvement and information technology

Existing healthcare facilities and resources

Marianjoy also recognizes that a large number of healthcare facilities and organizations within DuPage County respond to health needs and support health improvement efforts. A list of those that were found through publicly available information sources as of August 2015 is included in [Appendix B](#).

Actions taken to address the 2013 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 an awareness of a community's health needs is imperative in an environment as dynamic and diverse as Chicago's western suburbs—especially when it involves planning and responding to the needs of demographically diverse populations.

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

In 2013, Marianjoy identified three priority health needs in response to the CHNA. In selecting priorities, Marianjoy considered the degree of community need for additional resources, the capacity of other agencies to meet the need, and the suitability of our own expertise and resources to address the health need. The priority health needs identified were:

1. Transportation
 2. Employment
 3. Awareness of health-related services
-

Marianjoy, members of the ESC and key community partners collaborated to address the above priority health needs. This status report summarizes the impact of the strategies outlined in Marianjoy's 2013 Implementation Plan. For a more comprehensive discussion of the strategies and related outcomes/impact, please refer to Marianjoy's Community Benefit Implementation Plan.

Implementing findings of the CHNA

The purpose of the CHNA was to gain better insight into the health concerns and needs of the specific communities served by the Marianjoy network, focusing on those members of the community with disabilities and impairments. This information was used to guide a number of strategies and tactics focused on the overall improvement of health and access to essential services for this population.

A review of the results from the initial CHNA offers insights into the overall perceptions of the availability of, and access to, health services in DuPage County. Initial findings appeared positive in terms of overall accessibility and availability of needed services; however, a number of opportunities for improvement were identified:

- Transportation assistance to health services
 - Employment opportunities for individuals with disabilities
 - Awareness of health education and information
-

These issues were consistent with the type of essential health services identified and defined by the federal, state and county health and human services agencies serving DuPage and surrounding counties in Illinois. Data from federal, state and county agencies have consistently highlighted the aforementioned services as targets for community-focused providers.

Specifically, a number of published reports detail strategically significant services needed to support the health of communities served by the Marianjoy network. The following priorities were determined to best align with the operational competencies of Marianjoy associates:

- Monitor health status to identify community health problems
 - Inform, educate and empower people about health issues
 - Link people to needed personal health services and ensure the provision of health care when otherwise unavailable
 - Ensure a competent public and personal healthcare workforce
 - Research new insights and innovative solutions to health problems
-

The primary focus of community benefits planning activity at Marianjoy is to align community-focused initiatives with identified health goals. The data obtained from the IDPH, IPLAN and Marianjoy 2013 CHNA primary research are instructive to these overall planning efforts.

The objective of these reporting activities is to identify health disparities and establish workable solutions to aid in improving the health of the community served by the Marianjoy network.

By understanding the health priorities of the larger community, leaders from Marianjoy identified the needs of at-risk populations within the communities they directly serve. With this knowledge, the leadership team at Marianjoy was able to outline specific community benefit strategies and tactics to be included in the annual Marianjoy strategic plan, which guides the overall direction of the organization. In fiscal year 2015 (FY15), the Marianjoy CHNA provided a more specific direction for how the specialty competencies available at Marianjoy can be leveraged to meet the needs of those at risk in the communities served.

Targeting persons with disabilities requiring physical rehabilitation

According to *Americans With Disabilities: 2012 Household Economic Studies*,¹⁰ the number of people with disabilities increased at the same rate as the general population; however, the chance of having a disability increases with age. According to the Centers for Disease Control and Prevention,¹¹ in Illinois, the numbers of individuals with disabilities across the adult population increase across age cohorts:

Age Cohort	Total People With Disability	% Population
18 to 44	503,314	10.5
45 to 65	661,611	20.6
60+	538,408	34.0

Marianjoy physicians and clinicians are trained in the provision of specialty treatments and rehabilitation for individuals with disabilities resulting from injuries, accidents, illnesses or congenital defects. In general, individuals in these categories tend to experience higher percentages of health disparities than the larger population. These added challenges can result in further impaired mobility, nutritional deficits and increased susceptibility to chronic medical conditions.

Common precursors of chronic diseases—including physical inactivity, obesity, hypertension and high cholesterol—are more prevalent among persons with disabilities than those without. Despite increased health risks, people with disabilities are rarely targeted by specific health-promotion and disease-prevention efforts. Given the increasing prevalence of disability as the population ages, the need for community health services focusing on the rehabilitation needs of those served will likely increase at a proportional rate.

¹⁰ Brault, M. W. (2010). *Americans With Disabilities: Current Population Reports* (pp. 70-131). U.S. Census Bureau, Washington, DC.

¹¹ Centers for Disease Control and Prevention. *How Many People Have Disabilities*. Retrieved from http://www.cdc.gov/ncbddd/documents/Disability%20tip%20sheet%20_PHPa_1.pdf

Marianjoy community benefits strategic crosswalk

In their action plan addressing the health needs of individuals with disabilities, the Illinois Department of Public Health¹² stated:

People with disabilities often encounter inaccessible medical offices and equipment, transportation barriers, communication barriers and attitudinal barriers. Consequently, people with disabilities in Illinois face an increased risk of developing additional health conditions. Health promotion programs must be developed and refined to be more inclusive for people with disabilities to ensure that they have equal access to these services. Reducing barriers and expanding access to health services and health promotion programs are critical steps in supporting the independence of people with disabilities.

This is consistent with the findings of the 2013 CHNA, providing validation for the areas of focus identified by the leadership of the organization. Since the initial survey, community-targeted efforts have focused on:

Transportation-related concerns

Findings from the CHNA demonstrated transportation to medical appointments is seen as a barrier to both health and community-based services.

- Seventeen percent reported frequent problems with transportation.
- Twenty-one percent agreed that the public transportation system is difficult to navigate due to their disability.

Employment-related concerns

Respondents to the CHNA survey and users of the AbilityLinks service consistently note that the presence of a disability is perceived as a barrier to accessing meaningful employment.

- A total of 48 percent of respondents perceived their disability as being an impediment to employment at the level they would like.

¹² Illinois Department of Public Health. (2012). *Illinois Disability and Health Action Plan 2012-2017*. Retrieved from http://www.idph.state.il.us/idhp/documents/Disability_Health_Plan_2012-2017.pdf

Fitness- and wellness-related concerns

A need exists for improved awareness of and access to health and fitness services targeted to individuals with disabilities resulting from stroke, brain injury, or other congenital or acquired disabilities.

- Ten percent reported dissatisfaction with information about fitness and exercise related to their specific health condition.
 - A total of 12 percent reported dissatisfaction with knowledge and awareness of health services and resources.
-

These insights have been incorporated into the annual strategic planning and implementation process for FY15. They serve as a driver for the creation of integrated business and community-focused strategies for FY15 and beyond.

As a member of Northwestern Medicine, Marianjoy leadership participates in an annual exercise to determine overall strategic priorities for the system and individual business units. Since completing the initial CHNA, a consistent set of organizational strategies were identified to specifically align with the opportunities to provide a benefit to the community served by Marianjoy. These include:

Patient and family experience

Consistently deliver a superior and compassionate patient and family experience across the continuum of care, distinguishing us as the provider of choice in the communities we serve

Clinical excellence

Achievement of outstanding clinical outcomes through innovation and care transformation, resulting in the greatest value for our patients and customers across the continuum of care

Total health management

Our care delivery system is positioned to compete and succeed in a changing environment, focusing on better care, better health and lower costs

The table below demonstrates, via a simple crosswalk, the alignment of the assessment areas identified in the Marianjoy CHNA with the categories of community benefits defined by the State of Illinois and the strategic goals of Marianjoy as they relate to those community needs.

Marianjoy Community Benefits Strategic Crosswalk		
Identified Community Needs	Category of Community Benefit	Aligned Marianjoy Strategic Goal
Transportation to receive health services	Community health improvement services	Patient and family experience Clinical excellence Total health management
Access to employment	Financial and in-kind contributions	Patient and family experience Clinical excellence Total health management
Awareness of health- and wellness-related services	Health profession education Community health improvement services	Patient and family experience Clinical excellence Total health management

This crosswalk demonstrates the integration of community needs as an essential component to the overall strategies that annually guide the work of Marianjoy physicians and associates. As in prior years, due consideration is given to the latest available community data during the annual strategic planning process. Each year, additional resources are evaluated to ensure the most urgent community needs are being both identified and met. Further, Marianjoy associates continuously monitor and report on their community-directed activities, as required by state and federal regulations.

Focus of activities benefiting communities served by Marianjoy

The two primary objectives of community-focused activity at Marianjoy are: 1) to provide quality, cost-effective healthcare services to patients in need of physical medicine and rehabilitation services, regardless of their ability to pay; and 2) to serve as a community resource for improved community health as it relates to those issues impacting persons with disabilities. These goals are integrated into the larger charitable mission, vision and values of the organization and its parent healthcare system.

Leaders at Marianjoy are challenged to find new and innovative channels to reach the high-risk populations of persons with disabilities and their families who live within the communities served by the Marianjoy network. Individuals with disabilities are more likely to require secondary healthcare needs related to joint care and arthritis; diabetes and the prevention of lower-extremity amputations; foot care; fall prevention; nutrition; safety; high blood pressure; stroke and heart disease prevention; and pain control.

As a leader in physical medicine and rehabilitation, Marianjoy serves as a critically important community resource for individuals with disabilities and others from the community. The leaders, clinicians and associates of Marianjoy are aware of the important role the organization plays in helping to maintain healthy communities. As such, as part of the annual strategic planning process at Marianjoy, community benefit objectives are evaluated and updated as needed. The following objectives have served to drive organizational community-directed activity:

1. Link people to needed personal health services and ensure the provision of health care when otherwise unavailable.

Marianjoy operational policies call for the provision of medically necessary healthcare services to people in the communities it serves, regardless of their ability to pay, as called for by the organization's mission, vision and values, and those of its sponsoring organization.

Marianjoy supports community efforts to increase employment equality among people with disabilities through its web-based employment network, AbilityLinks.org. The goal of this initiative is to connect potential employers with job-seekers who have disabilities. Components of this program include vocational counseling for job-seekers, virtual job fairs, employment expos and a variety of educational programs for businesses interested in employing individuals with disabilities.

In FY15 continuing into FY16, Marianjoy has taken a leadership role in the promotion of disability awareness through activities associated with the ADA25 Chicago celebrations, which highlight the 25th anniversary of the passage of the Americans With Disabilities Act. This ongoing program can be tied to nearly 1,000 job-seekers gaining employment in the 15 years AbilityLinks has been in operation.

2. Research new insights and innovative solutions to rehabilitation-focused health problems.

Researchers and clinicians at Marianjoy conduct and promote applied and behavioral research in the field of physical medicine and rehabilitation with the goals of improving the recovery and/or treatments for people with disabilities. Each year, dozens of poster and podium presentations are offered at regional and national medical conferences, highlighting the findings of Marianjoy associates.

3. Monitor health status to identify community health problems.

Through a number of innovative new programs, associates from Marianjoy help patients reduce environmental barriers at home, school, work or within the community by advancing the use of assistive devices and technology for people with disabilities. The Marianjoy Assistive Rehabilitation Technology Institute was opened in FY15 to help patients achieve the highest level of independence possible via the utilization of assistive devices and/or technology. This level of therapy helps patients achieve a successful return to their home setting.

4. Inform, educate and empower people about health issues.

In addition to providing transportation for individuals who lack access to sources of mobility, Marianjoy maintains and hosts support groups for individuals with specific disabilities. The goal of these programs is to provide ongoing support for individuals and families impacted by disability.

A number of classes are offered annually, designed to improve the health of the community and help prevent secondary conditions. Education and support services address joint care and arthritis; diabetes and the prevention of lower-extremity amputations; foot care; fall prevention; nutrition; safety; high blood pressure; stroke and heart disease prevention; and pain control. Marianjoy provides a variety of free community education programs, including health assessments, as well as other educational activities to improve health literacy. These courses are driven by the identified needs of the community gathered through formal and informal means (such as evaluation surveys, anecdotal requests of patients and service providers).

5. Monitor health status to identify community health problems.

Fitness and wellness programs tailored to people with disabilities and other health issues help ensure these vulnerable populations are engaged in moderate physical activity designed to improve strength and increase flexibility, to protect against further disability and enhance functional independence. The addition of the Marianjoy Fitness Center has opened new opportunities for individuals who may not have felt physically able or comfortable in other exercise settings. A full schedule of classes based on the expressed needs of adult and pediatric patients was put into effect starting early in calendar year 2016, and it is continually being updated to meet the needs of specific patient populations.

The following is a list and brief description of some of the specific program components of the Marianjoy Community Benefit Plan. These actions are designed to optimize the competencies of the physicians and clinicians of Marianjoy in a manner that best benefits the community at large.

Marianjoy Community Care Program

Marianjoy provides medically necessary healthcare services to people in the communities it serves; no persons may be denied emergent or urgent care or receive less than the appropriate level of care, regardless of ability to pay. Marianjoy follows the Wheaton Franciscan System's Payment for Services Policy. The Community Care Program, outlined in the policy, provides sliding scale discounts on healthcare services for uninsured patients with income up to 400 percent of the federal poverty guidelines. The policy also provides a standard set of procedures for the collection of payment for the healthcare services it supplies and renders for all patients.

Charitable Assistance for Assistive Devices Program

Marianjoy provides charitable support to individuals who do not have access to assistive devices or technology. This program is operated out of a center located in Wheaton, Illinois, where patients can practice using assistive technology for diverse rehabilitation needs.

Professional training, education and clinical research activities

Programming includes a Physical Medicine and Rehabilitation (PM&R) Residency Program, as well as clinical experiences for students in nursing, allied health professionals, social workers, pharmacists and dietitians. For the fiscal year ending June 30, 2015, Marianjoy trained 15 residents (five residents per program year). The PM&R Residency Program continued in 2016, again serving 15 medical residents. Due to a recent change in market needs, the program is being expanded in 2017 to accommodate 18 medical residents (six per program year).

In addition, in order to better serve all patients in need of physical medicine and rehabilitation services, clinical staff at Marianjoy is engaged in the provision of ongoing education and professional development of both practicing professionals and aspiring students. Annually, through the Marianjoy Professional Learning Institute, multiple international, national and locally known clinical experts present courses at Marianjoy that focus on the latest evidence-based best practices. Marianjoy is able to award contact hours to nurses, therapists and other clinicians seeking continuing education. Annually, approximately 75 percent of participants were clinicians external to Marianjoy. To date, 99 percent of course participants reported satisfaction with their Marianjoy learning experience and indicated they were likely to return for future educational Marianjoy programs.

Marianjoy also provides training for university students. Under the supervision of physicians and clinicians from Marianjoy, students from more than 40 leading universities from across the U.S. participated in clinical internship training and gained firsthand experience in the fields of physical therapy, occupational therapy, speech-language pathology, nursing, pharmacy and dietary sciences.

The leadership of Marianjoy also embraces and supports multidisciplinary research projects. Each year, physicians and clinicians from Marianjoy share evidence-based best practices with colleagues across the nation in order to cultivate a culture of quality and excellence. This ongoing commitment to research and education enables Marianjoy to meet the changing medical needs of patients to reduce hospitalizations and maintain independence, thereby supporting the goals of the community/population health. In order to serve the larger rehabilitation community with the establishment of best practice patterns designed to promote neurologic recovery, the sharing of information among rehabilitation professionals is accomplished through multiple channels such as publications, scientific presentations and other educational offerings.

During FY15, researchers from Marianjoy self-published the Marianjoy Rehabilitation Research Compendium 2011-2014. This comprehensive report reflected research conducted at Marianjoy and was designed for the physician reader to share with the entire physical medicine and rehabilitation community in order to advance quality rehabilitation care, improve overall patient satisfaction and demonstrate optimal treatment outcomes.

Advocacy

Through a variety of programs designed to encourage those it serves to continue working, live independently and pursue education, Marianjoy advocates for its patients, the community and all individuals living with a disability. These programs and activities include:

Disability advocacy – In July 2015, the U.S. commemorated the 25th anniversary of the Americans With Disabilities Act (ADA). Community leaders throughout the greater Chicago area worked together to sponsor a yearlong celebration of this milestone legislation under the banner of ADA25 Chicago. Marianjoy President and CEO Kathleen Yosko served on the Board of Directors for the ADA25 Chicago organization. Furthermore, one of the first events of this initiative was a business breakfast sponsored by Marianjoy and the AbilityLinks service titled “Business Strategies for Fulfilling the Promise of Inclusion.” Approximately 100 business professionals and service providers attended this event held in the Marianjoy Education and Conference Center.

Vocational assistance through AbilityLinks.org – Marianjoy sponsors AbilityLinks.org, an award-winning job-networking website designed to help individuals with disabilities find employment. This program provides job-seekers with a single point of contact to reach both employers and employment programs. Annually, AbilityLinks.org sponsors up to three virtual job fairs and webinars targeted toward job-seekers with disabilities and employers seeking to recruit them. On average, approximately 90 job-seekers and 30 employers participate in each of the job fairs. Webinars gather audiences of approximately 35 job-seekers and 40 employers per event. The total number of job-seekers self-reporting success finding employment averages between 60 and 70 per year.

Driver rehabilitation vehicle modification program – This program restores driving ability for individuals who have a disability and are living at or below the poverty level. All participants are initially unable to drive a regular vehicle. Through this program, participants are provided with necessary adaptive devices or conversions required to make their vehicle accessible and drivable. The program provides services to approximately 750 individuals annually.

Transportation – Marianjoy provides transportation for clients who have little to no means to travel to therapy. The transportation department services a large geographical area and provides services for a nominal fee. Annually drivers from Marianjoy provided nearly 16,000 one-way trips using 10 transport vehicles from both the Wheaton and Oakbrook Terrace locations. In 2015 a grant in the amount of \$110,790 was awarded to provide transportation, medication and medical equipment to low-income patients. This grant provided assistance for uninsured or underinsured patients, including 141 medical equipment and 14 medication purchases, and 168 transport services. The total annual estimated value of services provided is calculated to be nearly \$650,000.

Advancing continuing education for students with physical disabilities – Each year the Marianjoy Scholarship Program awards more than \$60,000 in scholarships to deserving young men and women with disabilities from the Chicagoland area who are pursuing post-high school education. This program has awarded more than \$900,000 since 1997.

Community support groups – Marianjoy sponsors a variety of support groups that enable former patients, their families and caregivers to share experiences, learn about resources and network. Some of the groups include those affected by amputation, aphasia, Guillain-Barré, brain injury, chronic pain and stroke. Beginning in 2012,

the recently formed “Moms and Dads for Marianjoy” group began hosting educational and service-oriented programs to help parents of children with disabilities identify needed resources and network as a community on behalf of children with special needs. These free programs are open to the general community.

Community education programs—Marianjoy supports a great number of community education initiatives:

Multiple free events targeted to specific needs of patients utilizing Marianjoy services, including “Achieving Your Running Goal,” “Avoiding Food Fights,” “Friends and Family CPR,” “Give Your Heart a Rest,” “Understanding Blood Pressure,” “Walking the Labyrinth” and “Journey of Renewal”

Library access for patients and families seeking additional information and resources, including InformationConnections.org, a website that offers families reliable health information for children with disabilities, and DisabilityandRehabilitation.org, a website that offers current and accurate information for adults and caregivers

Tools and education that help people with disabilities properly monitor medications and dosage requirements

Preventive classes that promote strength and flexibility to protect against disability and enhance functional independence

Medicaid Task Force of the Illinois Health Association

Transforming Illinois Health Care Committee of the Illinois Health and Hospital Association

American Hospital Association Region 5 Advisory Board

Collaborative support to nonprofits, foundations and government agencies that reach the disabled and other high-risk populations, including:

American Medical Rehabilitation Providers Association (AMRPA)

Metropolitan Chicago Health Council (MCHC)

Illinois Health and Hospital Association (IHA)

Economics Club of Chicago

The Beryl Institute

Almost Home Kids

DuPage County Workforce Board

DuPage Health Coalition Board

Student Advisory Board—Midwestern University

Association for Driver Rehabilitation Specialists—Midwest Chapter

American Speech-Language-Hearing Association

Illinois Speech-Language-Hearing Association

Associates across the Marianjoy network are committed to providing exceptional, compassionate and cost-effective rehabilitation medicine and related healthcare services that promote the dignity and well-being of those in the communities served. They are specifically interested in ensuring those who are most at-risk have access to the care and information they need to maintain a healthy and meaningful life. The actions identified as part of the community benefits strategy of Marianjoy should serve to enrich the communities and patients we serve.

Appendix A

Organization	Description of medically underserved, low-income, or minority populations represented (from publicly available sources, August 2015)
AbilityLinks	AbilityLinks is the nation's leading disability employment community. Businesses post jobs and search resumes, and job-seekers who self-identify as having a disability post resumes and apply for jobs. No information about disability type is asked. AbilityLinks counselors, who also have a disability, provide information, referrals and the human touch.
Anixter Center	Anixter Center provides services for individuals with disabilities and related challenges to live, learn, work and play in the community.
DuPage County Health Department	The mission of the DuPage County Health Department is to promote physical and emotional health; prevent illness, injury and disability; protect health from environmental risk factors; and strive to ensure the provision of accessible, quality service. The department provides active programming in the areas of behavioral health, dental health, disease control, emergency preparedness, environmental health, family health, food safety, obesity and nutrition, health promotion, population health and women's health.
DuPage Federation on Human Services Reform	The DuPage Federation on Human Services Reform is a collaboration of government and key community organizations working together to identify ways a local community can address its human needs using its own resources and resourcefulness. The federation serves as an organizer and catalyst, bringing together responsible organizations and advocating for development of real solutions. Its work involves expanding resources for cross-cutting issues that are the foundations of self-sufficiency. The federation is a unique convergence of people, place and opportunity, accomplishing its mission through a strong and unusually dedicated board that includes community leaders, state and county public officials, clergy, representatives of community groups, business leaders, consumers and providers of human services.
DuPage Health Coalition (Access DuPage)	Access DuPage provides access to medical services for DuPage County residents lacking health care due to economic reasons. Access DuPage is not an insurance program, nor is it a substitute for good health insurance. For individuals without health care who meet the eligibility criteria, Access DuPage and its participating physicians try to provide a medical home where individuals can receive primary care services at a small cost until they become insured. In addition to primary care services, Access DuPage also works to secure additional medical services for patients as needed.
DuPage Workforce Board	The DuPage Workforce Board spearheads a workforce development system to meet the needs of employers for qualified workers and to expand employment opportunities for county residents. Through its diverse initiatives, the board is a key player in the economic growth and competitiveness of DuPage County and the Metropolitan Chicago region.

Organization	Description of medically underserved, low-income, or minority populations represented (from publicly available sources, August 2015)
Donka, Inc.	This non-profit organization provides computer training to persons with physical disabilities.
Edward Hines VA Hospital	Edward Hines VA Hospital offers comprehensive health care, rehabilitative services and other important resources to veterans.
Elmhurst Community Unit School District 205 (CUSD 205)	Elmhurst CUSD 205 currently serves more than 8,000 students who reside primarily in the city of Elmhurst, Illinois, and small portions of Oak Brook, Bensenville and Addison. Approximately 93 percent of students live in Elmhurst, with the remainder living outside of the city but within district boundaries. Per its vision statement, Elmhurst CUSD 205 will be a national leader in educating children of all backgrounds and ability levels, promoting high individual student achievement. The district will incorporate student-centered decision-making, the highest academic standards, best practices in education, the highest-caliber educational professionals, and leading-edge resources to ensure an equitable education for all and success in a global society.
Illinois Health and Hospital Association (IHA)	For a combined 174 years, the Illinois Hospital Association and Metropolitan Chicago Healthcare Council worked to improve health care. The two organizations are now one—IHA—combining talent and expertise with a renewed sense of purpose.
Kensington International	Kensington International provides dedicated and experienced professionals to recruit, consult and coach on behalf of organizations.
Naperville School District 203	The district educates students to be self-directed learners, collaborative workers, complex thinkers, quality producers and community contributors.
Office of the Illinois Secretary of State	The office of the Illinois Secretary of State maintains official state records and the state seal. This office also issues drivers' licenses, registers vehicles, promotes organ/tissue donation and administers the state's literacy efforts.
People's Resource Center (PRC)	PRC provides food, clothing, job skills programs and much more to help neighbors in need in DuPage County. PRC serves more than 9,000 DuPage County families each year. It is a grassroots, community-supported organization, bringing neighbors together to create a future of hope and opportunity for all. Services include a food pantry, emergency rent/mortgage assistance, clothes closet, social services, job assistance, literacy training and a computer lab.
SPR Consulting	SPR Consulting powers businesses with technology by linking IT and line-of-business goals. Today's competitive business environment demands technologies that collaborate effectively, innovate new market advantage, increase business performance and enhance market share.
Village of Addison	Addison is a village located west of the Metropolitan Chicago Area, in DuPage County.

Appendix B

The following are healthcare facilities and organizations in DuPage County, Illinois, found through publicly available information sources as of August 2015.

Acute-Care Hospitals/Emergency Rooms

Adventist GlenOaks Hospital	Marianjoy Rehabilitation Hospital, now part of Northwestern Medicine
Advocate Good Samaritan Hospital	
Alexian Brothers Medical Center	Northwestern Medicine Central DuPage Hospital
Edward-Elmhurst Health Center	Presence Mercy Medical Center
Edward Hospital	Rush-Copley Medical Center

Emergency Medical Services (EMS)

Superior Ambulance Service Elmhurst

Federally Qualified Health Centers and Other Safety Net Providers

Access Community Health Network	DuPage Health Coalition
Access DuPage	VNA Health Care
DuPage Federation on Health Services Reform	

Home Health Care

Addus HomeCare	Family Home Health Services
Advocate Home Health Services	Home Instead Senior Care
ALC Home Health Care	Lexington Healthcare Center of Lombard
Always Best Care	LMR Home Health Care
Amedisys Home Health Care	ManorCare Health Services—Westmont
Assisting Hands Naperville	Metro Home Health Care
BrightStar Care Central DuPage—Wheaton	Pearl Health Care Services
Elite Care Management	

Hospice Care

Compassionate Care Hospice	Northwestern Medicine Home Health & Hospice
CovenantCare Hospice—St. Charles	Seasons Hospice & Palliative Care
First Hospice Care	

Mental Health Services/Facilities

Advanced Behavioral Centers of DuPage	Interfaith Mental Health Coalition
Aunt Martha's Aurora Community Health Center	Linden Oaks Outpatient Center
Crisis Intervention Unit	Meier Clinics
DuPage County Health Department	National Alliance on Mental Illness (NAMI)
DuPage Mental Health Services	Northwestern Medicine Behavioral Health Services
Good Samaritan Hospital Outpatient Behavioral Health	

Skilled Nursing Facilities

Abbington Rehab & Nursing Center	ManorCare Health Services—Naperville
Brighton Gardens of St. Charles	Meadowbrook Manor—Naperville
Brookdale Lisle	Oak Trace
Cordia Senior Residence	Park Place of Elmhurst
DuPage County Convalescent	Presence Pine View Care Center
Franciscan Village	Rehab Care Group
Friendship Village of Schaumburg	Rosewood Care Center
Lemont Nursing and Rehabilitation Center	The Holmstad
Lombard Place Assisted Living & Memory Care	Wynscape Health and Rehabilitation



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