

Northwestern Lake Forest Hospital 2013 Community Health Needs Assessment Report

Northwestern Lake Forest Hospital gratefully acknowledges the participation of a dedicated group of individuals who gave generously of their time and expertise to help conduct and develop our 2012-2013 Community Health Needs Assessment:

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Introduction

Northwestern Lake Forest Hospital (NLFH) is a not-for-profit community hospital in Lake Forest, Illinois, that provides a complete range of adult inpatient and outpatient services as well as skilled nursing care to the residents of Lake County, Illinois and surrounding areas. More than 700 physicians on the medical staff at NLFH are trained in 90 medical specialties.

From its founding 114 years ago as Alice Home on the campus of Lake Forest College, NLFH has upheld its promise to provide Lake County residents convenient access to the highest quality, most advanced healthcare services available. NLFH has continually expanded its healthcare services to respond to the growing needs of its community. NLFH is committed to providing care for those unable to pay, consistently providing the highest percentage of charity care as a percent of patient revenue among Lake County hospitals.

NLFH's board-certified emergency physicians and trauma-trained nurses serve and support the Region 10 Emergency Medical System, providing trauma and emergency care to patients at its Level II Trauma Center at NLFH and emergency services at the Northwestern Grayslake Emergency Center. NLFH has achieved the prestigious Magnet designation from the American Nurses Credentialing Center, the gold standard for nursing excellence and an organizational commitment to quality care.

NLFH sponsors numerous programs to promote health and wellness, healthcare career training, youth mentoring, language assistance and a multitude of volunteer programs to enhance the quality and accessibility of healthcare services.

NLFH has completed a comprehensive Community Health Needs Assessment to identify the highest priority health needs of residents of our community, and will use this information to guide new and enhance existing efforts to improve the health of our community. As described in detail later in this report, the goal of the CHNA is to use a data-driven approach to determine the health status, behaviors and needs of all residents in the NLFH Service Area. Through this

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

Providing Care to the Community

Addressing Priority Health Needs In Partnership

NLFH provides medically necessary care to residents of its community in coordination with safety-net organizations in Lake County, and with public health and social service partners.

The Community Health Needs Assessment (CHNA)

Background

The CHNA conducted by NLFH in 2012-2013 was comprised of a formal assessment of community health needs, interpretation and review of the findings, and prioritization of the health needs identified. The formal assessment of community health needs was sponsored by a collaboration of hospitals through the Metropolitan Health Council of Chicago (MCHC). NLFH purchased a separate report for its defined community, Lake County, Illinois. MCHC contracted with Professional Research Consultants (PRC), a nationally-recognized healthcare consulting firm with extensive experience conducting CHNAs in hundreds of communities across the United States since 1994, to complete the assessment. Following completion of the formal assessment, NLFH undertook additional steps to further interpret the findings and determine highest priority health needs to address.

To ensure that organizations impacting health in Lake County were meaningfully engaged in reviewing and interpreting the findings of the CHNA, developing priorities among the identified needs and forming a collaborative plan to address the top priority needs, a steering committee (the External Steering Committee) was established and maintained. Members include representatives of:

- HealthReach (Free Health Clinic)
- Lake County Council for Seniors
- Lake County Health Department
- Lake Forest High School and District 39
- Mano a Mano Family Resource Center

A description of the communities served by these organizations is included in Appendix A.

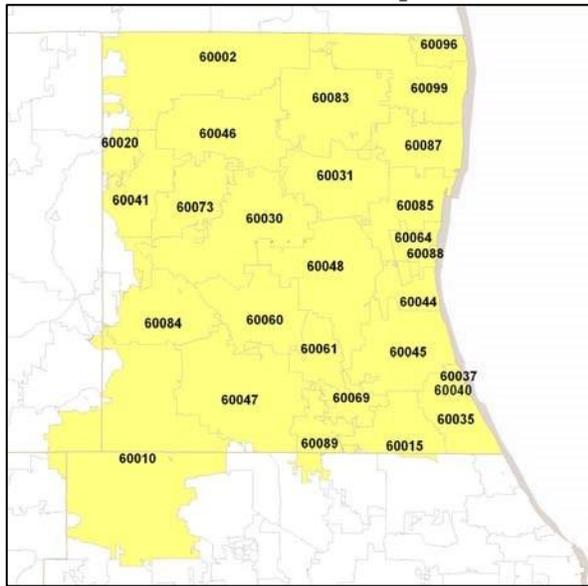
NLFH Service Area

NLFH primarily serves Lake County. Lake County is defined by 28 zip codes and accounts for 90 per cent of inpatient admissions at NLFH. Of the approximately 706,000 residents in the county¹, an estimated 80,000² under the age of 65 are uninsured and more than 80,000³ live in poverty.

¹ U.S. Census Bureau, 2011 American Community Survey

² U.S. Census Bureau, 2010 Small Area Health Insurance Estimates (SAHIE)

Northwestern Lake Forest Hospital Service Area: Lake County



NLFH Service Area – Lake County Zip Codes

Lake County Zip Codes					
60002	60031	60044	60060	60083	60089
60010	60035	60045	60061	60084	60096
60015	60037	60046	60064	60085	60099
60020	60040	60047	60069	60087	
60030	60041	60048	60073	60088	

Source: Truven Health Analytics Demographic Profiles (Claritas Based)

Lake County’s population is growing. Between 2012 and 2017, the population of Lake County is projected to increase by 3.1%.

Population	Lake County		
	2012	2017	% Change
Total	735,822	758,589	3.1%

Source: Truven Health Analytics Demographic Profiles (Claritas Based)

Race	Lake County		
	2012	2017	% Change
White	74.4%	71.9%	-2.5%
Black	6.8%	6.8%	0.0%

³ U.S. Census Bureau, 2011 American Community Survey

American or Alaskan Indian	0.5%	0.5%	0.0%
Asian/Pacific Islander	7.0%	8.2%	1.2%
Some Other Race	8.6%	9.7%	1.1%
Two or more Races	2.7%	2.9%	0.2%
Total	100.0%	100.0%	

Source: Truven Health Analytics Demographic Profiles (Claritas Based)

Ethnicity	Lake County		
	2012	2017	% Change
Hispanic or Latino	20.3%	22.7%	2.4%
Non-Hispanic or Latino	79.7%	77.3%	-2.4%
Total	100.0%	100.0%	

Source: Truven Health Analytics Demographic Profiles Source: Thomson Reuters Demographic Profile (Claritas Based)

Note: The census currently defines “Hispanic or Latino” as an *ethnicity* not a *race*. Race and ethnicity are separate census questions; thus, a person of Hispanic or Latino *ethnicity* can be of any *race*.

CHNA Goals and Objectives

The CHNA conducted in 2012-2013 is a systematic, data-driven approach to determine the health status, behaviors and needs of residents in the NLFH Service Area.

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. This CHNA will serve as a tool toward reaching three related goals:

- *To 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.
- *To 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 individuals may then be developed to combat some of the socioeconomic factors that have historically had a negative impact on residents’ health.
- *To 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 caring for late-stage diseases resulting from a lack of preventive care.

Methodology

This assessment incorporates data from both quantitative and qualitative sources. Quantitative data input includes primary research (the PRC Community Health Survey) 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 a series of Key Stakeholder Focus Groups.

Community Health Survey

Survey Instrument

The survey instrument used for this study is based largely on the Centers for Disease Control and Prevention (CDC) Behavioral Risk Factor Surveillance System, as well as various other public health surveys and customized questions addressing gaps in indicator data relative to health promotion and disease prevention objectives and other recognized health issues. The final survey instrument is similar to the previous survey used in the region, allowing for data trending.

A precise and carefully executed methodology is critical in asserting the validity of the results gathered in the PRC 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 sample design used for this effort consisted of a sample of 468 individuals age 18 and older in the NLFH Service Area. All administration of the surveys, data collection and data analysis was conducted by PRC.

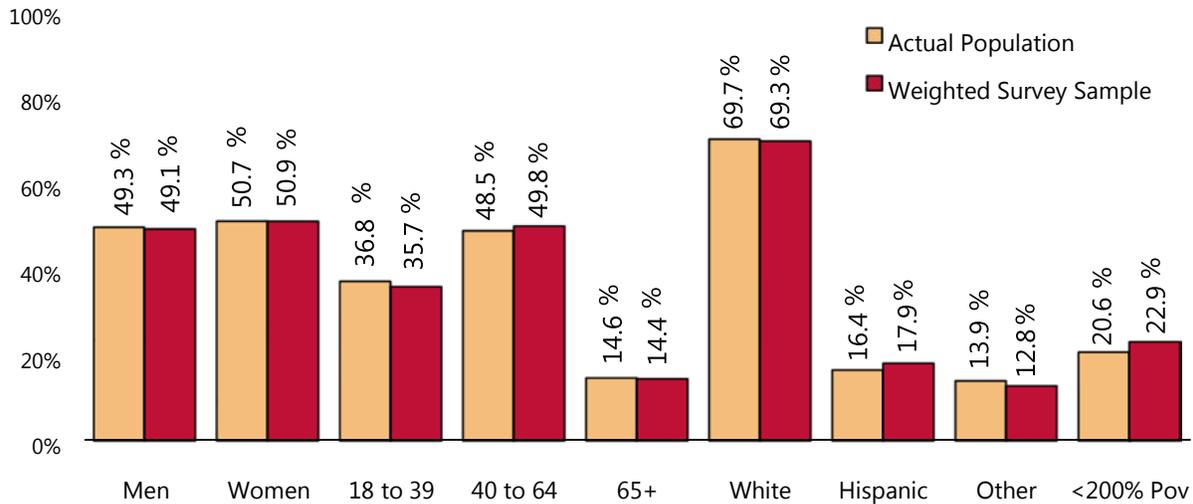
Sample Characteristics

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 improve this representativeness even further. This is accomplished by adjusting the results of a random sample to match the geographic distribution and demographic characteristics of the population surveyed (post stratification), so as to eliminate any naturally occurring bias. Specifically, once the raw data are gathered, respondents are examined by key demographic characteristics (namely gender, age, race, ethnicity and poverty status) and a statistical application package applies weighting variables that produce a sample that more closely matches the population for these characteristics. Thus, while the integrity of each individual’s responses is maintained, one respondent’s responses may contribute to the whole the same weight as, for example, 1.1 respondents. Another respondent, whose demographic characteristics may have been slightly oversampled, may contribute the same weight as 0.9 respondents.

The following chart outlines the characteristics of the NLFH Service Area sample for key demographic variables, compared to actual population characteristics revealed in census data. [Note that the sample consisted solely of area residents age 18 and older; data on children were

given by proxy by the person most responsible for that child’s healthcare needs and these children are not represented demographically in this chart.]

Population & Sample Characteristics (Northwestern Lake Forest Hospital Service Area, 2012)



Source: Census, 2010, Summary File 3 (SF 3), US Census Bureau
2012 PRC Community Health Survey, Professional Research Consultants, Inc

Further note that the poverty descriptions and segmentation used in this report are based on administrative poverty thresholds determined by the U.S. Department of Health & Human Services. These guidelines define poverty status by household income level and number of persons in the household (e.g., the 2012 guidelines place the poverty threshold for a family of four at \$23,050 annual household income or lower). In sample segmentation: “<200% FPL” refers to community members living in a household with defined poverty status or living just above the Federal Poverty Level (FPL)¹, earning up to twice the poverty threshold; “200%+ FPL” refers to those households living on incomes that are twice or more the federal poverty level.

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 & Other Data

A variety of existing (secondary) data sources were consulted to complement the research quality of the CHNA. These secondary data were available at the county and city level; to best

¹ The FPL in calendar year 2013 is an annual income of \$23,550 for a family of four.

match the community services area, data from Cook County and city of Chicago were used. These were obtained from a variety of sources including:

- Centers for Disease Control & Prevention
- Illinois Department of Public Health
- Illinois State Police
- National Center for Health Statistics
- U.S. Census Bureau
- U.S. Department of Health and Human Services
- U.S. Department of Justice, Federal Bureau of Investigation

Community Stakeholder Input

Key Stakeholder Focus Group

As part of the CHNA, a focus group was held among key stakeholders including representatives from public health and social service providers.

A list of recommended participants for the NLFH focus groups was provided by NLFH. Potential participants were chosen because of their ability to identify primary concerns of the populations with whom they work, as well as of the community overall. Participants included a representative of public health, as well as several individuals who work with low-income, minority or other medically underserved populations, and those who work with persons with chronic disease conditions.

Focus group candidates were first contacted by letter to request their participation. Follow-up phone calls were then made to ascertain whether or not they would be able to attend. Confirmation calls were placed the day before the groups were scheduled to insure a reasonable turnout. Audio from the focus group sessions was recorded. Findings from the focus group represents qualitative rather than quantitative data. The group was designed to gather input from participants regarding their opinions and perceptions of the health of the residents in the area. Thus, these findings are based on perceptions, not facts.

Information Gaps

While the 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. It must be recognized that 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 the homeless, institutionalized persons or 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 analyses.

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

Vulnerable Populations

The CHNA analysis and report yielded a wealth of information about the health status, behaviors and needs for our population. A distinct advantage of the primary quantitative (survey) research is the ability to segment findings by geographic, demographic and health characteristics to identify the primary and chronic disease needs and other health issues of vulnerable populations, such as uninsured persons, low-income persons and racial/ethnic minority groups.

For additional statistics about uninsured, low-income and minority health needs please refer to the complete PRC CHNA report, which can be viewed online at <http://lfh.healthforecast.net>. (ID: lfh; password-chna)

Public Dissemination

This CHNA is available to the public using the following URL: <http://lfh.healthforecast.net>. HealthForecast.net™ is an interactive, dynamic tool designed to share CHNA data with community partners and the public at large. This site:

- Offers the CHNA Report document in a format that, when accessed, downloaded, viewed, and printed in hard copy, exactly reproduces the image of the report;
- Grants access to download, view, and print the document without special computer hardware or software required for that format (other than software that is readily available to members of the public without payment of any fee) and without payment of a fee to the hospital organization or facility or to another entity maintaining the website.
- Links to the HealthForecast.net™ site, also available at NLFH's hospital website at: <http://www.lfh.org>.
- NLFH will also maintain at its facilities a hardcopy of the CHNA report that may be viewed by any who request it.

Areas of Opportunity for Community Health Improvement

The following health needs were identified by PRC and recommended as potential areas to consider for intervention, based on the information gathered through this CHNA and the guidelines set forth in Healthy People 2020.

Topic	Identified Need
Access to Health Services	<ul style="list-style-type: none"> ● Focus Group Concerns: <ul style="list-style-type: none"> ○ Health Disparities ○ Uninsured Residents ○ Cost of Prescriptions ○ Medicaid Reimbursement Rates ○ Language Barriers ○ Transportation
Chronic Kidney Disease	<ul style="list-style-type: none"> ● Kidney Disease Deaths
Chronic Pain	<ul style="list-style-type: none"> ● Chronic Neck Pain
Dementias, Including Alzheimer’s Disease	<ul style="list-style-type: none"> ● Alzheimer’s Disease Deaths
Heart Disease & Stroke	<ul style="list-style-type: none"> ● Prevalence of Hypertension
Mental Health & Mental Disorders	<ul style="list-style-type: none"> ● Suicides ● Focus Group Concerns: <ul style="list-style-type: none"> ○ Availability of Providers/Facilities ○ Pressure to Succeed
Substance Abuse	<ul style="list-style-type: none"> ● Alcohol Use (Current Drinkers) ● Illicit Drug Use ● Drug-Induced Deaths ● Drunk Driving/Riding With a Drunk Driver ● Focus Group Concerns: <ul style="list-style-type: none"> ○ Drug Use (Including Youth) ○ Limited Treatment Facilities ○ Prevention Education ○ Faith-Based Organizations

Interpreting and Prioritizing Health Needs

Following the completion of the CHNA by PRC, members of the External Steering Committee reviewed the findings. Representatives of the Lake County Health Department analyzed the findings and compared them to health priorities identified through the MAPP (Mobilizing for Action through Planning and Partnerships) process.

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

- **Magnitude:** How many people in the community are/will be impacted?
- **Seriousness & Impact:** How does the need impact health & quality of life?
- **Feasibility:** What capacity/assets currently exist to address the need?
- **Consequences of Inaction:** What impact would inaction have on individuals and the community?

The survey results were compiled and shared with the External Steering Committee. Together with the committee, the highest priority health needs were determined taking into account the findings of the PRC report, input from IPHAM, the survey findings, and consideration of:

- Importance of the problem to the community
- Availability of existing resources to address the issues
- Organizations already addressing the health issue
- Relationship of the identified health need to other community issues
- Impact specifically on vulnerable populations
- Feasibility of change; availability of tested approaches
- Estimated resources, timeframe, and size of impacted population
- Applicability of NLFH as a change agent (as a partner, researcher, educator, in a role as knowledge sharing or providing direct funding, etc)
- Feasibility of defining a solution to the need that has specific and measureable goals, achievable in a reasonable timeframe.

Prioritization Results

From this process, the top Priority Health Needs were identified as follows:

1. Access to Health Services
2. Heart Disease & Stroke
3. Mental Health Disorders and Substance Abuse (combined)

Development of Implementation Plan

NLFH will continue to work with the External Steering Committee to develop a specific Implementation Plan that addresses each Priority Health Need. NLFH 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 Health Care, NLFH and the organizations of Northwestern Medicine® can support efforts to positively change the health status of our

community by taking on any of a number of roles, whether as a direct clinical service provider, through application of our research and education expertise, by sharing our knowledge of health literacy, quality improvement or information technology, or by providing indirect support by coalescing organizations that can impact health, or funding initiatives undertaken by others.

The Implementation Plan will specify resources NLFH and its community partner organizations will direct toward each priority health issue. A general listing of the collective assets that could potentially be directed toward impacting priority health issues includes:

- Clinical care resources and facilities of NLFH 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 Feinberg physician scientists
- Financial assistance programs at NLFH
- Policies and procedures that broaden and simplify access to healthcare for the uninsured or underinsured
- Advocacy resources at NLFH and its community partner organizations
- Planning and oversight resources
- Management expertise in quality improvement and information technology

Existing Healthcare Facilities & Resources

NLFH also recognizes that a large number of healthcare facilities and organizations in Lake County, Illinois respond to health needs and support health improvement efforts. A list of those that were found through publicly available information sources as of May 2013 is included in Appendix B.

Appendix A

Organization	Description of medically underserved, low-income, or minority populations represented (from publicly available sources, July 2013)
<i>HealthReach</i>	HealthReach is a free medical clinic that provides a patient-centered medical home to 5000 of the uninsured, underserved residents of Lake County, Illinois. The communities we serve, and therefore our patients, are diverse in economic, cultural, and ethnic composition. HealthReach patients are economically disadvantaged, many are immigrants, and some have cultural and language barriers.
<i>Lake County Health Department</i>	As the largest human service provider in Lake County, we believe that services must be available without barriers. No residents are turned away due to an inability to pay. Of the approximately 706,000 residents in the county ¹ an estimated 80,000 ² under the age of 65 are uninsured and more than 80,000 ³ live in poverty.
<i>Lake Forest High School and District 67</i>	Lake Forest High School serves the communities of Lake Forest, Lake Bluff and Knollwood. District 67 serves elementary school students and their families in Lake Forest. In 2012 Lake Forest High School experienced three student suicides. The community has mobilized to address mental health issues.
<i>Mano a Mano Family Resources Center</i>	Mano a Mano serves over 4,300 adults and children each year, most of whom are between the ages of 18 and 54. The majority of our clients are from Mexico, with just over nine percent speaking English well, 60% speaking it poorly and the remaining 30% speaking no English at all. Only 35% have completed high school or higher education. Most of the rest have not completed middle school in their native countries. Many of our clients suffer from or health, a lack of health insurance and poor living conditions.

¹ U.S. Census Bureau, 2011 American Community Survey

² U.S. Census Bureau, 2010 Small Area Health Insurance Estimates (SAHIE)

³ U.S. Census Bureau, 2011 American Community Survey

Appendix B

Healthcare facilities and organizations in Lake County, Illinois found through publicly available information sources as of May 2013:

- Acute-Care Hospitals/Emergency Rooms
 - Advocate Condell Medical Center
 - Advocate Good Shepherd Hospital
 - Highland Park Hospital
 - Midwestern Regional Medical Center
 - Northwestern Lake Forest Hospital
 - Vista Medical Center East
 - Vista Medical Center West

- Emergency Medical Services (EMS)
 - Lindenhurst Freestanding Emergency Center
 - Northwestern Grayslake Freestanding Emergency Center

- Federally Qualified Health Centers & Other Safety Net Providers
 - Belvidere Health Center
 - Grand Avenue Health Center
 - Midlakes Health Center
 - North Chicago Health Center
 - Northeast Health Center
 - North Shore Health Center

- Home Healthcare
 - A Time For Care, Inc.
 - Addus HealthCare, Inc.
 - Advantage Home Health Plus, Inc.
 - Affectionate In-Home Care, LLC
 - Angels Keeper Home Care Services, Inc.
 - Apt Home Care, Inc.
 - Assured Healthcare Staffing, LLC
 - Baby Boomers Inc
 - Brightstar Healthcare
 - C D LeGrande Limited
 - Calgary NFP
 - CLS Home Care Services Inc.
 - ComForcare Senior Services- S. Lake

- Companion Services of America, LLC
 - Eggering Enterprises LLC
 - Field Home Care, LLC
 - Freedom Home Care, Inc.
 - Gentle Home Services, Inc.
 - Harmony Home Care, Inc.
 - Helping Hand Caregivers LTD
 - Home Care With Dignity, Inc.
 - JSV Enterprises, Inc.
 - Lake Bluff Home Care Solutions, LLC
 - Maggie's Healthcare Providers Inc.
 - MLM Homecare Services, LLC
 - More Care At Home Inc.
 - Northern Rose Caregivers, LLC
 - Northwestern Home Health
 - Partners in Senior Care, Inc.
 - Personalized Living at Hawthorn Lakes
 - Reliable Home Care Providers, Inc.
 - SCI Home Care
 - Senior Care Plus, Inc.
 - Traycee Home Care Services, Inc.
 - We Care Senior Caregiver Services, Inc.
- Hospice Care
 - Accord Hospice, Inc.
 - Integrated Palliative and Hospice, LLC
 - Journeycare, Inc.
 - Midwest Care Center
 - Waukegan Hospital Corporation
- Mental Health Services/Facilities
 - Highland Park Hospital
 - Lake County Health Department /Community Health Center
- Nursing Home
 - Abbott House
 - Alden Long Grove Rehabilitation & Healthcare Center
 - Ann M Kiley Development Center

- Anna Hintz House #1
- Arlington Rehabilitation & Living Center
- Arthur C. Neilsen Sr. House
- Bayside Terrace
- Benjamin Green-Field Residence
- Brentwood North Healthcare & Rehabilitation Center
- Claremont Rehab & Living Center
- Claridge Healthcare Center
- Clearbrook - Wright Home
- The Eva Markus Residence
- Gaylord & Dorothy Donnelley House
- Gerard M. Ungaro House #2
- Glenlake Terrace Nursing & Rehabilitation
- Greenfields Of Geneva
- Grove At The Lake Living & Rehabilitation
- Highland Park Nursing & Rehabilitation
- Hillcrest Retirement Village
- Irving Anixter House #3
- Lake Forest Hospital
- Lake Forest Place
- Lake Park Center
- Lewis Terrace
- Lexington of Lake Zurich
- Libertyville Manor Ext Care
- Manorcare of Highland Park
- Manorcare of Libertyville
- Michael Cudahy House #5
- Monte Philipe & Marie Monaster
- Moraine Clf
- Mount St Joseph
- Norman & Marie Bate Residence
- Northwestern Lake Forest Hospital Westmoreland Nursing Center
- Pavilion Of Waukegan
- Pine Terrace
- The Ponds of Wealshire
- Prairieview Nursing Unit
- Radford Green

- Riverside Foundation
- Rolling Hills Manor
- Seymour Terrace
- Sheltering Oak
- Stone Residence
- The Terrace Nursing Home
- The Village at Victory Lakes
- Wauconda Healthcare and Rehabilitation
- Waukegan Terrace
- The Wealshire
- Whitehall North
- Winchester House