

2019  
Community Health Needs  
Assessment

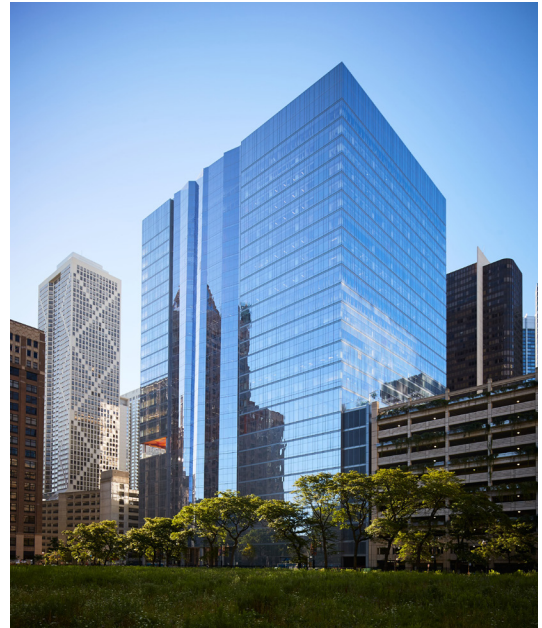


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# Executive Summary

Shirley Ryan AbilityLab, formerly Rehabilitation Institute of Chicago (RIC), is the global leader in physical medicine and rehabilitation for adults and children with the most severe, complex conditions — from traumatic brain and spinal cord injury to stroke, amputation and cancer-related impairment. Shirley Ryan AbilityLab is a Section 501(c)(3) corporation, as defined by the Internal Revenue Code. As such, it is a nonprofit organization that expands and accelerates leadership in the field — leadership that began at RIC in 1953. The quality of its care and research have led to the designation of No. 1 Rehabilitation Hospital in America by *U.S. News & World Report* every year since 1991 — 29 years in a row. No other hospital, of any kind, has held this distinction for as many years consecutively.



In accordance with the Patient Protection and Affordable Care Act<sup>1</sup> (the Affordable Care Act), Shirley Ryan AbilityLab has conducted three ongoing Community Health Needs Assessments (CHNA or Assessment); specifically, in 2013, 2016 and now in 2019 (jointly referred to as “Assessments”). Each Assessment has taken into account input from a variety of parties representing the broad interests of the community served by the organization. Shirley Ryan AbilityLab reviewed data and articles regarding rehabilitation health needs from a wide variety of sources, hosted a focus group of community representatives, received feedback from the Chicago Department of Public Health and reviewed data provided by the Illinois Department of Public Health on identifying the rehabilitation needs of the community.

Based upon the prior Assessments, as well as the current analysis and process, the following conditions continue to be identified and form the basis of our implementation plan:

- a) stroke;
- b) spinal cord injury;
- c) brain injury;
- d) neuromusculoskeletal;
- e) pediatrics;
- f) cancer.

# Introduction

## About the Shirley Ryan AbilityLab

Shirley Ryan AbilityLab, formerly Rehabilitation Institute of Chicago, serves patients from around the globe. In fiscal year (FY) 2018, for example, it treated more than 3,100 inpatients throughout its system of care and delivered more than a million outpatient therapy units. Shirley Ryan AbilityLab facilities are staffed by approximately 2,250 clinicians, scientists and staff, medical professionals and support personnel — an integrated and dedicated team — who in FY 2018 treated patients from nearly every state in the nation, as well as referrals from more than 70 countries around the world. Each day, Shirley Ryan AbilityLab focuses its care on its Vision — To be the global source of science-driven breakthroughs in Human Ability.

Since the 2016 Assessment, in March, 2017, the organization opened a 1.2-million-square-foot, first-ever “translational” research hospital — Shirley Ryan AbilityLab — in which clinicians, scientists, innovators and technologists work together in the same space, surrounding patients, discovering new approaches and applying (or “translating”) research real time. This unique model allows research to have an immediate impact on clinical care to provide patients with the best opportunity for recovery. This new translational research hospital represents an important investment toward realizing the organization’s Vision. The community has recognized this unique, innovative approach to providing rehabilitation to its patients through various awards (e.g., Gold Award, *Modern Healthcare* Design Awards; Chicago Innovation Awards; the United Kingdom’s S-Lab Award for Excellence in Laboratory Design, amongst 23 others). However, the most important measure of success is the organization’s progress in evolving patient care and research to achieve better outcomes for its patients.

In addition to embedding researchers into the clinical setting, Shirley Ryan AbilityLab restructured its clinical offerings into Innovation Centers and Ability Labs. Innovation Centers are the inpatient care units that provide highly specialized care focused on one of the following conditions: dysfunction or injury of the Brain, Spinal Cord, Nerves, Muscles or Bones, Pediatrics and Cancer. Ability Labs are integrated, applied-research areas in which physicians, therapists and scientific researchers work together with patients to regain function (or advance ability). The structure of the building itself compels collaboration across disciplines and functions.



Specifically, we have four Ability Labs, each with a different focus reflecting the different key functions under treatment and study:

### **Arms + Hands Lab**

The focus is on advancing hand function and movement, body and upper-limb coordination, strength, reaching and hand control (including individual finger manipulation). State-of-the-art research methods and approaches in this Lab include experimental electromyography, movement analysis, kinetic analysis, biomechanics, sensor technologies, brain and/or other imaging, brain physiology, musculoskeletal physiology, experimental biologics, experimental pharmacotherapeutics, and emerging technologies and use of smart devices.

### **Legs + Walking Lab**

The focus is on advancing trunk, pelvic and leg function, movement and balance. Therapeutic intervention makes use of anti-gravity support and weight-bearing assistive devices, which are used to support patients as they work on climbing and descending the Lab's staircase.

### **Think + Speak Lab**

Dedicated to recovery of patients with the most severe conditions affecting the fundamental functions of the human brain — arousal, lucidity, awareness, sensory perception, motivation, information-processing and thinking, perception, speech, memory and learning. Brain injury or disease also affects the muscles and structures used in breathing, speaking and articulation, eating and swallowing. Patients are immersed in cutting-edge therapeutic interventions in neurophysiology and neurological functioning, which includes utilizing proprietary software, computers and other unique smart thinking-speaking technology and equipment.

### **Strength + Endurance Lab**

Designed for patients and research participants working on building stamina and resilience. Therapy is targeted to improve complex motor and endurance activities, coordination and higher-level activities of daily living. Clinical trials and human-subject research focus on the facilitation of patients' neurologic, muscle, bone and joint repair and recovery. State-of-the-art research methods and approaches in the Strength + Endurance Lab include experimental electromyography, movement analysis, kinetic analysis, biomechanics, sensor technologies, brain and/or other imaging, brain physiology, musculoskeletal physiology, experimental biologics, experimental pharmacotherapeutics, and emerging technologies and use of smart devices.

In addition to the new facility, Shirley Ryan AbilityLab continues to offer robust physician clinics, outpatient care, day rehabilitation (for patients who no longer require hospitalization, but still need intensive, coordinated rehabilitation care), as well as additional specialized services, such as ethics consultation, therapeutic recreation, an assistive technology program, and a wheelchair seating and positioning center.



Following is an overview of Shirley Ryan AbilityLab locations:



Figure 1. Shirley Ryan AbilityLab sites of care, including its wholly owned sites.

Finally, Shirley Ryan AbilityLab is one of the 3.7 percent of the nation's nearly 6,000 hospitals to have achieved the American Nurses Credentialing Center (ANCC) Magnet designation for nursing excellence three or more consecutive times, and it is the first free-standing acute inpatient rehabilitation hospital to hold this distinction.

Each year the Shirley Ryan AbilityLab continues its robust commitment to the community and their needs by implementing the actions identified by the Assessment and evolving future care and services. This report outlines the findings of the community health needs assessment and provides guidelines for implementation of services to address those needs.

# The CHNA Process

## **Commitment by the Organization and Its Leaders**

Shirley Ryan AbilityLab's 2019 CHNA took into account input from a number of parties who represent the broad interests of the community served by the organization. Shirley Ryan AbilityLab reviewed data and articles regarding rehabilitation health needs from a wide variety of sources, hosted a focus group of community representatives, received feedback from the Chicago Department of Public Health and reviewed data provided by the Illinois Department of Public Health on identifying the rehabilitation needs of the community. Shirley Ryan AbilityLab found continued rehabilitation health needs in the areas of stroke, spinal cord injury, brain injury, neuro-musculoskeletal conditions, pediatric care and cancer. In response to the CHNA, Shirley Ryan AbilityLab will prepare an Implementation Strategy to identify the programs and resources the organization will employ to address the significant health needs identified in the CHNA.

## **The Community that Shirley Ryan AbilityLab Serves**

Critical to any Assessment is identifying the community being served. To do so, a provider may take into account the relevant facts and circumstances in defining the community it serves, including the geographic area served by the hospital facility, target populations served (for example, children, women or the aged), and principal functions (for example, focus on a particular specialty area or targeted disease)<sup>2</sup>. Although as identified above, Shirley Ryan AbilityLab serves a global patient population, for the purposes of the Assessment, Shirley Ryan AbilityLab identified the community as the Chicagoland and Illinois area with a need for inpatient, outpatient, or day rehabilitation physical medicine and rehabilitation. Furthermore, Shirley Ryan AbilityLab's assessment included a broad and all-encompassing evaluation of the needs of all individuals in its community with a need for physical medicine and rehabilitation services, including those services for which a rehabilitation hospital is required. Patients requiring physical medicine and rehabilitation services include those with neuro-musculoskeletal injuries, brain injuries, spinal cord injuries, pediatric rehabilitation, stroke rehabilitation and cancer rehabilitation, in both adult and pediatric populations, along with patients who have had amputations or who have other limb deficiencies.

The community is further defined by Chicago and the surrounding Illinois counties of Cook, DeKalb, DuPage, Kane, Kankakee, Lake, McHenry and Will, which together are home to approximately 8.6 million people. The area is also home to a diverse population, as shown by the data in Table 1. In calendar year 2018, 19,780 patients were discharged from inpatient rehabilitation facilities (IRFs) located in these eight Illinois counties.

Most patients who receive care at Shirley Ryan AbilityLab are from the Chicagoland area. In CY 2018, 79 percent of inpatients, 96 percent of outpatients and 91 percent of DayRehab patients were from Chicagoland (the counties of Cook, DeKalb, DuPage, Kane, Kankakee, Lake, McHenry and Will in Illinois).

## **Our Role in Providing Care to Medically Complex Patients**

Shirley Ryan AbilityLab patients are some of the most medically complex patients requiring rehabilitative care. The Case Mix Index (CMI) provides one measure to objectively determine a patient's medical complexity. Namely, a higher number indicates more complexity. "A hospital's CMI represents the



average case mix group (CMG) relative weight for that hospital. It is calculated by summing the CMG weights for all Medicare discharges and dividing by the number of discharges.”<sup>3</sup>

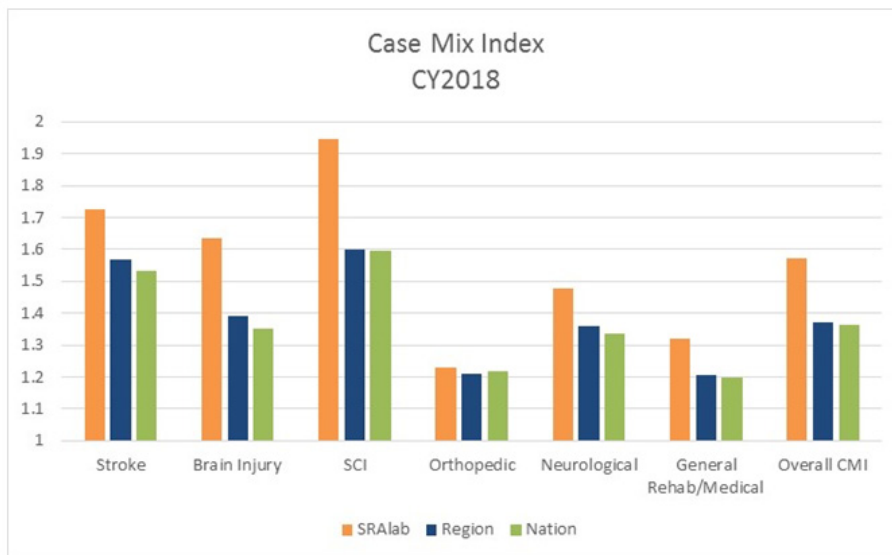


Figure 2. CMI Values for Shirley Ryan AbilityLab, the region and the nation for calendar year 2018. The regional values include Illinois, Indiana, Michigan, Ohio and Wisconsin.

### Age and Race of Patients

In preparing the Assessment, Shirley Ryan AbilityLab reviewed age, race and ethnicity information for IRF patients. Nationally, older adults make up the largest percentage of users of rehabilitation services. Table 1 indicates the race and ethnicity of individuals in the Chicagoland area, and compares it with the racial and ethnic breakdown of patients recently discharged from our hospital and patients recently discharged from all Chicagoland IRFs. As the table indicates, Shirley Ryan AbilityLab sees more patients who identify as African-American, or other minority population, than do other IRFs in the Chicagoland area. Of note, the percentage of Hispanic patients discharged from Shirley Ryan AbilityLab and other Chicagoland IRFs is low and may identify an area of community health need.

	White	African-American	Hispanic	Other
Percent of Population in Chicagoland Area	52.1%	17.2%	23.7%	7.9%
Percent of Patients Discharged from Shirley Ryan AbilityLab (FY 2018)	51.0%	25.7%	5.6%	17.7%
Percent of Patients Discharged from Chicagoland IRFs (FY 2018)	64.2%	19.2%	6.5%	10.1%

Table 1. Race and ethnicity percentage of patients discharged from Shirley Ryan AbilityLab and from Chicagoland IRFs

Overall, Shirley Ryan AbilityLab’s determination of its community of care for this Assessment took into account these functional, geographical and demographic considerations.

# How the Shirley Ryan AbilityLab Conducted This Assessment

A hospital facility’s report of the CHNA should describe the process and methods used to conduct the CHNA. Namely, the CHNA should: (1) describe the data and other information used in the assessment, as well as the methods of collecting and analyzing this data and information, and (2) identify any parties with whom the hospital facility collaborated, or with whom it contracted for assistance, in conducting the CHNA.<sup>4</sup> Specifically, Shirley Ryan AbilityLab utilized:

## Data & Methods

### 1. Review of Patient Conditions

Shirley Ryan AbilityLab reviewed its patient mix by diagnostic group to determine the substantial health needs of its community. Figure 3 shows Patient Mix by Diagnostic Group for patients admitted on an inpatient basis.

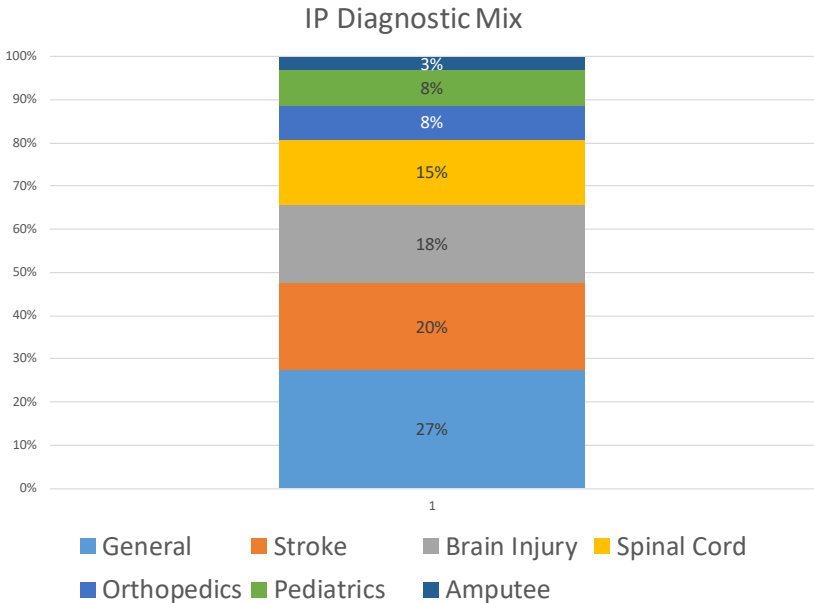


Figure 3. Shirley Ryan AbilityLab patient mix by diagnostic group for calendar year 2018.

### 2. Literature Survey

Literature in the field of physical medicine and rehabilitation was reviewed to help determine the significant health needs of the community, with a focus on the types of conditions presented by Shirley Ryan AbilityLab patients. Millions of individuals, including those in Shirley Ryan AbilityLab’s geographic community, have conditions that require physical medicine and rehabilitation services, such as stroke, spinal cord injuries, traumatic brain injuries and cancer. Nationally, survival rates for many of these conditions including stroke,<sup>5</sup> spinal cord injury,<sup>6</sup> and traumatic brain injury<sup>7</sup> are increasing so that the total burden of illness and need for rehabilitation care is growing. In addition, more people than ever are

cured of cancer or live longer with their cancer, making cancer a chronic condition. Increased survival rates in populations suffering from such conditions bring new challenges and opportunities in the field of rehabilitation. For many cancer survivors, the aggressive, life-saving interventions often take a harsh physical toll.<sup>8</sup> Although the fight against cancer is frequently won, patients may experience debilitating fatigue, pain, anemia, memory or concentration problems, edema and nerve problems that result in the loss of mobility or the ability to perform self care tasks.<sup>9</sup> For stroke patients, the effects differ based on which area of the brain was affected and can include vision problems, memory loss, speech impairments, mobility limitations and changes in behavior.<sup>10</sup> Based on data provided by the Illinois Health and Hospital Association’s COMPdata Informatics, the chart below identifies the number of patients discharged with the condition listed from acute-care hospitals in Chicagoland eight-county area:

Condition	Occurrences	
	2013	2018
Stroke	20,963	35,191
Spinal Cord Injury	3,931	3,047 <sup>1</sup>
Traumatic Brain Injury	5,860	6,623
Neurological Conditions	16,337	21,331

**3. Illinois Department of Public Health**

Shirley Ryan AbilityLab reviewed the Illinois Department of Public Health’s (IDPH) 2016 Illinois Disability and Health Data Report, which addresses health status of adults with disabilities and children with special healthcare needs in Illinois. In preparing the report, IDPH uses a questionnaire with a pair of screening questions. One question inquires whether a respondent has an activity limitation due to physical, mental and/or emotional problems. Another asks if he or she uses a mobility-device (e.g., cane, wheelchair) and/or other assistive devices (e.g., special bed or telephone). Survey participants who respond positively to either or both questions are categorized as “adults with disabilities.” In all, 19.1 percent of adults in the Chicago metropolitan area were estimated to have a disability in 2014.<sup>11</sup> “The prevalence of disability increases across the age groups from 10.8 percent (95 percent CI: 8.8 percent – 13.2 percent) among young adults ages 18 to 39, to 21.8 percent (95 percent CI: 19.7 percent – 24.1 percent) among middle-aged adults ages 40 to 64, and to 34.9 percent (95 percent CI: 31.9 percent – 38.0 percent) among those ages 65 and older.”<sup>12</sup>

According to the IDPH Report, Illinois adults with disabilities are more likely to face chronic disease than Illinois adults without disabilities. Table 3 compares disease rates for select chronic diseases.

	Adults with Disability	Adults without Disability
Arthritis	56%	17.6%
Asthma	19.2%	6.8%
Diabetes	22.9%	7.2%
Heart Attack	9.6%	2.4%
Chronic Obstructive Pulmonary Disease	15.6%	3.5%
Cancer	15.3%	7.3%

Table 3. Chronic Disease Prevalence <sup>13</sup>

Additionally, Illinois adults with disabilities are more likely to face risk factors for chronic diseases. Table 4 compares rates for select risk factors.

	Adults with Disability	Adults without Disability
Obesity	46.0%	25.3%
Participation in Exercise	60.3%	80.4%
Cigarette Smoking	19.9%	15.9%
High Blood Pressure	53.6%	24.9%
High Blood Cholesterol	51.3%	33.0%

Table 4. Risk Factor Prevalence <sup>14</sup>

Data from this IDPH report highlights the critical need to address social determinants of health and target risk factors that can lead to chronic disease development in people with disabilities.

#### 4. Chicago Department of Public Health

Shirley Ryan AbilityLab also reviewed data that had been prepared at the request of the Chicago Department of Public Health, which indicated that people with activity limitations face higher rates of obesity and lower rates of physical activity than people with no physical disabilities. This data highlights the importance of addressing and promoting physical activity early on in the patient population served by Shirley Ryan AbilityLab.

	Under or normal weight	Overweight	Obese
Activity limitations due to health problems	16	18.6	31.5

Disability	Healthy weight	Overweight	Obese
No limitation	73.3	71.5	58.3
Basic actions difficulty	24.7	26.6	39.7
Complex activity limitation	12.3	12.1	20.5

**5. Focus Group — Consulting with Persons Who Represent the Broad Interests of the Served Community**

As part of developing its 2019 Community Health Needs Assessment, and, in order to assess the significant health needs of its community, Shirley Ryan AbilityLab invited a number of leaders of the health community to participate in a Focus Group. These leaders included persons with special knowledge or expertise in public health, federal, state or local health departments, or agencies with current data or other information relevant to the health needs of the community. Participants included leaders, representatives or members of medically underserved, low-income and minority populations, and populations with chronic disease needs. Shirley Ryan AbilityLab is grateful for the discussion and input provided by the following Focus Group participants:

- Access Living
- Brain Injury Association of Illinois
- Chicago Park District
- EOA Consulting, LLC.
- Illinois DHS — Division of Rehabilitation Services
- Open Doors (Consultant)
- Parkinson’s Disease & Movement Disorder Center, Northwestern University
- Sliding Board Productions, Inc.
- Spinal Cord Injury Association of Illinois
- Shirley Ryan AbilityLab Peer Mentor Program

The Focus Group meeting was held on May 21, 2019, at Shirley Ryan AbilityLab. Group discussion focused on rehabilitation health needs of people with physical disabilities, access to information and care, research and clinical trials, education and training, and support programs. A detailed description of the organizations invited by Shirley Ryan AbilityLab to participate in its Assessment Focus Group is included in Appendix A.

In order to identify the significant community health needs, Shirley Ryan AbilityLab analyzed the information obtained in the Assessment process. Focus Group participants were asked to consider the significant rehabilitation health needs of their respective communities.

# Evaluating Our Actions

A hospital’s CHNA includes an “evaluation of the impact of any actions that were taken ... to address the significant health needs identified in the hospital facility’s [immediately preceding] CHNA.”<sup>15</sup> In the 2016 Assessment, Shirley Ryan AbilityLab identified the following significant community health needs:

1. Rehabilitation Health;
2. Research;
3. Improved Access to Information About Existing Resources;
4. Education and Training; and,
5. Support Programs.

These needs were identified and prioritized based on data analysis and feedback provided by the community served by Shirley Ryan AbilityLab. Shirley Ryan AbilityLab has made an effort to address each identified health need, as discussed in this section of our Assessment.

## 1. Rehabilitation Health: Expanding Access to the Best Rehabilitation & the Best Patient Outcomes

The 2016 Assessment identified a community health need for increased access to rehabilitation services given the increasing incidence of conditions that cause cognitive and physical disabilities. Shirley Ryan AbilityLab (formerly Rehabilitation Institute of Chicago or RIC) opened a new translational research hospital on March 25, 2017. Prior to that time, RIC operated a 182-bed IRF, primarily with semi-private rooms. As a result, we were effectively capacity constrained due to semi-private rooms, gender mix issues and the need for infection control. Upon opening the new research hospital, capacity increased to 242 private rooms. Further, on April 30, 2019, the Illinois Health Facilities Planning Board authorized an additional twenty (20) beds for a capacity of 262 private rooms. Currently, our average census is 205, but we often reach a census of 230 or more.

Data regarding the percentage increases in the number of patients is shown in the chart below:

Area of Focus	Number of Patients	Percentage Increase	
	2013	2016	2018
Stroke	1,217	26%	28%
Spinal Cord Injury	601	0%	44%
Traumatic Brain Injury	347	9%	27%
Cancer	278	-16%	16%
Neuromusculoskeletal conditions	398	3%	22%
Pediatric	383	15%	36%

In addition, patients who received care at Shirley Ryan AbilityLab since the 2016 CHNA were more medically fragile than patients at other IRFs, regionally and nationally. Figure 2 (shown on the previous page) compares our hospital’s CMI in the areas of stroke, brain injury, spinal cord injury, orthopedic, neurological and medical rehabilitation with comparative values for the region and the nation for CY 2018. Shirley Ryan AbilityLab’s CMI in each area of care is higher, often substantially so, than the equivalent regional or national CMI.

In addition, Shirley Ryan AbilityLab has increased access to care in the outpatient and day rehabilitation settings. Since the 2016 Assessment, ten of our outpatient and day rehabilitation sites have been upgraded and expanded. Specifically, we have remodeled our Northbrook outpatient program and our Glenview pediatric program, updating the spaces to better meets the needs of our patients. In addition, we have moved our spine and sports program and our neurological outpatient program into adjacent spaces in the new hospital and have updated the equipment therein. Our outpatient pediatric program also moved from the old hospital into the new building, sharing an Ability Lab with the inpatient team for greater staff collaboration and improved patient experience. Three of our community-based neuro DayRehab programs — our Pain Management Center and our Willowbrook outpatient program — have also moved to newly renovated or constructed spaces, complete with state-of-the-art equipment and technology targeted at improved patient outcomes.

As a result of this expansion, Shirley Ryan AbilityLab has been able to offer access to more individuals. As noted in the chart below, Shirley Ryan AbilityLab’s outpatient facilities have provided care to more than 700 additional outpatients versus 2016, and more than 1,400 additional outpatients versus 2013. Similarly, the day rehabilitation programs have seen an increase of more than 550 patients (28.3%) since 2013.

	2013	2016	2018
<b>Outpatient</b>	11,363	12,097	12,790 12.6% increase
<b>DayRehab</b>	2,043	2157	2,623 28.3% increase

The expansion of services across the continuum of care, from inpatient and day rehabilitation to outpatient programs, has enabled Shirley Ryan AbilityLab not only to provide a significant increase in access, but also to meet a community need identified in the 2016 Assessment.

## 2. Research

In the 2016 Assessment, a need was identified for rehabilitation research into new and more promising treatments to improve and eliminate the effects of injury, disease and debilitating health conditions in the community served. Also, as result of the opening of the new translational research hospital, Shirley Ryan AbilityLab’s Research Program has expanded considerably. It has always been the world’s largest physical rehabilitation research enterprise in pursuit of clinical advancement through scientific discovery; however, as a result of embedding research into clinical care, new innovations and research is expanding rapidly.

Currently, the Research Program has, at any given time, more than 125 research projects underway, funded by approximately \$100 million in grants and donations, from both public and private sources. Shirley Ryan AbilityLab conducts research in areas including aging, amputation, aphasia, arthritis, basic science, biologics, brain injury, cerebral palsy, gait, musculoskeletal conditions, neuro-engineering, outcomes, pain, Parkinson’s disease, pediatrics, prosthetics and orthotics, biomarkers, brain imaging, bionics, robotics, spinal cord injury, sports medicine, stroke and women’s health. Since the 2016 Assessment, there has been a major focus on and expansion in research.

The chart below provides a 2016/2019 comparison of funded research projects, award dollars funded and the number of employee researchers:

	FY16	FY19
# Funded Research projects (Grants & Clinical Trials)	142	142
Total Active Award \$\$ funded in FY	\$93,961,254	\$107,090,425
# Employee Researchers	268	308

Additionally, Shirley Ryan AbilityLab researchers have published hundreds of articles on a wide variety of rehabilitation-related topics from 2016 to 2019.

Since the 2016 Assessment, Shirley Ryan AbilityLab has hired three individuals for key roles, which will continue to expand the research portfolio and ensure that Shirley Ryan AbilityLab stays at the forefront of clinically relevant research. These roles include:

### Scientific Chair, Arms + Hands Lab

The Scientific Chair of the Arms + Hands Lab facilitates clinically meaningful research and applies state-of-the-art scientific principles to improve patient function, specifically in the areas of complex arm/hand and reaching skills. The Scientific Chair establishes research themes and provides guidance and technical expertise in collaboration with the Clinical Chairs of all Innovation Centers. The Scientific Chair is focused on creating synergy among investigators and clinicians in the Arms + Hands Lab that will speed discovery and ensure clinical adoption of discoveries.



### Scientific Chair, Legs + Walking Lab

The Scientific Chair of the Legs + Walking Lab facilitates clinically meaningful research and applies state-of-the-art scientific principles to improve patient function, specifically in the areas of locomotion, gait and walking. The Scientific Chair establishes research themes and provides guidance and technical expertise in collaboration with the Clinical Chairs of all Innovation Centers. The Scientific Chair is focused on creating synergy among investigators and clinicians in the Legs + Walking Lab that will speed discovery and ensure clinical adoption of discoveries.

### Section Chief, Parkinson's and Movement Disorders

The Section Chief of Parkinson's and Movement Disorders leads the medical practice of attending physicians, as well as the clinical contingent of the interdisciplinary team focused on Parkinson's disease and movement disorders. The Section Chief also shares responsibility with a designated operations leader for planning, developing and implementing this program, a leadership teaming that will create additional access for patients.

### **3. Improved Access to Information**

The 2016 Assessment identified the need for improved community and professional access to evidence-supported educational materials and information. Since 2003, the organization's LIFE Center has served as a multimedia education center and virtual education web portal that provides patient education and consumer health information as an integrated component of our care. The LIFE Center's mission is to provide opportunities for Learning, Innovation, Family and Empowerment for the patient populations, families and community served by Shirley Ryan AbilityLab. The Center provides virtual access to its resources through Shirley Ryan AbilityLab's website ([sralab.org/lifecenter](http://sralab.org/lifecenter)). All content is designed to provide holistic support to people living with a wide range of cognitive and physical impairments. Knowledgeable, expert staff are available on-site to help visitors and professionals find personal connections and trusted resources (such as peer mentors) who are aligned with their needs, and can provide guidance throughout their respective healthcare journeys.

In response to the 2016 Assessment, Shirley Ryan AbilityLab increased community access and visibility of available resources. One component of building toward this goal was mailing an informational brochure containing information regarding Shirley Ryan AbilityLab's Henry B. Betts, M.D., LIFE Center to 50 acute-care/inpatient rehabilitation hospitals. A copy of the brochure is attached as Appendix B. In addition, the LIFE Center recently hosted a National Council on Disability Town Hall and provided LIFE Center information for the 75 participants.

In 2018, total outreach and service efforts represented 10,168 person contacts. Services provided included individualized patient, family and community education programs, classes, special events, tours and a peer-mentor program. The Center offers a public computer bank that provides centralized access to its best-practice, peer-reviewed content. LIFE web traffic in fiscal 2018 averaged 19,093 page views per month, or 229,127 page views annually, with visits from more than 190 countries.

#### 4. Education and Training

The 2016 Assessment noted the continued need for more rehabilitation professionals to address the increasing prevalence of conditions resulting in disability, as well as increased education and training for patients and their families.

Shirley Ryan AbilityLab has been able to increase the number and availability of rehabilitation professionals who are up-to-date on best practices and educate patients and families through the following programs:

##### Physiatry Residency Program and Required Medical Student Rotation

*Medical Education Training Programs:* The Department of Physical Medicine and Rehabilitation at Northwestern University's Feinberg School of Medicine (Department of PM&R) is housed within Shirley Ryan AbilityLab. This program is one of the largest, with 40 residents, and is arguably the most highly respected residency programs in physical medicine and rehabilitation in the country. Resident physicians spend three years rotating through the Department of PM&R, taught by expert Shirley Ryan AbilityLab physicians, who are experts in this specialty. The Shirley Ryan AbilityLab medical education program also provides opportunities for first-year medical students to meet regularly with patients from Shirley Ryan AbilityLab's spinal cord injury, general rehabilitation or pediatric program to gain patient insight into recovery and the need to live independently. Northwestern University Feinberg School of Medicine requires fourth-year medical students to complete a two-week rotation at Shirley Ryan AbilityLab in order to understand more fully the needs and care of patients with diagnoses served by the hospital. Approximately 160 medical students participate in this rotation. Additionally, there are five fellowship training programs in Spinal Cord Injury, Traumatic Brain Injury, Pediatric Rehabilitation, Sports Medicine and Pain Medicine. These subspecialty fellowships promote advanced medical knowledge and expertise in the diverse field of Physical Medicine and Rehabilitation.

*Prosthetics and Orthotics (P&O) Residency:* Each year, Shirley Ryan AbilityLab's Prosthetics and Orthotics Clinical Center (POCC) selects three prosthetist and three orthotist residents for these highly-sought-after positions. The orthotics residency program is 12 months long, and the prosthetics residency program is 18 months long. The length of these specialty residencies has been established to allow for additional hands-on experience in research through our Center for Bionic Medicine. P&O residents are mentored by Shirley Ryan AbilityLab's certified, licensed prosthetists and orthotists and get exposure to a variety of clinical presentations and pathologies, clinical evaluation, prescription recommendations, documentation, the actual fabrication of devices and formal research.

##### Continuing Education Programs for Clinicians

*Academy:* Since 1953, the organization has offered continuing education programming to help healthcare professionals stay at the forefront of the field. Each year, more than 1,000 students participate in Academy courses, which are taught by interdisciplinary teams of our recognized PM&R specialists and visiting experts from across the country and around the world. These programs also include discussions about the existence of disparities in managing certain chronic conditions, as well as the difficulties patients with disabilities have in this regard. Also, the programs identify how to connect patients with the right resources. These courses are offered in a variety of formats including webinars, on-site workshops, online courses, outreach programs and blended programming. Healthcare professionals from outside

of the hospital participated in Academy offerings 4,140 times in the 25 courses and more than 70 webinars held from September 2016 to August 2018. In 2018, we introduced our first online series on concussion, as well as a podcast on Stroke. This format was designed for busy professionals who might be better able to complete them at home, on their own time. Titles of various programs and conferences presented by the Academy following the 2016 CHNA are listed in Appendix C.

*Pathways:* Shirley Ryan AbilityLab is helping healthcare professionals ensure that patients are connected to the right resources through its subsidiary, Pathways. Specifically, Pathways.org is a national, nonprofit organization uniquely dedicated to increasing knowledge about early childhood development. To achieve their goals, Pathways provides free tools and resources. (Pathways Foundation is also a subsidiary of Shirley Ryan AbilityLab, formerly Rehabilitation Institute of Chicago.)

Pathways.org outreach efforts include an interactive website with the most current multimedia resources; social media, including Facebook, Twitter and YouTube; online medical education modules; presentations to medical societies and consortiums; exhibitions, poster presentations, and workshops at conferences; and post-graduate training for healthcare professionals. Pathways.org materials are used 25,000 times each day, and more than 300 educational institutions link to the Pathways.org website. Among free online materials are videos, brochures, and checklists that share information on a baby's milestones, tips, games and more. These resources are easy to understand and have actionable steps to help parents understand their baby's development, as well as learn about the warning signs of atypical development. Additionally Pathways.org offers courses to help healthcare professionals enhance their knowledge of early detection practices. The early detection of delays or atypical development can lead to early intervention, which can lead to better outcomes for children. All of these initiatives are guided by Pathways.org's Medical Roundtable and vetted by pediatric physical therapists, occupational therapists and speech-language pathologists, all outstanding leaders in the field. All milestones are supported by American Academy of Pediatrics findings.

Pathways.org partners with healthcare facilities, educational institutions, nonprofits, healthcare professional organizations, social media influencers and others to provide resources on child development to a diverse population.

*Donnelly Ethics Program:* Shirley Ryan AbilityLab's Donnelly Ethics Program (DEP) was established in 1995. The DEP is a resource for patients, families, clinicians, researchers and staff members when they have challenges or concerns regarding the delivery of patient care and/or the conduct of research. The DEP addresses both clinical and research ethics issues, such as decisional capacity, informed consent and refusal, patient autonomy and self-determination, quality of life, disability rights, and the integration of clinical care and research. The DEP also serves as an educational resource for Shirley Ryan AbilityLab, the Northwestern community and the nation through seminars, presentations and scholarship. FY 2018, Shirley Ryan AbilityLab's DEP created and delivered 19 clinical ethics in-services. Ethics also delivered educational programming to residents and medical students, including a lecture for fourth-year medical students on their PM&R clinical rotation; training and assessing every PGY2 resident on a communication competency to have Do Not Resuscitate conversations; lectures to residents; and facilitating resident journal clubs on ethics topics. Through internal educational activities, DEP staff reached approximately 1,200 participants. The DEP hosted three Ethics Grand Rounds through Northwestern University

Feinberg School of Medicine's Department of Physical Medicine and Rehabilitation, reaching approximately 410 participants.

The DEP also hosts Schwartz Center Rounds (<http://www.theschwartzcenter.org/supporting-caregivers/schwartz-center-rounds/>), which allows staff the time to explore and share the psychosocial and emotional aspects of caring for patients. In FY 2018, the DEP hosted six Schwartz rounds that reached approximately 1,500 staff, with an average of 250 attendees per Rounds.

## 5. Support Programs

The 2016 Assessment identified a continued need for particular support programs for patients and their families, as well as accessible fitness programs.

The following programs at Shirley Ryan AbilityLab provide unique resources for patients and their families:

### Aphasia Programs

Our aphasia experts are investigating novel ways to treat aphasia through technological innovation, clinical research studies, and unique therapeutic treatments. The following examples illustrate how our aphasia team is addressing patient and community needs:

- Aphasia Community Groups — Approximately 45 participants attend throughout the year on a fairly regular basis.
- Annual Aphasia Day — Approximately 160 community members with aphasia and their families participate.
- Intensive Aphasia Program — Approximately 25 participants attended the month-long, self-pay program.
- Aphasia Research — We have several aphasia related studies underway. Across all, 50 aphasia patients participated in one of the studies.

Further, Shirley Ryan AbilityLab sponsors weekly programming for community members with aphasia. Participants are charged a nominal fee of \$6-\$8 per session, with alternate arrangements available if a participant cannot afford the fee. Programming includes conversation groups, book clubs and collaborative sessions with outside contractors, such as drama therapists, fitness trainers and yoga instructors.

### Transition Programs for Adolescent Patients

Transition from adolescence to adulthood presents unique challenges for rehabilitation patients. Like most peers their age, they are going through changes in puberty, sexual identity, increased abstract thinking, self-determination and increased responsibility; but they have the added responsibility of navigating their worlds with a disability. The added challenge requires additional support and services. In an effort to help adolescent patients through the transition to adulthood, Shirley Ryan AbilityLab operates a Youth Transition Program for adolescents ages 13 to 21 who have the potential for independent living and ability to direct their own care. The program focuses on providing social support and training in cooking, money management, community transportation, medical information and care, and education and employment.

### Vocational Rehabilitation Program

Beginning a career or returning to work following an illness or injury is important to a patient's financial security and emotional well-being. Employment can contribute to achieving a productive, independent and fulfilling life. For more than 50 years, our organization has been providing comprehensive vocational rehabilitation services tailored to meet the needs of each client. Services include initial assessment, evaluation, work trial assessments, return-to-work evaluation, job placement, résumé writing, interviewing workshops, an Internet job skills course and internship coordination. Shirley Ryan AbilityLab covers the cost of initial assessments, which are not covered by most third-party payers. Patients receive vocational services at eight Shirley Ryan AbilityLab facilities, ensuring that employment assistance is closely tied to community reintegration. During the past five years, the program has served an average of 900 clients annually.

We also offer no-cost, accessible GED classes at our downtown Chicago location (541 N. Fairbanks). These classes have the potential for long-lasting and life-changing impact. This program is offered to any individual with a spinal cord injury (SCI) who is looking to earn his or her GED. Unlike other GED programs, the Shirley Ryan AbilityLab Vocational facility is an accessible location and the computer lab is equipped with assisted technology. The Shirley Ryan AbilityLab Vocational Rehabilitation staff are experienced in meeting the unique needs of individuals with SCI as they pursue a GED. These considerations help reduce the barriers to continuing education for people with SCI, increasing their potential for further education, employability and quality of life.

### Adaptive Sports and Fitness Program

The Adaptive Sports and Fitness Program provides wellness opportunities for people with physical disabilities through sports and recreation, as well as through a full-service accessible health club. All services offered in the Adaptive Sports and Fitness program, which marked its 37th year in 2018, are free of charge or offered at a nominal fee. The Fitness Center, which celebrated its 22th anniversary, provides access to a health club that operates from 6:15 a.m. to 7:00 p.m., five days a week for a nominal annual fee. The Adaptive Sports and Fitness Program is funded primarily by grants and generous community donations, and is operated by 10.5 full-time equivalent staff. Additionally, program volunteers logged nearly 11,877 hours in 2018. Shirley Ryan AbilityLab's Adaptive Sports and Fitness Program is considered a national leader in health promotion for people with disabilities. In 2018, the sports program recorded 6,696 visits by its 344 registered participants, and the fitness program recorded 30,372 visits by its 722 registered participants. A separate program for youth, Caring for Kids, recorded 1,557 visits by 190 children with disabilities from the Chicago area.



## Military Sports Camp

Shirley Ryan AbilityLab's Military Sports Camp is designed for injured Military personnel with a primary physical disability. Introductory-level athletes are invited to learn from elite-level coaches, while enjoying all that Chicago has to offer. Adaptive sports offered included: wheelchair basketball, biathlon, archery, sled hockey, wheelchair tennis, field, judo, rock climbing, SCUBA, swimming, cycling, kayaking, fitness and golf. Transportation to and from Chicago is provided for all participants, including airfare, train tickets and fuel reimbursement. The camp aims to help participants develop a healthy and active lifestyle through adaptive sports and recreation. At the end of the program, each participant leaves for home with an at-home workout program, a list of adaptive sports programs near him or her, and a grant resource page so that they can continue their adaptive sports journey.

Shirley Ryan AbilityLab offers the camp each year, usually over multiple days in the summer. All individuals who have or are currently serving in the U.S. Armed Forces and have a primary physical disability are welcome to apply. In fact, 2019 camp participants represented every Military branch (Army, 52 percent; Navy, 26 percent; Marine Corps, 5 percent; Air Force, 14 percent; Coast Guard, 3 percent), and arrived from 15 states.

There were 43 participants, five of whom brought caregivers and four of whom brought service dogs to allow them to participate fully in the experience. Participants were ages 22 to 73 and were 64.3 percent male and 35.7 percent female. The disability groups represented by participants were Spinal Cord Injury, 33 percent; Traumatic Brain Injury, 19 percent; Stroke, 2 percent; Multiple Sclerosis, 5 percent; Amputation, 12 percent; Visual Impairment, 9 percent; PTSD, 65 percent; Orthopedic Impairments, 31 percent; Other, 5 percent. (Multiple disability groups were represented among participants).

The 2019 camp was hosted by a core team of staff and 139 volunteers, the latter of whom put in 1,433 volunteer hours.

# Prioritized Needs Assessment

Shirley Ryan AbilityLab reviewed and analyzed data obtained through methods described in the “data and methods” section of this report and has identified the following significant community health needs in its 2019 Assessment:

## **A. Rehabilitation Health**

Given the increasing prevalence of conditions resulting in disability, Shirley Ryan AbilityLab’s Assessment identified the continued need to expand access for patients in various rehabilitation settings in the areas of stroke, spinal cord injury, brain injury, neuro-musculoskeletal conditions, pediatric care and cancer.

## **B. Research**

Shirley Ryan AbilityLab’s Assessment identified the continued need for rehabilitation research into new and more promising treatments to improve and eliminate the effects of injury, disease and debilitating health conditions in the community we serve. In addition, the assessment revealed a need for addressing social determinants of health, as well as social-science issues such as depression, quality of life and advocacy for patients who will always depend on a wheelchair for mobility.

## **C. Improved Access to Information About Existing Resources**

The Assessment identified a continued need for increasing the awareness of patients, visitors and the community regarding Shirley Ryan AbilityLab’s LIFE Center, as well as additional programs and resources, such as Pathways.

## **D. Support Programs**

The Assessment identified a continuing need for support programming. In particular:

- Support for helping patients manage expectations upon returning home; and
- Developing clinical community links and formalizing communication with existing community support groups.

## **E. Business Relationships**

Participants in the Focus Group identified a continued need for increased hiring of persons with disabilities. Shirley Ryan AbilityLab will continue to be cognizant of and continue to assist in meeting these needs, as well as continue ensuring that the LIFE Center is aware of resources specifically designed to help connect people with disabilities to potential employment opportunities.

As a result of the 2019 Assessment, the Shirley Ryan AbilityLab will develop an implementation program for continued focus on these identified community needs.

# Citations

<sup>1</sup> Public Law 111148 (124 Stat. 119(2010))

<sup>2</sup> 26 CFR §1.501(r)-3(b)(3)

<sup>3</sup> Case Mix Index, CTRS. FOR MEDICARE & MEDICAID SERVS., available at <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/Acute-Inpatient-Files-for-Download-Items/CMS022630.html> (last visited March 10, 2016).

<sup>4</sup> 26 CFR §1.501(r)-3(b)(6)(ii)

<sup>5</sup> Daniel T. Lackland et al., Factors Influencing the Decline in Stroke Mortality, AHA/ASA Scientific Statement (2013).

<sup>6</sup> David Strauss et al., Trends in Life Expectancy after Spinal Cord Injury, 87 *Archives Phys. Med. Rehab.* 1079, 1079 (2006).

<sup>7</sup> American Association of Neurological Surgeons, Traumatic Brain Injury.

<sup>8</sup> National Cancer Institute, Side Effects of Cancer Treatment, available at <https://www.cancer.gov/about-cancer/treatment/side-effects> (last accessed Feb. 4, 2019); American Cancer Society, Anxiety, Fear, and Depression, available at <https://www.cancer.org/treatment/treatments-and-side-effects/emotional-side-effects/anxiety-fear-depression.html> (last accessed Feb. 4, 2019).

<sup>9</sup> National Cancer Institute, Side Effects of Cancer Treatment.

<sup>10</sup> American Heart Association, Effects of Stroke, available at <https://www.heart.org/en/about-stroke/effects-of-stroke> (last accessed Feb. 4, 2019).

<sup>11</sup> <http://dph.illinois.gov/sites/default/files/publications/2013-datareport-7-13-15-final-042216.pdf> (page 13).

<sup>12</sup> <http://dph.illinois.gov/sites/default/files/publications/2013-datareport-7-13-15-final-042216.pdf> (pp. 8-9).

<sup>13</sup> <http://dph.illinois.gov/sites/default/files/publications/2013-datareport-7-13-15-final-042216.pdf> (pp. 15-21).

<sup>14</sup> <http://dph.illinois.gov/sites/default/files/publications/2013-datareport-7-13-15-final-042216.pdf> (pp. 22-31).

<sup>15</sup> 26 CFR §1.501(r)-3(b)(6)(i)(F)



Shirley Ryan  
**Abilitylab**<sup>®</sup>

# Appendix A

## Consulted Organization Descriptions

The following organizations were invited to participate in the focus group Shirley Ryan AbilityLab conducted as part of its Assessment. The descriptions below were provided by each organization.

Organization	Organization Descriptions
Access Living	Access Living is a change agent committed to fostering an inclusive society that enables Chicagoans with disabilities to live fully–engaged and self–directed lives. Nationally recognized as a leading force in the disability advocacy community, Access Living challenges stereotypes, protects civil rights and champions social reform. Their staff and volunteers combine knowledge and personal experience to deliver programs and services that equip people with disabilities to advocate for themselves. Access Living is at the forefront of the disability rights movement, removing barriers so people with disabilities can live the future they envision.
Brain Injury Association of Illinois	The Brain Injury Association of Illinois (BIA of IL) is a not-for-profit, statewide membership organization comprised of people with brain injuries, family members, friends, and professionals. BIA of IL is part of a network of brain injury associations across the United States, and is a subsidiary of the national Brain Injury Association, Inc. (BIA) which was founded in 1980. The BIA of IL is the only organization in Illinois serving individuals with TBI, their families and professionals who treat them and is dedicated to providing information, advocacy, and support.
Chicago Mayor's Office for Persons with Disability	The Mayor's Office for People with Disabilities (MOPD) works to meet the diverse needs of the more than 600,000 individuals with disabilities who live and work in Chicago. MOPD's goal is to make Chicago the most accessible city in the nation. MOPD serves five major groups: people with disabilities, City departments and agencies, other government agencies, disability-related agencies, and organizations and the private sector.
Chicago Park District	The Chicago Park District owns more than 8,100 acres of green space, making it one of the largest

	<p>municipal park managers in the nation. The Chicago Park District's 580 parks offer thousands of sports and physical activities as well as cultural and environmental programs for youth, adults, and seniors. The Chicago Park District is also responsible for 26 indoor pools, 51 outdoor pools, and 26 miles of lakefront including 23 swimming beaches plus one inland beach. From canoeing to batting cages to arts and crafts, there is never a shortage of activities to participate in Chicago's parks.</p>
Chicago Transit Authority	<p>The CTA operates the nation's second largest public transportation system and covers the City of Chicago and 35 surrounding suburbs.</p>
EOA Consulting, LLC.	<p>EOA Consulting LLC provides consultation and expertise to businesses owned and operated by individuals with disabilities as well as governmental units, public and private businesses and non-profit organizations to increase opportunities for business development, inclusion and to increase supplier diversity as well as ensuring compliance with applicable accessibility laws and regulations.</p>
Gridiron Alliance	<p>The mission of the Gridiron Alliance is twofold: 1) Provide essential outreach to high school student athletes catastrophically injured in school sports, and 2) Prevent future injuries to all student athletes by making school sports as safe as they can be. To accomplish this mission, the Alliance will provide outreach and prevention initiatives. The Gridiron Alliance recognizes that school sports-related injuries have and will occur. The impact of catastrophic injuries on the young athletes and their families can be emotionally, physically, and financially devastating. Through outreach and educational programs, the Gridiron Alliance helps injured athletes and their families adjust to and meet the extraordinary challenges they face in the weeks, months, and years after the onset of the injury. The Gridiron Alliance has enlisted as leaders and mentors athletes who became paralyzed as a result of high school football injuries. The Alliance maintains strong relationships with the NFL and other professional and paraprofessional outreach programs.</p>

<p>Illinois DHS - Division of Rehabilitation Services</p>	<p>The Illinois Department of Human Services' Division of Rehabilitation Services is the state's lead agency serving individuals with disabilities. DRS works in partnership with people with disabilities and their families to assist them in making informed choices to achieve full community participation through employment, education, and independent living opportunities.</p>
<p>Open Doors</p>	<p>Open Doors Organization (ODO), a 501(c)3 non-profit organization based in Chicago, was founded in 2000 for the purpose of creating a society in which persons with disabilities have the same consumer opportunities as non-disabled persons. ODO strives to teach businesses how to succeed in the disability market while at the same time empowering people with disabilities.</p>
<p>Parkinson's Disease &amp; Movement Disorder Center at Northwestern University</p>	<p>Northwestern University Parkinson's Disease and Movement Disorders Center conducts research to extend the knowledge and treatment of PD and other movement disorders. Additionally, it provides innovative, multidisciplinary care for patients and families affected.</p>
<p>Spinal Cord Injury Association of Illinois</p>	<p>Spinal Cord Injury Association of Illinois is a 501(c)3 non-profit organization providing information and support resources for people paralyzed by trauma and medical conditions, family members, and health care and related professionals that serve the SCI community.</p>
<p>Shirley Ryan AbilityLab Peer Mentor Program</p>	<p>The LIFE Center Peer Mentor Program introduces Shirley Ryan AbilityLab patients and families to the possibilities of post-rehabilitation success and to support continued engagement in life-long learning. The mentors share strategies that support goal achievement and community integration.</p>

# Henry B. Betts LIFE Center



# Advancing Human Ability®



## **THE NATION'S BEST**

Ranked the #1 Rehabilitation Hospital in America by *U.S. News & World Report* every year since 1991, the Shirley Ryan AbilityLab (formerly RIC) continues to set the standard for care with our novel approach to treatment. An expert team of clinicians work together to set individual patient goals, tackle challenges and innovate solutions that improve patient recovery.

Located on the Sky Lobby (10th Floor), the LIFE Center offers a comfortable place to browse curated resources including books, magazines, and DVDs and to explore health information on the Internet.

The virtual LIFE Center provides access to thousands of resources on the following topics:

- Medical information & care
- Providing care & equipment
- Housing & transportation
- Education & employment
- Support & wellness
- Recreation & leisure
- Finance & law
- Inspiration & hope

The LIFE Center resources are also available at [sralab.org/lifecenter](http://sralab.org/lifecenter).

# About the LIFE Center

The Henry B. Betts LIFE Center at the Shirley Ryan AbilityLab provides information, resource assistance and support for people with various levels of physical functioning and conditions across the country and around the globe.

The LIFE Center provides assistance to patients, families, and health professionals across the globe to encourage inquiry, promote productivity and inspire everyone to achieve their greatest and fullest participation in life.

Our staff are knowledgeable educators who assist people in finding information about community services, support groups, government programs and products especially designed for each individual.

Our multimedia education center and virtual education make information on physical and cognitive impairment and conditions available to patients, families, staff and the public. The goal in providing these extensive resources is to empower individuals to make the best choices for themselves and their families.

The LIFE Center also offers peer mentoring and hosts several peer panels throughout the year. Mentors share strategies and tips learned during their recovery and transition to the community.



Shirley Ryan AbilityLab  
355 East Erie Street  
Chicago, IL 60611

844.355.ABLE (2253)  
sralab.org

**#1** rehabilitation  
hospital in America  
since 1991

— *U.S. News & World Report*



“Ken, my spinal cord injury peer mentor, told me that he was the CEO of his body. His words gave me confidence during a time when I felt lost.”

— Patient with a spinal cord injury

## CONTACT US

For more information please contact us at  
312.238.5433 or [lifecenter@sralab.org](mailto:lifecenter@sralab.org)

[sralab.org/lifecenter](http://sralab.org/lifecenter)

## Hours of operation:

Mon-Thurs: 10:00am - 4:00pm

Fri: 10:00am - 3:00pm

Sat: CLOSED

Sun: 2:00pm - 4:00pm



## Appendix C

### Academy Courses and Conferences

Title	Format
Neuroplasticity and Implications for Stroke Recovery	Webinar
Working with Patients to Resolve Moral Distress	Webinar
Managing Neurogenic Bladder and Bowel in the Person with SCI	Webinar
What's New: Future Therapies in Stroke Rehabilitation	Webinar
Facilitating Adjustment to Spinal Cord Injury	Webinar
Empathy and Connection in Rehabilitation?	Webinar
Augmentative Alternative Communication (AAC): Low to High Tech Communication Alternatives	Webinar
Management of Cognitive-Communication Disorders in Early Childhood	Webinar
Updates on the Management of Spasticity in Stroke	Webinar
Keeping Current with Electronic Aids to Daily Living	Webinar
Management of Mild Cognitive Impairments in TBI	Webinar
Reviewing the Impact of Chemotherapy for Breast Cancer on Cognition	Webinar
Ambiguous Loss in Patients with Traumatic Brain Injury	Webinar
Decision Making Capacity	Webinar
Behavior Management for Patients with TBI	Webinar
One Good Turn Deserves Another: Relieve that Pressure	Webinar
Yes! You Can Predict Outcome in Stroke: predicting General Recovery	Webinar
Yes! You Can Predict Outcome in Stroke: Predicting Recovery of Walking, Hand Use and Aphasia	Webinar
Management of Written Language Impairments Associated with Right Hemisphere Damage	Webinar
Basic Principles of Burn Rehabilitation	Webinar
Burn Management in the Rehabilitation Setting	Webinar
Assent versus Consent	Webinar
What Do I Do First? Assessment of Visual Impairments In the Patient with Neurological Deficits	Webinar
Medical Complications of Patients with Stroke and Its Impact on Rehabilitation	Webinar
Be the Bridge: Strategies for Communicating with People with Aphasia for Non-SLPs	Webinar
Assessment & Treatment of Low Level Brain Injured Patients	Webinar
Medical Complications of Patients with TBI and Its Impact on Rehabilitation	Webinar
Knee Osteoarthritis: How Your Biology Can Help	Webinar

Medical Complications of Patients with SCI and Its Impact on Rehabilitation	Webinar
Pain Science Transformed into Practice	Webinar
Painful Hemiplegic Shoulder	Webinar
Swallowing 101: Dysphagia for Non-SLPs	Webinar
Tracheostomy Safety and Management	Webinar
Evidence Based Rehabilitation in the Breast Cancer Survivor	Webinar
Executive Function in Children	Webinar
Medical Management of Multiple Sclerosis	Webinar
Approach to Managing Cancer Related Fatigue	Webinar
Management of Memory Disorders	Webinar
Neuroplasticity and Implications for Stroke Recovery	Webinar
Regenerative Medicine: What is its Role in Rehabilitation?	Webinar
Performing Arts	Webinar
Updates in Tendinopathy	Webinar
Management of Attention Disorders	Webinar
Conflict of interest in rehabilitation practice	Webinar
Updates in the Management of Spasticity after Spinal Cord Injury	Webinar
Medical Management of Parkinson's Disease	Webinar
Spaced Retrieval Training: A Cognitive Strategy for Allied Health and Nursing	Webinar
Sexuality and SCI	Webinar
Management of Executive Function Disorders	Webinar
Neurotoxicity of Chemotherapy and Radiation	Webinar
Degenerative Diseases: Beat Barriers to Being Active	Webinar
Understanding Health Literacy for the Health Care Professional	Webinar
Upper Extremity Edema Management in the Stroke Population	Webinar
Improving Nutritional Compliance of Dysphagia Patients for Nursing and Allied Health Practitioners	Webinar
Treatment of Visual Problems for Patients with Brain injury and Stroke	Webinar
Collaborating with Interpreters to Connect with Patients Across Language and Culture	Webinar
Management of Pediatric Spasticity: The Holistic Treatment of Children with Cerebral Palsy	Webinar
Ethical issues Facing Functional Neurological Disorders	Webinar
Updates in Neuroscience: How Therapy Changes the Brain	Webinar
Updates in Pain Management Pharmacology: Clinical Implications and Side Effects	Webinar
Chronic Pain: An Interdisciplinary Approach to a Complex Problem	Webinar
Applying Musculoskeletal Principles to the Painful Neurological Shoulder	Webinar

Updates in Pediatric Dysphagia	Webinar
Clinical Research Ethics in Rehabilitation: Basics and Beyond	Webinar
Pharmacological Interventions in Brain Injury	Webinar
Swallowing Issues in Patients with Spinal Cord Injury	Webinar
Rehabilitation of Patients with Acute Burns	Webinar
Blood Flow Restriction: Description and Applications	Webinar
Return to Work for Patients with Brain Injury	Webinar
PREP2 for Predicting Upper Limb Functional Outcome After Stroke: Why and How	Webinar
Sleep Disturbance in Traumatic Brain Injury	Webinar
Functional Outcomes and Goal Setting for SCI	Webinar
Pediatric Gait Analysis: A Segmental Kinematic Approach to Orthotic Management	Course
Therapeutic Interventions in Neurorehabilitation (Especially designed for OTA's and PTA's)	Course
Interdisciplinary Brain Injury Course	Course
Vestibular	Course
Clinical Evaluation and Management of Visual Perceptual Impairments Following Acquired Brain Injury	Course
Neuroanatomy Course: A Practical Review for Clinicians	Course
Golf Symposium	Course
Annual Spinal Cord Injury Course	Course
Annual Interdisciplinary Stroke Course	Course
Concussion Series: Live Online	Online Series
11/11/16: Management of the Neurologic Upper Extremity with a Focus on the Hand	Course
12/1- 12/4 Pediatric Gait Analysis: A Segmental Kinematic Approach to Orthotic Management - Pediatric Gait	Course
1/19-1/21 Vestibular Rehabilitation: Theory, Evidence and Practical Application	Course
11/11/16: Management of the Neurologic Upper Extremity with a Focus on the Hand	Course
4/28-4/29 Conservative Management of Hip Pain: From FAI to OA	Course
5/31-6/2: 40th Annual Spinal Cord Injury Course, Chicago	Course
5/4-5/6 Advances in Rehabilitation for the Patient with a Lower Extremity Amputation	Course
5/4-5/6 Lower Extremity Amputation Rehabilitation	Course
7/13-7/14 Stroke Rehabilitation: Knowledge, Balance and Skill: Foundations for Optimizing Care	Course

2015 Pediatric Gait Analysis: A Segmental Kinematic Approach to Orthotic Management	Course
2016 Vestibular Rehabilitation: Theory, Evidence and Practical Application	Course
6/2-6/4: 39th Annual Spinal Cord Injury	Course
7/21-7/23: Stroke Rehabilitation: New Science and Classic Foundations	Course
11/11/16: Management of the Neurologic Upper Extremity with a Focus on the Hand	Course
12/1- 12/4 Pediatric Gait Analysis: A Segmental Kinematic Approach to Orthotic Management	Course