

### MADONNA REHABILITATION HOSPITAL

#### **COMMUNITY HEALTH NEEDS ASSESSMENT 2018-2019**

#### INTRODUCTION

Madonna Rehabilitation Hospitals (MRH) are Catholic hospitals that provide physical medicine and rehabilitation services to children and adults throughout the nation. Madonna rehabilitates those who have sustained injuries or disabling conditions so they can fully participate in life; lead research to improve outcomes; prevent physical disabilities and promote wellness through community programs.

Madonna Rehabilitation Hospitals will be the destination of choice for world-class rehabilitation providing children and adults, devastated by illness or injury, the bright hope of being made whole.

This hope is ignited and fueled by Madonna Rehabilitation Hospitals':

- expert staff open to the call of those in need
- innovative programs and state-of-the-art equipment
- cutting-edge research and innovative technology development
- medical, academic and community partnerships

Madonna, as an organization, operates four hospitals in two geographic locations.

- Madonna Rehabilitation Hospital Lincoln (MRH-Lincoln)
- Madonna Rehabilitation Specialty Hospital Lincoln (MRSH-Lincoln)
- Madonna Rehabilitation Hospital Omaha (MRH-Omaha)
- Madonna Rehabilitation Specialty Hospital Omaha (MRSH-Omaha)

MRH-Lincoln and MRH-Omaha are comprehensive acute rehabilitation hospitals that serve children and adults in both an inpatient and outpatient setting. MRSH-Lincoln and MRSH-Omaha are long term acute care hospitals (LTCHs).

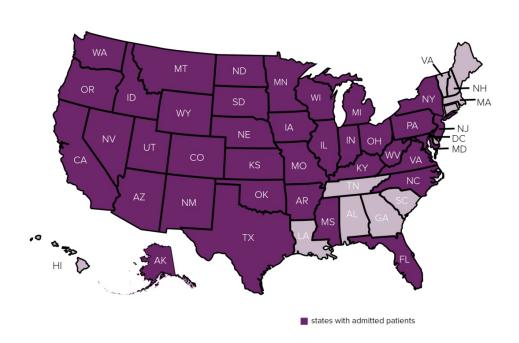
## **DESCRIPTION OF COMMUNITY SERVED BY MADONNA**

Madonna is one of the nation's largest specialized rehabilitation hospitals. Madonna treats children and adults with complex disabilities due to traumatic brain injury, spinal cord injury, stroke, neurological disorders, burns, pulmonary disease, and other disabling conditions. This is Madonna's "community" — the people who require inpatient post-acute physical rehabilitation to reduce or eliminate impairments, activity limitations, and participation restrictions. Unlike acute care hospitals, Madonna does not define "community served" as a geographic area, but rather by the priority population that

requires these highly specialized services. This population includes people of all ages, gender, income level, and race from throughout the country.

## **Referral Market and National Admissions**

In FY 2018, Madonna served patients from 38 U.S. states.



FY 2018 National Admissions

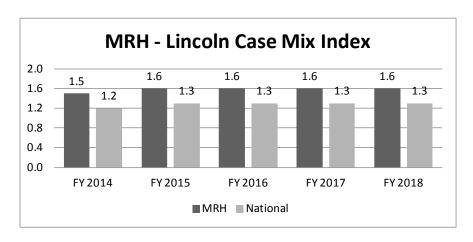
### FY 2018 Referral Market Results for Madonna

- 7,766 total patients were served
- 99 hospitals and healthcare facilities referred patients
- 855 physicians referred patients

## **MRH-LINCOLN**

## **Adult Acute Rehabilitation**

Case Mix Index (CMI) is a measure of patient severity. In FY 2018, MRH-Lincoln treated persons with a CMI of 1.61, compared to the national benchmark of 1.37 and a regional benchmark of 1.34 which placed MRH-Lincoln in the top one percent nationally. This demonstrates the ability and expertise of Madonna to offer clinically excellent and appropriate care for the needs of the adult rehabilitation patient.

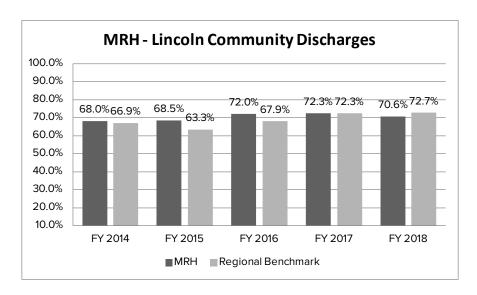


FY 2018 Acute Rehabilitation Case Mix Index

Patient mix comparisons also demonstrate that Madonna's acute rehabilitation level of care treats a more complex population than the national norm. In FY 2018, 83 percent of those served at MRH-Lincoln were neurologically impaired with diagnoses such as stroke, brain injury and spinal cord injury compared to the 57 percent reported nationally.

#### **Adult Acute Rehabilitation Clinical Outcomes**

In FY 2018, MRH-Lincoln discharged 71 percent of its patients to a non-institutionalized setting. The **Brain Injury Program** discharged 74 percent, the **Spinal Cord Injury Program** discharged 63 percent, and the **Stroke Program** discharged 69 percent of their patients to community settings.



FY 2018 Acute Rehabilitation Hospital Community Discharge

According to data from eRehabData<sup>1</sup>, outcomes were strong in spite of the fact that Madonna's patients were in the top one percent in the nation for severity in FY2018. Inpatient rehabilitation patients' functional improvements are measured by the Functional Independence Measure (FIM) score taken at admission and again at discharge. MRH-Lincoln patients made greater functional gains in FIM scores and discharged at a higher functional level compared to national benchmarks. MRH-Lincoln patients were contacted three months after discharge. Of those responding, 90 percent reported maintaining the functional gains they had made in rehabilitation.

MRH-Lincoln is accredited by CARF International (CARF)<sup>2</sup>. In FY 2018 MRH-Lincoln earned three-year accreditation, the highest accreditation possible, in Brain Injury Specialty Program, Spinal Cord System of Care, and Stroke Specialty Program.

## **Pediatric Acute Rehabilitation**

Madonna Rehabilitation Hospitals are the only free-standing rehabilitation hospitals in the region to house separate, secured pediatric rehabilitation units with specialized pediatric clinical staff including a physiatrist, rehabilitation nurses, therapists and a rehabilitation psychologist.

The Alexis Verzal Children's Rehabilitation Unit (AVCRU) in Lincoln serves adolescents and children with a variety of diagnoses, including those with mild to severe brain injury, spinal cord injury, stroke, cardio-pulmonary conditions, neurological conditions and those with developmental disabilities.

The Lincoln pediatric unit has 11 available beds, a pediatric gym, therapy space, sensory stimulation spaces, feeding spaces, specialized car seat fitting and storage, and provides recreational therapy and play space/time.

## **AVCRU** is:

- One of two hospitals with a CARF accredited Stroke & Pediatric Specialty Program.
- One of three hospitals nationally accredited in Pediatric Specialty Rehabilitation and Spinal Cord Specialty Program.
- One of seven hospitals nationally accredited in Pediatric Specialty Rehabilitation and Brain Injury.
- One of 30 hospitals nationally accredited in Pediatric Specialty Programs.

<sup>&</sup>lt;sup>1</sup> eRehabData is an internet based data application offered through The American Medical Rehabilitation Providers Association (AMRPA). It delivers real-time financial and clinical outcomes and benchmarks for inpatient rehabilitation facilities. www.erehabdata.com

<sup>&</sup>lt;sup>2</sup> CARF International is the premium accreditation body for rehabilitation hospitals.

As one of the few rehabilitation hospitals with a CARF accredited pediatric program, AVCRU attracts referrals from throughout the region. The Lincoln campus cared for 78 children and adolescents during FY 2018<sup>3</sup>.

#### **AVRCU Clinical Outcomes**

The children and adolescents achieved excellent outcomes in terms of discharge to community, functional gains, patient satisfaction, and maintenance of gains.

- 92 percent discharged to community settings.
- Children and adolescents stayed an average of 33 days and made FIM gains of 33. Children under the age of 7 were scored using the WeeFIM tool, making an 11.4 point gain. The FIM and WeeFIM scores track and measure gains from admission to discharge in such areas as communication, feeding, ambulation, dressing, toileting, etc.
- 85 percent of patients responding to a survey reported maintaining gains three months after discharge.

#### MRSH-LINCOLN

MRSH-Lincoln provides care to chronically critically ill and medically complex patients who require medical management for a longer period of time than generally occurs in acute care. Unlike most LTCHs, Madonna chooses to apply a rehabilitation approach to care for patients served. In FY 2018 MRSH-Lincoln earned a three-year accreditation, the highest accreditation possible, by CARF in Comprehensive Integrated Inpatient Rehabilitation Programs (CIIRP).

Many patients are able to discharge directly home, while others gain the strength, medical stability, and activity tolerance necessary for transfer to acute rehabilitation. The patient population often requires mechanical ventilation and/or tracheostomy management and weaning, telemetry, respiratory therapy treatments, medication management, and complex medical services, such as in-room hemodialysis and complex wound or burn cares.

### **MRSH-Lincoln Clinical Outcomes**

According to the latest Medicare data, MRSH-Lincoln is in the top one percent of the United States for preventing readmissions to acute care 30 days after discharge. Madonna's interdisciplinary approach to patient care and exceptional discharge planning contributed to this positive outcome.

Of the discharged patients surveyed, 100 percent maintained the gains they made at MRSH-Lincoln at three months post-discharge.

<sup>&</sup>lt;sup>3</sup> MRH Patient Mix Report July 1, 2017 – June 30, 2018

#### MRH - OMAHA

In accordance with the 2015 CHNA implementation plan, Madonna opened an adult and pediatric inpatient rehabilitation facility in Omaha, Nebraska in October 2016. TherapyPlus Omaha outpatient clinic commenced services in November 2016.

### **Adult Acute Rehabilitation**

During its first full fiscal year, MRH-Omaha established itself as an exceptional inpatient rehabilitation facility by meeting industry benchmarks. In FY 2018, MRH-Omaha treated persons with an average CMI of 1.32, compared to the national benchmark of 1.37 and a regional benchmark of 1.34.

Falling in line with the national benchmark, 57 percent of those served at MRH-Omaha in FY2018 were neurologically impaired with diagnoses such as stroke and brain injury. The other 43 percent were orthopedically impaired or suffered another medical diagnosis.

## **Adult Acute Rehabilitation Clinical Outcomes**

MRH-Omaha discharged 80 percent of its patients to a non-institutionalized setting. The **Brain Injury Program** discharged 97 percent to a community setting surpassing the 72 percent weighted regional benchmark. The **Stroke Program** discharged 74 percent of their patients to a community setting.

Patients were contacted three months after discharge. Of those responding, 82 percent reported maintaining the functional gains they had made in rehabilitation.

MRH-Omaha is accredited by CARF International. In FY 2018 MRH-Omaha earned three-year accreditation, the highest accreditation possible, in Brain Injury Specialty Program and Stroke Specialty Program.

## **Pediatric Acute Rehabilitation**

Omaha pediatric patients are admitted by Pediatric Hospitalists contracted from Children's Hospital and Medical Center in Omaha, which offers a unique opportunity to provide continuity of care for children discharged from there to Madonna. As with the adult population, children come to the unit from all around the region and the US.

The Omaha pediatric unit has 14 available beds, a pediatric gym, therapy space, sensory stimulation spaces, feeding spaces, specialized car seat fitting and storage, and provides recreational therapy and play space/time.

The Children's Rehabilitation Unit is:

- One of two hospitals with a CARF International accredited Stroke & Pediatric Specialty Program.
- One of seven hospitals nationally accredited in Pediatric Specialty Rehabilitation and Brain Injury.

• One of 30 hospitals nationally accredited in Pediatric Specialty Programs.

As one of the few rehabilitation hospitals with a CARF accredited pediatric program, Madonna Rehabilitation Hospital Omaha attracts referrals from throughout the region. The Omaha campus cared for 79 children and adolescents during FY 2018<sup>4</sup>.

## **Pediatric Program Clinical Outcomes**

The children and adolescents achieved excellent outcomes in terms of discharge to community, functional gains, patient satisfaction, and maintenance of gains.

- 88 percent discharged to community settings.
- Children and adolescents demonstrated an average FIM gain of 26 points.
- 100 percent of patients responding to a survey reported maintaining gains three months after discharge.

## **MRSH-OMAHA**

In October 2016 MRSH-Omaha relocated from the fourth floor of Nebraska Medicine Bellevue to the lower level of the newly constructed Madonna Rehabilitation Hospital Omaha campus. By the end of fiscal year 2018, MRSH-Omaha increased the number of certified LTCH beds from 32 to 48.

MRSH-Omaha provides care to medically complex patients who require medical management for longer periods of time than generally occurs in acute care hospitals. In addition to the complex medical category, MRSH-Omaha also serves individuals with pulmonary and neurological conditions, including stroke. Like MRSH-Lincoln, MRSH-Omaha chooses to apply a rehabilitation approach to care for patients served. In FY 2018 MRSH-Omaha earned a three-year accreditation, the highest accreditation possible, by CARF International in Comprehensive Integrated Inpatient Rehabilitation Programs (CIIRP). MRSH-Omaha also received a three-year accreditation by The Joint Commission.

Many patients are able to discharge directly home, while others gain the strength, medical stability, and activity tolerance necessary for transfer to acute rehabilitation. Like MRSH-Lincoln, patient population often requires mechanical ventilation and/or tracheostomy management and weaning, telemetry, respiratory therapy treatments, medication management, and complex medical services, such as in-room hemodialysis and complex wound or burn cares.

<sup>&</sup>lt;sup>4</sup> MRH Patient Mix Report July 1, 2017 – June 30, 2018

#### **MRSH-Omaha Clinical Outcomes**

According to the latest Medicare data, MRSH-Omaha is in the top 0.8 percent in the United States for preventing readmissions to acute care 30 days after discharge. Madonna's interdisciplinary approach to patient care and exceptional discharge planning contributed to this positive outcome.

Of the discharged patients surveyed, 67 percent maintained the gains they made at MRSH-Omaha at three months post-discharge.

## 2018 COMMUNITY HEALTH NEEDS ASSESSMENT

## **Process & Methodology**

# **Progress of 2015 CHNA Implementation Strategy**

The first step in conducting the 2018 community health needs assessment was reviewing the progress made to the previously conducted CHNA and Implementation Plan.

## **Priority #1:** Expand Post Acute Care Services to Omaha

<u>Progress:</u> In response to community need, Madonna established a post acute care facility in Omaha, Nebraska in October 2016. The facility houses a comprehensive acute rehabilitation hospital (MRH–Omaha), a rehabilitation based LTCH (MRSH-Omaha), a multi-disciplinary comprehensive outpatient therapy clinic (TherapyPlus-Omaha), and a Research Institute for Rehabilitation Science and Engineering.

**Impact:** With the expansion into Omaha, Madonna was able to meet the complex needs of 1,649<sup>5</sup> persons via their inpatient programs from its opening in October 2016 through June 30, 2018. TherapyPlus-Omaha treated 1,138<sup>6</sup> persons in an outpatient setting during the same time frame.

### **Priority #2:** Enhance Rehabilitative Research and Technology

<u>Progress:</u> Over the past three years, team members of Madonna's Institute for Rehabilitation Science and Engineering created unique device adaptations to enable individuals recovering from serious injuries and illnesses greater independence during their rehabilitation journey.

In FY2017, a Spinal Cord Injury Model System application was submitted. The Director of Madonna's Institute for Rehabilitation Science and Engineering served as a reviewer on the NIDILRR Traumatic Brain Injury Model System review panel.

<sup>&</sup>lt;sup>5</sup> MRHO and MRSHO Patient Mix Reports October 1, 2016 – June 30, 2018

<sup>&</sup>lt;sup>6</sup> MRH Outpatient Financial Summary Reports October 1, 2016 – June 30, 2018

Collectively, these experiences in combination with an assessment of the strengths of Madonna as an organization and collaborators, suggested that focusing primarily on the pursuit of Model System designation could limit Madonna's potential to advance discovery and rehabilitation care for the breadth and depth of complex patients cared for at Madonna.

<u>Impact:</u> Madonna is building upon the successes and strategic alliances of the last three years to position itself as a national leader in research and development innovations that advance practical rehabilitation solutions for patients with complex needs.

<u>Priority #3</u>: Establish a Physical Medicine and Rehabilitation (PM&R) Graduate Medical Education Residency Training Program

<u>Progress:</u> Madonna partnered with the University of Nebraska Medical Center College of Medicine (UNMC-COM) to guide the establishment of a PM&R graduate medical education residency training program at the Omaha campus through an academic affiliation agreement. This residency program was the first one in over 25 years at UNMC-COM. Accreditation was received in 2016 through the Accreditation Council for Graduate Medical Education (ACGME). The UNMC PM&R Residency Program was established one year ahead of schedule. Due to the unmet demand for this program, the number of residents was accelerated. On July 1, 2018, four year-one and two year-two residents began the program.

<u>Impact:</u> The PM&R residency program will train specialists to fill a critical gap in the health care continuum that currently exists in the Midwest.

## **Assessment of Health Needs**

Madonna uses multiple avenues to collect data regarding the needs of its community. The evaluation of community health needs is an ongoing process that is integrated into Madonna's strategic planning process and annual goal setting.

On a continuous basis hospital leadership holds various meetings, lunch and learns, and focus groups with persons who represent the broad interest of the community. These community representatives include government officials on the local, state, and federal levels; public health leadership; payor representatives; regional healthcare facility management; and key stakeholders of the organization. A list of community organizations engaged during the CHNA process is located in Appendix A.

Additionally, Madonna managers and clinicians are encouraged to pursue leadership positions in their areas of expertise. Each year, Madonna staff members are elected and/or appointed to boards, special task forces, and other leadership positions within community organizations. In these positions, Madonna staff receives direct input from

colleagues in affiliated organizations and patients within the community served including those representing the medically underserved, low income, and minority populations. A list of Madonna staff and the organizations they are affiliated with are located in Appendix B.

Data was also collected through publications from organizations and government agencies at the local, state, regional, and national levels. Outcome indicator sources such as eRehabData and Program for Evaluating Payment Patterns Electronic Report (PEPPER)<sup>7</sup> were also utilized. These sources were used to collect data on post acute care trends, impairments (brain injury, spinal cord injury, stroke, etc), public health education, insurance regulations, government mandates, socio-economic characteristics, and biological factors.

Health needs data came directly from Madonna's patients which include satisfaction and follow up surveys that occur during and up to a year post discharge. Additionally, a Needs Assessment questionnaire was distributed to key persons within the organization who represent the broad interest of Madonna's community. The questionnaires were then collected and analyzed to determine trends.

Madonna also welcomed written comments on the organization's most recently conducted CHNA and Implementation Strategy to aide in addressing community health needs.

#### **Health Needs Identified**

- As the population ages, they are at risk for falls; stroke; cardiac and respiratory conditions which could result in traumatic and life altering impairments.
- The aging population will lead to greater needs for high quality rehabilitative services for stroke and other conditions associated with aging.8
- Approximately 45% of all Americans suffer from at least one chronic disease and the number is growing.9
- Every 9 seconds, someone in the United States suffers a traumatic brain injury.

<sup>&</sup>lt;sup>7</sup> PEPPER is a comparative data report that provides hospital-specific Medicare data statistics for discharges vulnerable to improper payments. PEPPER can support a hospital or facility's compliance efforts by identifying where it is an outlier for these risk areas. www.cms.gov

<sup>&</sup>lt;sup>8</sup> Guidelines for Adult Stroke Rehabilitation and Recovery; AHA Journal Volume 47, No. 6 June 2016 https://www.ahajournals.org/doi/full/10.1161/STR.0000000000000098

 $<sup>^9</sup>$  "An Empirical Study of Chronic Diseases in the United States: A Visual Analytics Approach to Public Health" March 1, 2018 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5876976/
The Brain Injury Association of America. https://www.biausa.org/downloads/public-

affairs/media/CYM2018/CYM%20Fact%20Sheet%20March%202018.pdf

- More than 3.5 million children and adults sustain an acquired brain injury (ABI) each year. Over the span of six years (2007–2013), while rates of TBI-related emergency room visits increased by 47%, hospitalization rates decreased by 2.5% and death rates decreased by 5%.
- Someone in the United States has a stroke every 40 seconds<sup>12</sup>
- Stroke is the leading cause of serious, long-term disability in the United States with recent reports indicating an increased incidence of stroke in young adults.<sup>13</sup>
- The average age at which spinal cord injuries are occurring is increasing. Patients
  with spinal cord injuries have life-long impairment requiring specialized
  rehabilitation, assistive technology and home and vehicle modifications found only
  in dedicated rehabilitation hospitals.<sup>14</sup>
- Rehabilitation patients are demonstrating more complex and severe impairments.
- There is a need for the highest quality, comprehensive, post-acute care solution for the most complex trauma patients being discharged from hospitals in the Midwest.
- As people survive conditions that once would have been fatal, the field of physiatry is moving to the forefront of medicine.<sup>15</sup>
- Nebraska is currently underserved in physical medicine and rehabilitation a critical gap in the health care continuum for all Nebraskans<sup>16</sup>
- The field of Physical Medicine and Rehabilitation will continue to grow as the population ages and requires more rehabilitative services for chronic disease management, musculoskeletal dysfunction, neurologic impairment and chronic pain.<sup>17</sup>
- Research shows patients and family members care deeply about privacy, accessibility and comfort in their rooms.<sup>18</sup>
- Providers must integrate care across post acute care settings and prevent hospital readmissions.

Madonna Rehabilitation Hospitals©

<sup>&</sup>lt;sup>11</sup> Brain Line: Get the Stats on Traumatic Brain Injury in the United States (Centers for Disease and Prevention), April 27, 2017 https://www.brainline.org/article/get-stats-traumatic-brain-injury-united-states

<sup>&</sup>lt;sup>12</sup> Vital Signs: Recent trends in stroke death rates – United States, 2000-2015. MMWR 2017;66. --Stroke Facts, CTRS FOR DISEASE CONTROL & PREVENTION https://www.cdc.gov/stroke/facts.htm

<sup>&</sup>lt;sup>13</sup> Benjamin EJ, Blaha MJ, Chiuve SE, et al. on behalf of the American Heart Association Statistics Committee and Stroke Statistics Subcommittee. Heart disease and stroke statistics—2017 update: a report from the American Heart Association. Circulation. 2017;135:e229-e445. --Stroke Facts, CTRS FOR DISEASE CONTROL & PREVENTION <a href="https://www.cdc.gov/stroke/facts.htm">https://www.cdc.gov/stroke/facts.htm</a>

Spinal Cord Injury Facts and Figures at a Glance NATIONAL SPINAL CORD INJURY STATISTICAL CENTER
 <a href="https://www.nscisc.uab.edu/Public/Facts%20and%20Figures%20-%202018.pdf">https://www.nscisc.uab.edu/Public/Facts%20and%20Figures%20-%202018.pdf</a>
 American Academy of Physical Medicine and Rehabilitation: <a href="https://www.aapmr.org/career-center/medical-">https://www.aapmr.org/career-center/medical-</a>

<sup>&</sup>lt;sup>15</sup> American Academy of Physical Medicine and Rehabilitation: <a href="https://www.aapmr.org/career-center/medical-students/physical-medicine-and-rehabilitation-faqs">https://www.aapmr.org/career-center/medical-students/physical-medicine-and-rehabilitation-faqs</a>

<sup>&</sup>lt;sup>16</sup> Nebraska Medicine's report to Madonna Rehabilitation Hospital's Board of Directors by Bradley Britigan, MD, Dean UNMC College of Medicine & President Nebraska Medicine May 20, 2015

https://thedo.osteopathic.org/2012/04/dos-a-natural-fit-for-physical-medicine-and-rehabilitation/

The Ohio State University Wexner Medical Center <a href="https://wexnermedical.osu.edu/mediaroom/pressreleaselisting/patient-room-comfort">https://wexnermedical.osu.edu/mediaroom/pressreleaselisting/patient-room-comfort</a> and Journal of Health Environments Research and Design <a href="https://journals.sagepub.com/doi/abs/10.1177/1937586717696700">https://journals.sagepub.com/doi/abs/10.1177/1937586717696700</a>

<sup>&</sup>lt;sup>19</sup> The Patient Protection and Affordable Care Act. Public Law 111-148 03/23/2010

- Throughout the healthcare industry, planning and design innovations are continuing to drive changes in the way inpatients are accommodated. These changes are driven by the need to improve outcomes, increase safety, and reduce staff errors, thereby raising efficiency and lowering costs.<sup>20</sup>
- By evidence collected in on-unit research, it was recognized that private rooms and the ways the inpatient unit is designed can affect a patient's psychological and medical well being. <sup>21</sup>
- More stringent LTCH patient-level criteria<sup>22</sup> will result in LTCH higher patient acuity as the LTCH focus continues to shift towards serving chronically-critically ill/injured patients with complex medical needs.

# Potentially Available Resources to Address Health Needs

In regards to offering post acute care there are 1,188 inpatient rehabilitation facilities  $(IRFs)^{23}$  and 407 long term acute care hospitals  $(LTCHs)^{24}$  in the United States. As an organization, Madonna is approved and licensed for 251 inpatient beds by the State of Nebraska (MRH-Lincoln - 60; MRSH-Lincoln - 86; MRH-Omaha - 57; MRSH-Omaha - 48). There are currently 14 free-standing IRFs and 24 LTCHs located in Madonna's region<sup>25</sup>. Services at these facilities differ programmatically from those offered by Madonna.

Madonna currently subsidizes several programs to meet the needs of the medically underserved. These programs are not covered by a payor source or not covered adequately by a payor source but have been identified as critical in the recovery process in building and sustaining independence.

## Adaptive Sports and Recreation

There are very limited opportunities for people with disabilities to participate in community-based recreation and sports, particularly on a competitive basis. Madonna's Adaptive Sports & Recreation Program offers a variety of sports and several levels of competition to help children and adults with disabilities participate more fully in life. In 2018, 580 individuals were served by Madonna's Adaptive Sports and Recreation Program. Seventy seven percent were community members with disabilities.

<sup>&</sup>lt;sup>20</sup>Department of Veterans Affairs Design Guide 11/29/2011 - Medical/Surgical Inpatient Units & Intensive Care Nursing Units. https://www.wbdg.org/FFC/VA/VADEGUID/inpatient\_nu.pdf

<sup>&</sup>lt;sup>21</sup> Department of Veterans Affairs Design Guide 11/29/2011 - Medical/Surgical Inpatient Units & Intensive Care Nursing Units. https://www.wbdg.org/FFC/VA/VADEGUID/inpatient\_nu.pdf

<sup>&</sup>lt;sup>22</sup> MediPac Report to Congress: Medicare Payment Policy – Long-term Care Hospital Services 2018 http://www.medpac.gov/docs/default-source/reports/mar18 medpac entirereport sec.pdf

MediPac Report to Congress: Medicare Payment Policy – Inpatient Rehabilitation Facility Services 2018 http://www.medpac.gov/docs/default-source/reports/mar18 medpac ch10 sec.pdf?sfvrsn=0

<sup>&</sup>lt;sup>24</sup> MediPac Report to Congress: Medicare Payment Policy – Long-term Care Hospital Services 2018 http://www.medpac.gov/docs/default-source/reports/mar18 medpac entirereport sec.pdf

<sup>&</sup>lt;sup>25</sup> Madonna's region is defined as the States of Nebraska, Iowa, Kansas, Missouri, South Dakota, North Dakota and the southern part of Minnesota.

# **Community Medical Transportation**

Because people with disabilities and the elderly have increased health care needs, isolation from providers can have a profound impact on the quality of their life, health and safety. Medical transportation barriers can lead to rescheduled or missed appointments which delays care, including missed or delayed medication. The consequences of inaccessibility of medical transportation can lead to poorer management of chronic health care conditions and ultimately, poorer outcomes. Madonna's community medical transportation program allows individuals to get the timely medical care they need, decreasing the amount of emergent situations which often result in emergency room trips and increased costs. In FY 2018, Madonna transportation provided 18,856 rides to and from non-emergency medical appointments.

## Research Institute for Rehabilitation Science and Engineering

The Institute for Rehabilitation Science and Engineering conducts research to improve rehabilitation outcomes so each person can participate fully in life. The research leads to development of new technologies and treatments for people living with physical disabilities and chronic conditions.

### Therapeutic Learning Center

The transition back to everyday activities is not always easy after an injury. Madonna recognizes this need as a critical part of the recovery process. Madonna's Kit Scott Therapeutic Learning Center (TLC) is the only on-site, classroom-based hospital program of its kind in the region. The TLC helps student patients maintain and, if necessary, relearn academic work; learn new study skills and coping strategies; and work with parents and schools to provide the necessary services and support to make a student's transition back to school as successful as possible. Medical insurance does not cover the cost of patient sessions due to the educational nature of the TLC program. Educational funds are not available because the services are provided in a medical setting. TLC services are offered at no cost to patients at both the Lincoln and Omaha campuses. In FY2018 the TLC assisted 107 student patients.

In addition to the myriad of programs offered, Madonna also participates in community outreach and education on a continual basis. During the needs review process it was evident that community outreach and prevention and treatment education regarding the afflictions of Madonna's community is an everyday need. Madonna staff make many educational presentations on various rehabilitation and health topics throughout the year. A list of educational presentations given in fiscal year 2018 is available in Appendix C. In addition, educational literature is available at the facility and on Madonna's website, www.madonna.org.

In FY2018 Madonna embarked on three initiatives in order to meet identified needs of its community and position Madonna as a national leader in post acute care.

# Cancer Rehabilitation Program

Madonna Rehabilitation Hospital has long served cancer patients but with rapid growth nationally in cancer rehabilitation programs and an identified patient/community need, a formalized program was developed at MRH-Omaha. Formal operations and outcome reporting commenced in FY2019.

# Transitional Care Unit Expansion Project

The Transitional Care Unit (TCU) is a Skilled Nursing Facility that is part of the St. Jane de Chantal Long Term Care business line. For many years the TCU comprised of 21 beds in 16 rooms (11 private and 5 semi-private). The lack of a sufficient number of private rooms presented challenges in placing patients in semi-private rooms by gender, infectious status, and other medical factors. Moreover, transforming the unit into all private rooms would eliminate shared bathroom challenges. In February 2019, the expanded and remodeled TCU featuring 26 private rooms each with its own private bathroom was unveiled.

# High Observation Unit

Madonna initiated a plan to develop a high observation unit within Madonna Rehabilitation Specialty Hospitals to support quality high value outcomes. The medical complexity and medical instability of the chronically critically ill and medically complex patients served within the Specialty Hospitals has continued to increase. Consequently a more medically intense program in a designated area of the hospital was designed. The high observation unit at MRSH-Lincoln is anticipated to commence operations the summer of 2019.

### **Needs Review Process**

After data is collected through the means identified, the information is reviewed during the hospital's annual strategic planning process and shared with the Board of Directors at the annual retreat. Identified needs are also reviewed throughout the year in regularly scheduled leadership and other team meetings.

Needs that can be addressed through equipment purchases are identified and prioritized in the Hospital's annual budgeting process.

Programming needs are reviewed and included, as warranted, in the Hospital's annual corporate goals. Progress on these identified needs is reviewed every quarter.

## **Prioritization of Health Needs**

Health needs significant to Madonna's community was discerned through the 2018 community health needs assessment process and building upon the impact of the previously conducted CHNA.

Prioritization criteria was based upon urgency, feasibility, government regulations, the importance the community places on addressing the need, and Madonna's philosophy and approach to rehabilitation. Madonna's goal is to return the patient to their highest level of independence possible through specialized programs and state-of-the-art research and technology so that they can resume their life roles.

The following needs were prioritized by Madonna and are represented in the Implementation Strategy:

- 1) Align the Lincoln Campus physical plant with space required to meet the clinical needs of a high-acuity, specialized patient population (Madonna's "community").
- 2) Expand Lincoln Campus on-site clinical and ancillary services required to meet the clinical needs of a high-acuity, specialized patient population (Madonna's "community").
- 3) Complete the implementation of the newly established Physical Medicine and Rehabilitation Graduate Medical Education Residency Training Program.

#### IMPLEMENTATION STRATEGY

Madonna's Implementation Strategy sets forth the plan to address each prioritized community health need indicated in the 2018 assessment.

## **CONCLUSION**

Madonna's CHNA and corresponding Implementation Strategy were reviewed and approved by the Boards of Directors of Madonna Rehabilitation Hospital prior to publication of the CHNA on Madonna's website.

The CHNA is available on Madonna's website at <a href="www.madonna.org">www.madonna.org</a>. A copy of Madonna's CHNA is also available at no charge in hard copy format upon request.

#### **APPENDIX A**

# **Community Organizations**

**Professional Organizations** 

Academy of Neurologic Physical Therapy

American Burn Association

American Case Management Association

American College of Healthcare Executives

American Congress of Rehabilitation Medicine

American Heart Association

American Medical Response

American Occupational Therapy Association

American Physical Therapy Association

American Psychological Association

American Medical Rehabilitation Providers

Association

American Speech/Language Hearing Association

Amputee Coalition of America

Assistive Technology Partnership

Association of Rehabilitation Nurses

Brain Injury Alliance of Nebraska

Brain Injury Association of America

Bryan College of Health Sciences

CIMRO of Nebraska

Commission on Accreditation of Rehabilitation

**Facilities** 

Great Plains Quality Care Collaborative

Health Connect Advisory Board

International Pediatric Rehabilitation Collaborative

Institute for Healthcare Improvement

Lincoln Stroke Partnership

National Academy of Neuropsychology

National Association of Long Term Care Hospitals

National Council for Therapeutic Recreation

Certification

Nebraska Adaptive Sports Organization

Nebraska AgrAbility Advisory Council

Nebraska Association for Healthcare, Quality,

Risk & Safety

Nebraska Health Network

Nebraska Health Care Association

Nebraska Hospital Association

Nebraska Infant Mental Health Association

Nebraska Nurses Association

Nebraska Occupational Therapy Association

Nebraska Physical Therapy Association

Nebraska Psychological Association

Nebraska Speech-Language Hearing Association

Nebraska State Society for Respiratory Care

Nebraska Stroke Advisory Council

Nebraska Vocational Rehabilitation

Neuro-Developmental Treatment Association

Omaha Mayor's Commission for Citizens

with Disabilities

Parkinson's Nebraska

Statewide Trauma Board

The Joint Commission

# **Workers Compensation Payors**

**Accident Fund** 

Acuity

Amerisafe

Bardavon

BerkleyNet

Broadspire

**CBCS** 

CCMSI

Chubb Insurance

Church Mutual

Continental Western

**EMC** Insurance

**ESIS** 

Farm Bureau

Gallagher Bassett

**Great West Casualty** 

Grinnel Insurance

League of Associate RM

Markel/First Comp

MEM

Nationwide

**NIRMA** 

One Call Sedgwick CMS Sentry Insurance **SFM** State of North Dakota/WSI Superior Point (SFM) Thomas Magee **Travelers** United Fire and Casualty United Heartland Werner Enterprises Zurich

### **Healthcare Facilities**

Avera McKennan Hospital – Sioux Falls, SD Beatrice Community Hospital – Beatrice, NE Brodstone Memorial - Superior, NE Brooks Rehabilitation Hospital - Jacksonville, FL Bryan Medical Center - Lincoln NE Butler County Hospital - David City, NE Carolinas Rehabilitation - Charlotte, NC Centerpoint Medical Center - Independence, MO CHI Health Creighton Bergan Mercy- Omaha, NE CHI Health Good Samaritan - Kearney, NE CHI Health Immanuel - Omaha, NE CHI Health Lakeside - Omaha, NE CHI Health St. Elizabeth - Lincoln NE CHI Health St. Francis - Grand Island, NE CHI Health Nebraska Heart - Lincoln, NE Children's Hospital & Medical Center - Omaha, NE Columbus Community Hospital - Columbus, NE Community Medical Center – Falls City, NE Community Hospital – Fairfax, MO Denver Health Medical Center - Denver, CO Faith Regional Health Services - Norfolk, NE Freeman Health System - Joplin, MO Fremont Area Medical Center – Fremont, NE Gothenburg Memorial Hospital – Gothenburg, NE Great Plains Regional Medical Center - North Platte, NE Hays Medical Center - Hays, KS Holdredge - Phelps Memorial Health Center -

Iowa Methodist Medical Center - Des Moines, IA

Jefferson County Hospital – Fairbury, NE JFK Johnson Rehabilitation Institute - Edison, NJ Kansas City Hospital - Kansas City, MO Kearney Regional Medical Center – Kearney, NE Kindred Hospital - Kansas City, MO Lincoln Surgical Hospital – Lincoln, NE Marianjoy Rehabilitation Hospital - Wheaton, IL Mary Free Bed Rehabilitation Hospital -Grand Rapids, MI Mary Lanning Memorial Hospital - Hastings, NE MedStar National Rehabilitation Hospital -Washington, DC Mercy Hospital - Council Bluffs, IA Mercy Medical Center – Des Moines, IA Mercy Medical Center - Sioux City, IA Methodist Health Systems - Omaha, NE Mosaic Life Care - St. Joseph, MO Nebraska Medicine – Omaha, NE Northern Colorado Medical Center - Greeley, CO Overland Park Regional Medical Center -Overland Park, KS Rapid City Regional – Rapid City, SD Regional West Medical Center - Scottsbluff, NE Republic County Hospital - Belleville, KS Research Medical Center - Kansas City, MO Salina Regional Medical Center - Salina, KS Sanford Medical Center – Bismarck, ND Sanford Medical Center – Sioux Falls, SD Select Specialty – Kansas City, MO Select Specialty - Lincoln, NE Select Specialty - Omaha, NE Select Specialty – Sioux Falls, SD Select Specialty - Wichita, KS Siskin Hospital for Physical Rehabilitation -Chattanooga, TN Spaulding Rehabilitation Hospital -Charlestown, MA St. Luke's East Hospital – Lee's Summit, MO St. Luke's Regional Medical Center - Sioux City, IA St. Mary's Hospital - Rochester, MN Stormont-Vail Healthcare - Topeka, KS The Nebraska Neurosurgery Group LLC -Omaha NE TIRR Memorial Hermann - Houston, TX

Holdredge, NE

Truman Medical Center - Kansas City, KS

University of Iowa Hospital – Iowa City, IA

University of Kansas Medical Center –

Kansas City, KS

University of Missouri Medical Center –

Columbia, MO

University Nebraska Medical Center – Omaha, NE

VA Medical Center - Omaha, NE

Via Christi Hospital St. Francis – Wichita, KS

Wesley Medical Center - Wichita, KS

## **Government Agencies**

City of Lincoln

City of Omaha

**Douglas County Health Department** 

Lincoln-Lancaster County Health Department

Nebraska Department of Health & Human Services

- Acute Care Facilities

Nebraska Department of Health & Human Services

- Division of Medicaid & Long Term Care

Nebraska Department of Health & Human Services

- Licensure & Health Data

Office of Congressman Adrian Smith

Office of Congressman Don Bacon

Office of Congressman Jeff Fortenberry

Office of Senator Ben Sasse

Office of Senator Deb Fischer

State of Nebraska

## **Commercial Payors**

Aetna

Avera Health Plan

Blue Cross Blue Shield - Nebraska

DakotaCare

First Choice of the Midwest

First Health Network

Fortified Provider Network

Health Alliance

HealthNet/Tricare

Healthsmart

Humana

**GEHA** 

Integrated Health Plan

Med Cost Pros

Medica

Midlands Choice

MultiPlan

Prime Health Services

Sanford Health Plan

Stratose

Three Rivers Provider Network

UniNet

United Healthcare

**USA Managed Care** 

Wellmark

WPPA ProviDRs Care Network

## **Other Organizations**

Adicep Corporations

Ameritas Life Insurance Corp

Athletic Republic

Bryan Health Connect

Creighton University

**Curbell Medical Products** 

D.A. Davidson

Dobson DaVanzo

First National Bank

Fitch and Graves CPA

Five Nines

Harding & Schultz P.C.

HBE Becker Meyer Love, LLP

Health Alert Advisory Network

KNG Health

Leadership Lincoln

Lincoln Chamber of Commerce

Lincoln/Lancaster County Safe Kids Coalition

Lincoln Partnership for Economic Development

Lincoln Public Schools

Love Signs

Lyman-Richey Corporation

Matheson Linweld

Medics at Home

Merrill Lynch

National Catholic Conference

Nebraska Athletic Performance Laboratory

Nebraska Brain Injury Advisory Council

Nebraska Cancer Registry Task Force

Nebraska Global

Nebraska Wesleyan University Nursing Advisory

Council

Omaha Chamber of Commerce

Omaha Media Group

Opera Omaha Healing Arts Program

Rembolt Ludtke, LLP

Sampson Construction

Society of Respiratory Care

Southeast Community College

Sports Art

Union College

University of Nebraska – Lincoln

University of South Dakota

**US Bank** 

V2 Content

Wells Fargo

Werner Enterprises

Woggworks

World's Foremost Bank

Wounded Warriors Family Support

#### **APPENDIX B**

# **Madonna Employee Organization Affiliations**

- Sara Bills, PT, DPT, GCS, serves as the Co-Chair and is a member of the House of Delegates for the Eastern District Nebraska Physical Therapy Association. Ms. Bills also served on the Membership Advisory Committee for the American Burn Association.
- **Kelly Billings**, PT, C/NDT, CBIS is a member of the Neuro-Developmental Treatment Association (NDTA)
- **Nicole C. Brown**, MOT, OTR/L, serves as a Nebraska Occupational Therapy Association Board Member.
- Judith M. Burnfield, PhD, PT, Director, Institute for Rehabilitation Science and Engineering, maintains adjunct faculty appointments in the Department of Biological Systems Engineering at University of Nebraska Lincoln (UNL), the Department of Mechanical Engineering at UNL, the School of Pharmacy and Health Professions at Creighton University, the Division of Physical Therapy Education at the University of Nebraska Medical Center, and the Department of Physical Therapy at the University of South Dakota. In addition to being issued three previous patents for technology developed through federally funded grant activities associated with creation of the Madonna ICARE by Sports Art, Burnfield has one patent pending. She is currently collaborating with Curbell Medical Products, Inc. to advance novel technology developed in Madonna's Research Institute to market.
- Cali Carlson, PT, DPT, is an ad-hoc member of the Rehab Task Force within the Nebraska Stroke Advisory Council.
- Mary Jo Chandler, RHIA, Omaha HIM Supervisor, is the Nebraska Health Information Management Association's Committee Chair for the Nebraska Cancer Registry Task Force.
- **Jason Doll,** Administrator of Madonna Rehabilitation Specialty Hospital Omaha and Physician Practices, serves as Board Member with the Omaha Chamber of Commerce and is a member of the National Association of Long Term Care Hospitals (NALTH).
- Paul Dongilli Jr., PhD, FACHE, President and CEO, serves on the Board of Directors of the National Association of Long Term Hospitals (NALTH) and Chair of the Education Committee. He is a board certified fellow of the American College of Healthcare Executives (ACHE) and serves on the State of Nebraska's Department of Health and Human Services State Trauma Advisory Board and participates on the Designation and Rehabilitation Committees. Dr. Dongilli also serves on the Board of Directors for the Nebraska Hospital Association.
- Melody Gagner, RN, BSN, NHA, Administrator Long Term Care Services, serves on the Medicaid Rate Committee, Workforce Task Force, and is Chairperson of the Standards Committee for the Nebraska Health Care Association (NHCA). She was selected by NHCA to participate in the Key Member Program. In 2017, Gagner received certification as a Certified Nursing Home Administrator Preceptor through the American College of Health Care Administrators (ACHCA). Gagner also participates on the Great Plains Quality Care Collaborative (QPQCC) through CIMRO of Nebraska.

- Lynn Hallowell-Gottsleben, PT, DPT, Vice President Community Services, is a member of the American College of Healthcare Executives (ACHE), the American Medical Rehabilitation Providers Association (AMRPA) Outpatient and Therapies Committee, the Nebraska Physical Therapy Association Practice Management and Reimbursement Committee and the advisory board for the Physical Therapist Assistant Program at Southeast Community College.
- Amy Goldman, PT, DPT, Stroke Program Manager, serves as Chair of the Nebraska Stroke Advisory Council (NSAC) Rehabilitation Task Force. Goldman is also a member of the Lincoln Stroke Partnership, the NSAC Steering Committee and the Omaha Stroke Consortium.
- Michael Hedderman, Administrator Financial Services, is member of the American Medical Rehabilitation Providers Association Final Update Workgroup and the Nebraska Hospital Association Task Force on Medicaid Expansion.
- Amber Herrington, PT, Amputation Program Leader, is certified as an amputee peer-volunteer trainer and certified PALS (Promoting Amputee Life Skills) trainer by the Amputee Coalition of America (ACA).
- Sonya Irons, PT, DPT, CCS, serves on the Briar Cliff Physical Therapy School Advisory
  Council (Sioux City, IA), the UNMC Clinical Education Advisory Council, the Board of
  Directors for the Nebraska Foundation for Physical Therapy and as a Manuscript Reviewer
  for the Cardiopulmonary PT Journal, APTA. In addition, she holds an Assistant Clinical
  Professor appointment at Creighton University and is a National Course Instructor for
  Scorebuilders.
- Joyce Jaixen PT, GCS, C/NDT serves as the Education Committee Chairperson for the Neuro-Developmental Treatment Association (NDTA) and works on the NDTA Instructor Task Force.
- **Susan Klanecky**, MSN, RN, CCM, CRRN, Vice President of Patient Care, serves on the Goldberg Award review panel for the National Association of Long Term Care Hospitals (NALTH), and serves on the Nebraska Wesleyan University Nursing Advisory Council. Ms. Klanecky is a member of the Association of Rehabilitation Nurses.
- **Heather Knight**, PT, DPT, NCS, serves on the Practice Committee for the Academy of Neurologic Physical Therapy.
- Christopher Lee, MSPT, FACHE, Vice President Rehabilitation, is a board certified fellow of
  the American College of Healthcare Executives (ACHE). He serves on the board of
  directors of the American Medical Rehabilitation Providers Association (AMRPA) and on the
  association's Legislative and Regulatory committee and Data committee. Mr. Lee also
  participates in training the next generation of healthcare professionals, regularly serving as
  a guest speaker on healthcare management at the University of Nebraska Medical Center
  (UNMC).
- **Kristin Luethke**, CTRS, Child Passenger Safety Instructor, serves as co-leader for the Child Passenger Safety Task Force for Lincoln/Lancaster County Safe Kids Coalition.

- **Brooke Murtaugh**, OTD, OTR/L, CBIS, Brain Injury Program Manager, is involved with the Brain Injury Alliance of Nebraska, the Brain Injury Association of America, the American Congress of Rehabilitation Medicine, and the Nebraska Brain Injury Advisory Council.
- **Paula Ray**, PsyD, Neuropsychologist, is a member of the American Psychological Association and the Nebraska Psychological Association.
- **Dustin Reinbold**, MSPT, ATC, OHC serves as a Clinic Leader at Clinic with a Heart in Lincoln, NE.
- **Joe Rush**, RRT, RRT-NPS, serves as a Southeast Community College Respiratory Therapy Advisory Board member. Mr. Rush also serves on the Nebraska Department of Health and Human Services Respiratory Care Licensure Review Board.
- Christopher Sanders, Ph.D., Director of Neuropsychology Omaha Campus, is a Fellow at the National Academy of Neuropsychology and a member of the National Register of Health Service Psychologists.
- Cathy L Smith MSN, RN, CRRN, CBIS, serves as on the Board of Directors as Treasurer for the Nebraska Nurses Association (NNA) and is a member of the NNA Governance, Membership, and Finance Committees. Smith is also a member of the Association of Rehabilitations Nurses.
- **Melissa Starr**, PT, DPT, CCS, serves as an Advisory Council Member of the UNMC Physical Therapy Program.
- **Jeff Stec**, MS, CCC-SLP, Pediatric Program Manager, serves on the Steering Committee for the International Pediatric Rehabilitation Collaborative (IPRC). The IPRC is an organization of approximately 300 pediatric rehabilitation facilities, which includes AVCRU. Stec also represents AVCRU in planning the Omaha Children's Hospital and Medical Center cosponsorship of the annual Pediatric Trauma Conference.
- **Linda Storz**, OTR/L, CDRS, serves as a member of the Board of Occupational Therapy Practice in the State of Nebraska.
- Lori Terryberry-Spohr, PhD., ABPP, Director of Rehabilitation Programs, serves as a member of the Nebraska Region 1 Trauma Advisory Board and the Lincoln Public Schools Medical Advisory Committee.
- Rachel Thompson, MSN, RN, Director of Nursing MRH-Omaha, is a member of the Nebraska Hospital Association Service Board.
- Cheryl Wagoner, MS, CCC-SLP, BCS-S, CBIS is a Board Certified Swallowing Specialist with the American Speech/Language Hearing Association (ASHA)
- **Victor Witkowicz**, Executive Vice President and Chief Financial Officer is a member of the National Association of Long Term Hospitals (NALTH) Policy Committee.

#### **APPENDIX C**

#### STAFF PRESENTATIONS

- **Kelly Anderson** presented "The RT & RN Alliance: Identification & Assessment of the Acutely and Subtly Declining Patient" in Lincoln, NE
- Jennifer Bausch presented "Geriatric Rehabilitation" in Lincoln, NE
- Kelly Bolz presented "Introduction to Occupational Therapy" and "Consideration for our Post NICU Babies" in Lincoln, NE
- **Ryan Burger** presented "Ergonomics in the Workplace", "Office and Warehouse Ergonomics", and "Back Safety at Work" in Lincoln, NE and "Know the Risks Injury Prevention at Work" in Omaha, NE
- **Judith Burnfield,** PhD, PT, made the following presentations:
  - o ICARE: A Practical Rehabilitation Solution to Address Complex Patient Challenges. Osceola Regional Medical Center - HCA. Kissimmee, FL.
  - o ICARE and Madonna Rehabilitation Hospitals' Innovations in Rehabilitation Care. *First Rehabilitation Hospital of Shanghai*. Shanghai, China.
  - o ICARE: Customizing Use for First Rehabilitation Hospital of Shanghai, China. *The First Rehabilitation Hospital of Shanghai, China.*
  - o Improving Walking and Fitness Following Neurologic Injury: Practical Solutions to Complex Challenges. 2018年中美康复医学与研究论坛/2018 Sino-US Rehabilitation Medicine and Research Symposium. Shanghai, China.
  - Observational Gait Analysis: How Knowledge of the Fundamentals Can Enhance Patient Outcomes. Clinical Doctorate in Physical Therapy Program, University of South Dakota. Vermillion, SD.
  - Robotic ICARE Technology for Walking, Fitness, Balance and Arm Rehabilitation: An Integrated and Affordable Approach. The 4<sup>th</sup> China Rehabilitation Forum (CRF2018). Shanghai, China.
  - o Evaluation of Custom Assistive & Adaptive Technology in Rehab. *UNL Spring Research Fair*, Lincoln, NE.
  - o ICARE: Evaluating the kinematic effects of a Center of Pressure driven passive foot pedal. *UNL Spring Research Fair*, Lincoln, NE.
- **Thad Buster, MS**, made the following presentations:
  - o ICARE: A Practical Rehabilitation Solution to Address Complex Patient Challenges. *Unity Point Younkers Clinic.* Des Moines, IA.
  - Evaluation of Custom Assistive & Adaptive Technology in Rehab. UNL Spring Research Fair, Lincoln, NE.
  - o ICARE: Evaluating the Kinematic Effects of a Center of Pressure Driven Passive Foot Pedal. *UNL Spring Research Fair*, Lincoln, NE.
- Cali Carlson, PT, DPT, presented "Partial Body Weight Supported Gait Training" in Omaha,
   NE

- **Guilherme Cesar** made the following presentations:
  - o ICARE: Evaluating the Kinematic Effects of a Center of Pressure Driven Passive Foot Pedal. *UNL Spring Research Fair*, Lincoln, NE.
  - Human Gait Analysis. Clinical Doctorate in Physical Therapy Program, University of South Dakota. Vermillion, SD. A
- Heather Dienstbier presented "Aquatic Therapy" in Lincoln, NE
- Susan Fager, PhD, CCC-SLP, made the following presentations:
  - o RERC on AAC: Progress on Research, Development, and Training Activities. Assistive Technology Industry Association (ATIA) conference. Orlando, FL.
  - o Multimodal Input to Enhance Access to Technology. *Assistive Technology Industry Association (ATIA) conference*. Orlando, FL.
  - Alternative Access for Adults Who Rely on Augmentative and Alternative Communication. Perspectives of the ASHA Special Interest Groups
- **Terasa Farlin**, RN, CRRN, presented "Innovations in Risk Assessments: Falls, Pressure Injuries and Safe Patient Movement" in Chicago, IL.
- Gail Finland presented "Cognitive Rehabilitation" in Lincoln, NE
- Travis Groft presented "Overview of Treatment for Alzheimer's Disease" in Lincoln, NE
- Melissa Gulizia made the following presentations:
  - o "The Road Home for the Medically Complex Population" in Iowa City, IA
  - o "Moving Medically Complex Children to Rehab" in Sioux Falls, SD
  - o "Family Centered Care" in Iowa City, IA
  - o "Madonna Rehabilitation Hospital" in LaMars, IA
  - "Considerations for Evacuations and Transport of Medically Complex Pediatric Patients" in Lincoln, NE
  - "Breathing & Eating What We All Want To Do: Swallowing Therapy for the Minimally Responsive Patient" and "This & That: Trachs, Madonna Rehabilitation Hospital and More" in Omaha, NE
- Sarah Hamilton presented "Driving Rehabilitation" in Omaha, NE
- **Sonya Irons**, PT, DPT, CCS, made the following presentations:
  - o "Pacemakers and ICDs", "Physical Therapy for the Post Operative Patient and/or Pulmonary Surgery" and "Clinical Application of EKG" in Sioux City, IA.
  - o "Physical Therapy: Is Itthe Right Career Choice For You?" and "Physical Therapy: Options to Specialize" in Lincoln, NE
  - "Physical Therapy for the Post Operative Patient and/or Pulmonary Surgery" and
     "Clinical Application of EKG", and "Cardio-respiratory Fitness Testing: Application & Physical Therapy Management" in Omaha, NE.
- Joyce Jaixen, PT, GCS, C/NDT presented "Utilizing Massery Techniques for Improved Pulmonary Function for Any Patient Diagnosis" in Lincoln, NE, "NDT Intervention Techniques" in Omaha, NE and at Southeast Community College in Lincoln as a Neuro Lab and CVA guest speaker.
- **Jen Korinek** presented "Vestibular Rehabilitation: Assessment and Treatment of the Patient with Dizziness and Balance Problems" in Lincoln, NE
- Christopher Lee, MSPT, FACHE "Management is for Everyone" in Omaha, NE

- Amber Lingen presented "Prevention of Brain and Spinal Cord Injury" in Lincoln, NE.
- **Brooke Murtaugh**, OTD, OTR/L, CBIST made the following presentations:
  - o "Cognitive Rehabilitation" in Lincoln, NE and Omaha, NE
  - o "Preparing the TBI Patient for Rehabilitation" in Rapid City, SD and Springfield, MO
  - "Catastrophic and Mild TBI: What You Need to Know" in Lincoln, NE and Rapid City,
     SD
  - "Rehabilitation Interventions for Catastrophic Injury" in Rapid City, SD and Kansas City, KS
  - o "Occupational Therapy Interventions for Catastrophic Injury" in Sioux Falls, SD
  - o "Exercise and Treadmill Protocol Post Mild TBI", "Rehabilitation After Burn Injury", "Long Term Management of TBI" and "Mild TBI on the Job" in Lincoln, NE
  - o "Rehabilitation for TBI" and "Cognitive and Visual Perceptions" in Omaha, NE
  - o "Rehabilitation for Complex Burn Injuries" in Kansas City, MO
  - o "Future of Brain Injury Rehabilitation and Challenges" in Hays, KS
  - o "Pediatric Brain Injury" in Springfield, MO
  - o "Relationships and Intimacy after Brain Injury" in Kearney, NE
  - o "Delayed Serial Casting Two Years Post Burn Injury" in Chicago, IL.
  - "Persistent Post-Concussion Symptoms and Mild TBI" in Urbandale, IA and Sioux City, IA
- Annie O'Campo presented at Ostomy Care Days in Lincoln NE and presented "A Quality Improvement Project: Use of CDS Tool in Improving Accuracy of Pressure Injury Assessment and Documentation in Long Term Acute Care Hospitals" in Philadelphia, PA.
- **Chase Pfiefer** made the following presentations:
  - Design of a Semi-Rigid Multi-use Mounting System for Rehabilitation Patients. UNL Spring Senior Design Fair, Lincoln, NE.
  - Design of a Pediatric Shower Commode Chair. UNL Spring Senior Design Fair, Lincoln, NE.
  - Design of a User Operated Pressure Relief Platform. UNL Spring Senior Design Fair, Lincoln, NE.
  - Inter-discipline Collaboration. Biological Systems Engineering Program, BSEN
     492/892 Rehabilitation Engineering, University of Nebraska-Lincoln. Lincoln, NE.
  - Evaluation of Custom Assistive & Adaptive Technology in Rehab. UNL Spring Research Fair, Lincoln, NE.
  - o ICARE: Evaluating the Kinematic Effects of a Center of Pressure Driven Passive Foot Pedal. *UNL Spring Research Fair*, Lincoln, NE.
- **Erin Reier,** OTD, OTR/L presented "Infant Dysphasia" and Pediatric Occupational Therapy" in Lincoln, NE
- **Jeffrey Stec**, MS, CCC-SLP, made the following presentations:
  - o "Technology Today" and "Collaboration through Consultation" in Kansas City, KS.
  - o "Family Centered Care" in Iowa City, IA and Omaha, NE
  - o "Moving Medically Complex Children to Rehab" in Fargo, ND
  - o "The Family Fight to Go Home" in Lincoln NE
  - o "Rehabilitation of the Young Child" in Milford, NE

- o "Rehabilitation of Pediatric Patients with Head Trauma" in Lincoln, NE
- **Suzanne Schwery** and **Cheryl Wagoner** presented "Can You Walk and Talk?: Integrating Speech and Physical Therapy for Respiratory Compromised Patients" in Los Angeles, CA.
- Sandy Stutzman, RN, presented a webinar "Safe Patient Handling and Mobility" in Lincoln, NE
- **Douglas Tvrdy**, PT, DPT, CSCS, OCS presented "Dynamic Warm Up for Pickle Ball" in Lincoln, NE
- **Diane Ulmer**, OTR/L, made the following presentations:
  - "Understanding Post Acute Care After Catastrophic Injury" in Kansas City, MO, Cedar Rapids, IA and Kansas City, KS.
  - o "Spinal Cord Injury Services and Community Engagement" in Sioux Falls, SD
  - o "Rehabilitation Interventions After Catastrophic Injury" in Rapid City, SD.
  - o "Rehabilitation Management of Traumatic Injuries" in Lincoln, NE
  - o "Special Considerations for Care of Patient with Spinal Cord Injury" in David City, NE
- Cheryl Wagoner, CCC-SLP, BCS-S, made the following presentations:
  - o "Swallowing Therapy for Minimally Responsive Patients" in Omaha, NE
  - o "The SLPs Role with Ventilated Patients" in Lincoln, NE
- **Michelle Wiggins**, OTD, OTR/L, CBIS, presented "Assistive Technology in Pediatrics" in Omaha, NE.