

# COMMUNITY HEALTH NEEDS ASSESSMENT

2024-2025

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# **COMMUNITY HEALTH NEEDS ASSESSMENT 2024 - 2025**

# **EXECUTIVE SUMMARY**

# **PURPOSE**

A Community Health Needs Assessment (CHNA) identifies key health issues and priorities within a specific community. It is designed to guide hospitals, health systems and nonprofit organizations in developing strategic plans, allocating resources and improving community health concerns. Key components of the CHNA include data collection, community engagement or input, and prioritization of key issues. The Implementation Strategy ("Strategy") is a written plan that addresses the prioritized community health care needs identified in the CHNA conducted for the 2024 fiscal year.

The CHNA and Implementation Strategy meets the requirements for community benefit planning as outlined in Section 501(r) of the Internal Revenue Code as part of the Affordable Care Act. The CHNA for Madonna Rehabilitation Hospitals can be reviewed in its entirety at www.madonna.org.

# I. 2021 STRATEGIC INITIATIVES PROGRESS UPDATE

#### **Facilities Enhancement**

Modernization efforts commenced in May 2020 to update physical infrastructures in line with highacuity, postacute care demands. A threestory expansion at the Lincoln campus—completed in August 2022 added 112,000 square feet of cuttingedge patient space featuring 59 new patient suites, enhanced family amenities, and updated dining facilities. Further improvements, including outdoor therapeutic gardens and a recreation therapy area launched in December 2023, are complemented by planned technology and facility upgrades scheduled for 2025.

## **Enhancing Specialty Rehabilitation & Post-COVID-19 Care**

Madonna has developed a comprehensive post-COVID-19 system of care including inpatient care; outpatient clinics; mental health and research integration; professional staff education; and clinical treatment guidelines. Interdisciplinary clinics on both campuses (Lincoln since January 2022; Omaha since December 2021) have completed over 20,000 outpatient visits for more the 1,400 recovering patients.

# **Optimizing Information Exchange**

The implementation of Sunrise Health Information Management (HIM) within the Sunrise Electronic Health Record, including digital signatures and secure direct messaging (using CCDA documents) has been completed. Virtual telehealth service capability has been established, covering 14 specialties and accounting for over 1,200 outpatient and 459 inpatient sessions, with increased provider licensure across 17 states.

# **Integrating Acute and Post-Acute Rehabilitation Care**

Collaborative partnerships have helped bridge the acute and post-acute care continuum. In partnership with UNMC, the newly ACGME approved Brain Injury Fellowship (launched in July 2022) rotates fellows through Madonna's campuses and Nebraska Medicine, addressing a critical shortage of board-certified specialists. Collaborations with local oncology providers are laying the groundwork for a dedicated inpatient cancer rehabilitation program in the Lincoln area, enhancing recovery and community reintegration for survivors. Feasibility studies in Kearney are underway to assess a third campus that would serve central Nebraska, capitalizing on regional health care and educational infrastructure.

# II. 2024 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.

# III. HEALTH NEEDS IDENTIFIED

#### 1. COMPREHENSIVE POST-ACUTE REHABILITATION CONTINUUM

The American population 65 and older is expected to grow from 56 million in 2020 to 81 million by 2040. Inpatient Rehabilitation Facilities (IRFs) are a growing part of the post-acute care land-scape, specializing in restoring function and returning people to their life roles and communities after serious traumas and illnesses. Although the LTCH industry is on a downward trajectory, this level of care continues to play a vital role in the U.S. health care system, providing specialized and extended hospital-level care to the most medically complex and critically ill Medicare beneficiaries. Nursing and skilled nursing facilities (NF/SNF) are dwindling in number while the need for these levels of care is growing. All three components are critical to ensure patient placement at the appropriate level of care and maintain efficient patient throughput through a community's health care continuum.

#### 2. SPECIALIZED REHABILITATION PROGRAMS

The Community Needs Assessment, along with information from the Brain Injury Association of Nebraska¹ and the Nebraska Department of Health and Human Services², identifies several critical areas of need for individuals with brain injuries, cancer, spinal cord injury, and stroke. Inefficiencies in the prior authorization process for post-acute services (inpatient rehabilitation, skilled nursing, and home health care) delay discharges and strain acute care hospital capacity. Streamlined processes and enhanced care coordination are needed to reduce these bottlenecks, lower costs, and support value-based reimbursement. Additionally, there is a significant need for a cohesive system of care that ensures continuity from emergency response and acute hospitalization through long-term recovery and community reintegration.

# 3. WORKFORCE DEVELOPMENT

Continued education and training in Physical Medicine & Rehabilitation are essential to address workforce shortages and rising demand driven by an aging population and chronic conditions. With an anticipated deficit in Nebraska exceeding 5,400 nurses, due to an aging workforce and high burnout levels, targeted recruitment, retention, and training strategies are imperative to maintain service quality.

<sup>1</sup> **Brain Injury Association of Nebraska.** (n.d.). *Home*. Retrieved May 22, 2025, from https://biane.org

<sup>2</sup> **Nebraska Department of Health and Human Services.** (n.d.). *Traumatic Brain Injury Waiver Services.* Retrieved May 22, 2025, from https://dhhs.ne.gov/Pages/TBI-Services.aspx

#### 4. DATA SECURITY AND ACCESS

Robust cybersecurity measures—including encryption, multi-factor authentication, and routine audits—protect sensitive patient data from increasing cyber threats. Equally, improving interoperability and standardizing data-sharing protocols ensure that comprehensive patient information is accessible across care settings, thereby supporting efficient care delivery and informed decision-making.

# IV. PRIORITIZATION OF HEALTH NEEDS

Health needs significant to Madonna's community were discerned through the 2024 community health needs assessment process-, building upon the impact of the previously conducted CHNA.

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

- 1) Expand the resources available to support world-class rehabilitation and the advancement of evidence-based treatment and scientific research through public-private partnerships.
- 2) Facilitate efficient throughput of the community health care system maintaining a comprehensive post-acute care rehabilitation continuum and formalize collaborative partnerships with hospitals to ensure patient placement at the appropriate level of care.
- 3) Ensure a strong and stable health care workforce.
- 4) Modernize the information technology infrastructure to ensure health care data security and health care information access.

# V. CONCLUSION

Madonna Rehabilitation Hospitals exemplifies a dynamic, integrated approach to rehabilitative care that combines state-of-the-art facilities, innovative clinical programming, and focused community engagement. Through infrastructural modernization, expansion of specialty programs, optimized digital information exchange, and proactive strategies addressing systemwide and workforce challenges, Madonna is redefining the healthcare continuum in Nebraska. Comprehensive resources and subsidized programs further ensure that even medically under-served populations receive the holistic care needed to reclaim independence, function, and hope.



# **COMMUNITY HEALTH NEEDS ASSESSMENT 2024 - 2025**

#### INTRODUCTION

Madonna Rehabilitation Hospitals (Madonna) 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's vision is to be the destination of choice for world-class rehabilitation, providing children and adults, devastated by illness or injury, with the bright hope of being made whole.

This hope is ignited and fueled by Madonna's:

- 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 three hospitals in two geographic locations – the Lincoln campus and the Omaha location.

- The Lincoln Campus contains a rehabilitation hospital, a nursing facility; and a specialty hospital.
- The Omaha Campus contains a specialty hospital with a distinct part rehabilitation unit.

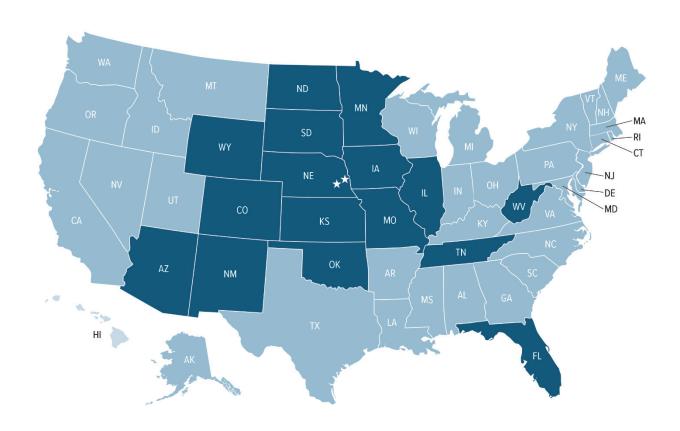
The Lincoln Campus rehabilitation hospital serves adults on an inpatient basis and both adults and children in the outpatient setting. The Lincoln Campus specialty hospital specializes in complex medical care. The Lincoln Campus nursing facility serves adults with special needs requiring clinically complex care. The Omaha Campus houses two certified facilities; one provides comprehensive rehabilitation services to adults and children in both inpatient and outpatient settings. The Omaha Campus specialty hospital provides complex medical care. Madonna's specialty hospitals are certified as Long Term Care Hospitals by the Centers for Medicare and Medicaid Services (CMS).

# **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, cancer 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 2024, Madonna served patients from 17 U.S. states and the District of Columbia.



FY 2024 National Admissions

#### FY 2024 Referral Market Results for Madonna

- 8,857 total patients were served
- 89 hospitals and healthcare facilities referred patients
- 790 physicians referred patients

# **HOSPITAL OVERVIEWS**

# LINCOLN CAMPUS

#### **REHABILITATION HOSPITAL - LINCOLN**

Case Mix Index (CMI) is a measure of patient severity. In FY 2024, the rehabilitation hospital in Lincoln treated persons with a CMI of 1.63, compared to the national benchmark of 1.48, which placed the rehabilitation hospital in the top 8% nationally. This demonstrates the ability and expertise of Madonna to offer clinically excellent and appropriate care for the needs of adult rehabilitation patients.

Patient mix comparisons also demonstrate that Madonna's rehabilitation hospital treats a more complex population than the national norm. In FY 2024, 78% of those served were neurologically impaired with diagnoses such as stroke, brain injury and spinal cord injury compared to the 57% reported nationally.

#### **REHABILITATION HOSPITAL - LINCOLN CLINICAL OUTCOMES**

In FY 2024, the rehabilitation hospital discharged 75% of its patients to a non-institutionalized setting. The Brain Injury Program discharged 73%, the Spinal Cord Injury Program discharged 62%, and the Stroke Program discharged 79% of their patients to community settings.

According to data from eRehabData<sup>1</sup>, outcomes were solid in spite of the fact that Madonna's patients were in the top 8% in the nation for severity in FY2024. Inpatient rehabilitation patients' functional improvements are measured by a standardized assessment taken at admission and again at discharge. Rehabilitation hospital patients' functional gains and functional level at discharge either approximated or were greater than national benchmarks. Past patients were contacted six months after discharge. Of those responding, 93% reported maintaining the functional gains they had made during their rehabilitation stay<sup>2</sup>.

The rehabilitation hospital program is accredited by CARF International (CARF)<sup>3</sup>. In FY 2024, the hospital earned a three-year accreditation, the highest accreditation possible, as a Comprehensive Inpatient Rehabilitation Program (CIRP), Brain Injury Specialty Program, Spinal Cord Specialty Program and Stroke Specialty Program.

#### SPECIALTY HOSPITAL - LINCOLN

The specialty hospital provides care to chronically critically ill and medically complex patients who require medical management for a longer period than generally occurs in acute care. Unlike most specialty hospitals, Madonna chooses to apply a rehabilitation approach to care for patients served. In FY 2024, the specialty hospital earned a three-year accreditation, the highest accreditation possible, by CARF in Comprehensive Inpatient Rehabilitation Programs (CIRP).

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.

#### SPECIALTY HOSPITAL - LINCOLN CLINICAL OUTCOMES

According to the latest Medicare data, the specialty hospital is in the top 2% 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, 91% maintained the gains they made during their specialty hospital stay at six months post-discharge.

#### **NURSING FACILITY - LINCOLN**

The nursing facility serves as the state of Nebraska's primary partner in caring for patients with highly clinical complex, catastrophic or chronic conditions including those on a ventilator long-term or requiring extended long-term care. The clinical severity rating for ventilator residents is the highest of a nursing facility in Nebraska.

#### **NURSING FACILITY - LINCOLN CLINICAL OUTCOMES**

The Nursing Facility has achieved 5 out of 5 stars according to the Centers for Medicare and Medicaid

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

<sup>2</sup> MRH-Lincoln Board Quality Scorecard YTD Actual FY2024b

<sup>3</sup> CARF International is the premium accreditation body for rehabilitation hospitals.

Services (CMS) Top Line Report Star Rating for Quality. Historically the facility has weaned 40% of residents on a ventilator resulting in a discharge to a lower level of care or to the community.

# **OMAHA CAMPUS**

#### **REHABILITATION UNIT - OMAHA**

In FY 2024, the rehabilitation unit in Omaha treated individuals with an average CMI of 1.41, compared to the national benchmark of 1.48. This places the program in the 40<sup>th</sup> percentile nationally in terms of patient complexity.

In FY 2024, 61% of those served in the program were neurologically impaired with diagnoses such as stroke, brain injury and spinal cord injury compared to the 57% reported nationally. The other 39% were orthopedically impaired or suffered another medical diagnosis.

#### REHABILITATION UNIT - OMAHA CLINICAL OUTCOMES

The unit discharged 77% of its patients to a non-institutionalized setting. The Brain Injury Program discharged 79% to a community setting, the Cancer Rehabilitation Program discharged 71% and, the Stroke Program discharged 70% of their patients to a community setting.

Patients were contacted six months after their discharge. Of those responding, 93% reported maintaining the functional gains they had made in rehabilitation.<sup>4</sup>

The unit is accredited by CARF International. In FY 2024, the unit earned three-year accreditation, the highest accreditation possible, in Comprehensive Inpatient Rehabilitation Program (CIRP), Brain Injury Specialty Program, Cancer Rehabilitation Specialty Program and Stroke Specialty Program.

# **CHILDREN'S REHABILITATION UNIT - OMAHA**

The Omaha Campus rehabilitation unit includes a dedicated, secure pediatric section for children ages 0-18 referred to as the Children's Rehabilitation Unit (CRU). Pediatric patients are admitted by pediatric hospitalists contracted from Children's Nebraska in Omaha, which offers a unique opportunity to provide continuity of care for children discharged from Children's Nebraska to Madonna.

The CRU 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. In addition, the pediatric program provides educational services that will be detailed elsewhere including school reintegration and support by education specialists.

The program is:

- One of four hospitals nationally accredited in Pediatric Specialty Rehabilitation and Spinal Cord Injury Specialty Program.
- One of eight hospitals nationally accredited in Pediatric Specialty Rehabilitation and Brain Injury Specialty Program.
- One of 43 hospitals nationally accredited in Pediatric Specialty Programs.

As one of the few rehabilitation hospitals with a CARF accredited pediatric program, referrals for admission come from throughout the region. The CRU cared for 113 children and adolescents during FY 2024<sup>5</sup>.

<sup>4</sup> MRH-Omaha Board Quality Scorecard YTD Actual FY2024

<sup>5</sup> MRH Patient Mix Report July 1, 2020 – June 30, 2024

#### CHILDREN'S REHABILITATION UNIT - OMAHA CLINICAL OUTCOMES

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

- 77% discharged to community settings.
- Children and adolescents demonstrated an average WeeFIM gain of 23 points and stayed an average of 24 days.
- 95% of patients/caregivers reported being very satisfied with their rehabilitation experience overall (9-10 on a 10 point scale)
- 95% of patients responding to a survey reported maintaining gains six months after discharge.<sup>6</sup>

#### SPECIALTY HOSPITAL - OMAHA

The specialty hospital provides care to medically complex patients who require medical management for a longer period than generally occurs in acute care hospitals. In addition to the complex medical category, the specialty hospital also serves individuals with pulmonary and neurological conditions, including stroke. Like the Lincoln Campus specialty hospital, Madonna's Omaha specialty hospital applies a rehabilitation approach to care for patients served. In FY 2024, the specialty hospital earned a three-year accreditation, the highest accreditation possible, by CARF International in Comprehensive Inpatient Rehabilitation Programs (CIRP).

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 the specialty hospital in Lincoln, 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.

#### SPECIALTY HOSPITAL - OMAHA CLINICAL OUTCOMES

According to the latest Medicare data, the specialty hospital in Omaha is in the top 1% 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 reached for the survey, 93% maintained the gains they made at six months post-discharge.

# 2021 COMMUNITY HEALTH NEEDS ASSESSMENT UPDATE

The first step in conducting the 2024 community health needs assessment was reviewing the progress made to the previously conducted CHNA and Implementation Plan.

**Priority #1:** Configure hospital beds and align the physical plant with space required to meet the clinical needs of a high-acuity, specialized post-acute-care patient population (Madonna's "community").

**Progress:** In May 2020, construction began on a three-story patient wing expansion at the Lincoln Campus. In August of 2022, patients began to occupy the 112,000 square foot patient wing, complete with 59 state-of-the-art patient suites, on-site family amenities, and new kitchen and dining space. Since then, outdoor gardens, utilized in daily therapies and recreationally

<sup>6</sup> Six month follow-up patient survey, as reported on year-end Board Quality Committee Scorecard, FY2024

with family members, have been completed and a new recreation therapy area was opened in December of 2023. Improvements to the main therapy gym and expansion of space for technologies focusing on neurological rehabilitation are planned for 2025.

**Impact:** To sustain its high organizational performance, Madonna must be the greatest place for employees to work, for physicians to practice and for patients to receive care. Facility and room modernization has allowed for innovative care at every stage of the rehabilitation process.

**Priority #2:** Enhance the complement of specialty rehabilitation programs and create a model system of post-COVID-19 care.

# **Progress:**

To help individuals return to these critical roles, Madonna Rehabilitation Hospitals has created a model system of post-COVID rehabilitation care that spans the post-acute care continuum, from inpatient to outpatient to community wellness, with a goal of helping restore and sustain the independence of affected individuals now and into the future. This work is supported, in part, by federal award numbers SLFRP1965 (PD: Burnfield) awarded to Douglas County and SLFRP1615 (PD: Burnfield) awarded to the Nebraska Department of Health and Human Services by the U.S. Department of the Treasury. Progress with the four key initiatives of Madonna's model system of post-COVID rehabilitation care is outlined below:

- 1. Develop post-COVID-19 clinics on Madonna's Lincoln and Omaha campuses to serve the needs of Nebraskans: With CDC estimates suggesting that more than 292,311 adult Nebraskans have developed long COVID, and over 69,739 are currently experiencing activity limitations because of long COVID, the need for comprehensive interdisciplinary evaluations and rehabilitation programming is incontrovertible. Through funding received to date, we have established interdisciplinary post-COVID-19 assessment clinics and rehabilitation programs on the Omaha (December 2021) and Lincoln (January 2022) campuses. Over 1,400 individuals recovering from COVID have received rehabilitation care at Madonna, including over 20,000 multidisciplinary outpatient visits providing physical, occupational and speech therapy, neuropsychology, nutrition, physician and vision services. While the vast majority receive care in-person, Madonna also offers multidisciplinary virtual care services including consultation and treatment sessions for individuals with complex needs across the state. To date, patients have been referred to our program from more than 360 sources including Primary Care, Internal Medicine, Neurology, Pulmonology, Allergy and Immunology, Cardiology and Psychiatry practices. At Madonna, clinical and educational awareness teams work closely with our Research Institute experts to improve the quality and relevance of evidence-based clinical guidelines, so patients and their rehabilitation clinicians have the information needed to make informed health care decisions.
- 2. Expand Mental Health Services: The neuro-invasive properties of the SARS-CoV-2 virus can lead to inflammation in the brain and central nervous system, impacting cognitive function and mental health. Patients with long COVID experience a variety of neuropsychiatric symptoms including incapacitating fatigue, pain, sleep disturbance, cognitive difficulties (e.g., memory impairments, deficits in attention and concentration), and psychological concerns (e.g., anxiety, depression, and PTSD). These symptoms often persist for 12 months or longer post-acute infection. Consequently, patients with long COVID are vulnerable to reduced mental health not only from the direct impact of the virus on the brain but also due to the cascade of challenges arising from their reduced capacity to fulfill key life roles. Disrupted family relationships and responsibilities, job loss, financial insecurity, substance use, and suicidality are prominent concerns in this regard. Mental health treatment is crucial to disrupting the downward spiral that can lead to severely diminished quality of life for patients and their loved ones. Madonna has had a neuropsychology department for more than 35 years, employing neuropsychologists, clinical psychologists and counselors.

Members are highly integrated into the team model, a feature essential to success. Although mental health challenges are common with post-COVID conditions, Nebraska continues to have a profound shortage of mental health providers. We are contributing to workforce development by serving as training sites for numerous psychology interns, including students from the UNL Clinical Psychology Department. Further, Madonna created the Translational Health Psychology Center within the Research Institute to bridge clinical and applied research environments and guide understanding and implementation of best practices for managing the complex impacts of COVID-19 on mental health and well-being. In addition, Madonna created a robust support group program for individuals to meet virtually and in person to learn about strategies to manage long COVID and discuss their experiences and concerns.

- 3. Build Awareness: Although many Nebraskans are struggling with the long-lasting impact of COVID-19, physicians and other healthcare team members often do not yet associate rehabilitation services with this population or understand how rehabilitation can improve patients' outcomes. Further, very few medical schools and health professional training programs include meaningful training about identification and clinical management of long COVID. For example, while 78% physicians in the United States agree that long COVID is a problem, only about one-quarter feel prepared to address it. Additionally, patients and their families need and deserve trustworthy information to guide informed decision-making regarding the treatment options that are best for them. Therefore, a vital component of our COVID model system is developing educational content for healthcare providers on the benefits of rehabilitation, as well as education to the public on the availability and relative value of these services. We blend our clinical expertise with emerging science and collaborative lessons learned with colleagues from across the world to advance the awareness campaign.
- 4. Develop Evidence-Based Post-COVID Rehabilitation Guidelines: Clinicians in the United States and globally do not yet know the best rehabilitation practices to advance outcomes for individuals recovering from severe COVID and those who develop long COVID. Through our work, we are contributing to the development of multidisciplinary clinical approaches and guidelines that serve as a roadmap for delivering rehabilitation services while also helping to identify those most likely to benefit from services and those at risk for exacerbations. Initial work focused on identification and refinement of a meaningful and achievable set of common data elements to characterize the extent and burden of the longterm sequelae of COVID-19 on Nebraskans, as well as the impact of rehabilitation on short and long-term patient outcomes. A standardized reporting process for cases being managed at Madonna and other key facilities across Nebraska is being defined in collaboration with Nebraska DHHS colleagues. This comprehensive system will assist in better understanding the scope of persistent COVID-19 symptoms and identifying subgroups that need rehabilitation services. The resulting robust, interdisciplinary data set we are developing will be used to quide cost-effective, evidence-based treatments and predict outcomes so patients, healthcare providers and society have the tools needed to maximize rehabilitation recovery following infection.

**Impact:** The pages that follow highlight key accomplishments.

Madonna's clinicians and researchers blend clinical wisdom, emerging research, and leading-edge technology to help individuals recovering from post-COVID conditions achieve their best possible outcomes. Madonna's model system of care is advancing clinical care, scientific discovery and community awareness surrounding post-COVID rehabilitation in Nebraska and beyond. Accomplishments and lessons learned associated with our work to date include:

Since the launch of Madonna's post-COVID-19 rehabilitation clinics, the team has conducted over 20,000 outpatient visits, offering a comprehensive range of services including physical therapy, occupational therapy, speech therapy, neuropsychology, nutrition, medical, and vision services. Madonna has provided services for nearly 1,400 individuals infected with the virus that causes COVID-19. Madonna's program was recognized by *Time.com* (https://time.com/6144427/long-covid-treatments-health-care-wait/).

- Natalie Williams, PhD, joined our team (August 2022) as the founding director of Madonna's
  Translational Health Psychology Center. Dr. Williams bridges clinical and applied research
  environments to guide understanding and implementation of best practices for managing
  the complex impacts of COVID-19 on mental health and well-being. She also provides
  outpatient neuropsychological evaluations in Madonna's post-COVID treatment program.
- Madonna developed and launched an interactive online COVID Screening Assessment
  (July 2023) to help people learn about common long COVID symptoms and presentation
  patterns, facilitate a meaningful discussion with medical providers and to inform
  understanding of the long COVID challenges Nebraskans are experiencing. To date, over
  2,000 surveys have been completed. De-identified data has been examined in collaboration
  with colleagues within UNMC's College of Public Health and confirms Madonna's clinical
  programming is responsive to the needs of Nebraskans with long COVID.
- Virginia Chaidez, PhD, RD, joined our team (July 2023) as the founding director of Madonna's Translational Nutrition Sciences Center. Dr. Chaidez transforms nutrition sciences research into practical treatments to help individuals recovering from COVID overcome challenges such as cognitive fog, depression, fatigue, and persisting GI disturbances.
- Dennis Scofield, MAEd, joined the team (March 2024) as the COVID model system's community-based exercise physiologist. Maintaining a physically active lifestyle is a keystone to prevention of many chronic conditions, including heart disease and diabetes. One challenge facing Nebraska is how to help individuals who have graduated from therapy, and those who never required formal therapy, regain a physically active lifestyle without exacerbating their long COVID symptoms. To address this need, we developed a holistic fitness and education training program. Mr. Scofield's in-person and virtual programming is advancing care and outcomes for individuals with long COVID in the community wellness environment.
- Because long COVID is a relatively new disease, best treatment approaches have yet to be defined. We conducted systemic literature reviews and bridged those with expertise of Madonna's clinicians and researchers to inform best practices for managing common long COVID sequelae (e.g., post-exertional malaise, mental health and cognitive challenges, gastrointestinal disorders, weakness, unsteadiness and autonomic dysfunction). Findings were shared with the research and clinical communities via presentations (hospital, state, national).
- Madonna clinicians, researchers and administrators worked collaboratively to create and implement a standardized multidisciplinary set of clinically-relevant and scientifically-sound post-COVID evaluation measures. The final set of measures reflect the disease's heterogeneous multisystemic nature and includes assessments of physical, cognitive, emotional, and nutritional function relevant to post-COVID conditions. The measures were integrated into the electronic health record and are used during inpatient and outpatient assessments. Community wellness environment measures are being integrated into a REDCap platform.
- Identifying factors that exacerbate or promote recovery is challenging when patients have long COVID memory challenges. We integrated the use of Garmin watches into practice so patients and clinicians can track how physical activity impacts recovery and exacerbation.
- Technology for managing the complex needs of patients with post-COVID was secured and construction was completed to enable effective and safe use. Technology includes specialized equipment to address autonomic dysfunction, balance and walking deficits, pain, dysautonomia, lung dysfunction, chronotropic incompetence, and remote/virtual training and education.
- Many Nebraskans are struggling with the lasting impact of long COVID, yet their physicians
  and other healthcare team members often do not associate rehabilitation services with this
  population nor understand how rehabilitation can improve patients' outcomes. Additionally,
  patients and families need trustworthy information to guide informed healthcare decisionmaking. Madonna's Model System efforts address these knowledge gaps. We developed

PSA-style ads (Facebook and google display networks) and used a paid search campaign to deliver text ads to users searching long COVID and related symptoms. We have also developed a library of patient stories providing a first-person narrative of the post-COVID experience. These stories are available through social media and Madonna.org to educate community stakeholders regarding post-COVID conditions.

- Clinicians and researchers drafted post-COVID Rehabilitation: A Patient Guide. The content
  bridges disciplines and addresses common topics including exercise, energy conservation,
  nutrition and hydration, mental health, vision changes, sleep alteration, pelvic floor disorders,
  relaxation, meditation and mindfulness, cognition and brain fog, breathing exercises, voice
  and swallowing challenges, and local and national resources. The booklet is currently being
  formatted for print and will be used with individuals recovering from post-COVID.
- Madonna has provided education and onsite training for current and future clinicians in best practices for managing the needs of individuals with post-COVID conditions. Disciplines trained have included family physicians, physiatry, general medicine, psychology, physical therapy, speech-language pathology, nursing, respiratory therapists, and nutrition sciences.
- Madonna developed and delivered two seminar series focused on long COVID pathology and symptomatology, and the role of mental health, nutrition, and physical activity in recovery from post-COVID conditions. The series was delivered in-person and virtually to community members.
- Madonna's Research Institute has engaged in several national studies and partnered locally with Nebraska's Department of Health and Human Services to identify and track long COVID symptoms. This statewide project, in collaboration with CHI Health, the University of Nebraska Medical Center, and Children's Nebraska, aims to enhance understanding of the illness to improve treatments and outcomes.

Rehabilitation care and science benefit from collaboration. This is particularly true when seeking to develop best practices to help individuals recover from a novel disease. Our long COVID collaborators share a passion for advancing care and outcomes for individuals with long COVID. More than 20 publications and presentations have been completed to advance the science related to post-COVID and are included with the content in Appendixes C and D.

**BOLD** = Madonna post-COVID team member

**Priority #3:** Optimize the exchange of information.

**Progress:** Madonna successfully implemented a clinical documentation imaging solution, Sunrise Health Information Management (HIM), in September 2021.

Madonna has successfully purchased and implemented direct messaging capabilities for our Sunrise Electronic Health Records (EHR) system in 2020. During this implementation we also defined our Consolidated Clinical Documentation Architecture (C-CDA) documents to allow us to securely send clinical documentation via direct messaging. We have also been implementing our Fast Healthcare Interoperability Resource Revision 4 (FHIR R4) in 2024 with an anticipated go-live in early 2025.

Since the COVID-19 pandemic, virtual healthcare has continued to expand to meet the needs of the community. Madonna has leveraged telehealth to implement services to better assist our patient populations, and advocate for improved policies moving forward.

**Impact:** Sunrise HIM integrates with our Sunrise EHR system and provides streamlined access within Sunrise to documents that previously were only accessible from a physical paper chart located at the nursing station. Sunrise HIM also provides digital signature capabilities at time of registration and has features to support efficient release of information for our HIM department.

In the last three years, Madonna has expanded our virtual services by adding specialty physician consults and specialty therapy clinics, including assisting with the development of the post-COVID model system. We have increased the number of our clinicians with out of state licensure to 17, providing patients access to much needed specialty care who had no access to these services in their local communities. Madonna currently provides virtual services across 14 different disciplines and specialties which resulted in 459 inpatient and 1210 outpatient virtual sessions over the last three years. Madonna will continue to develop and expand our virtual services to meet the community's growing need and demand for access to virtual healthcare.

**Priority #4:** Integrate acute care and post-acute rehabilitation care by collaborating with acute care hospitals and academic institutions.

**Strategy:** Enhance the University of Nebraska Medical Center's (UNMC) newly established Physical Medicine and Rehabilitation (PM&R) Graduate Medical Education Residency Training Program securing Accreditation Council for Graduate Medical Education (ACGME) approval for a Brain Injury Fellowship Program.

**Progress:** The ACGME approved UNMC's Brain Injury Fellowship Program application in the spring of 2022. The residency program began accepting applications for this fellowship on July 1, 2022. Fellows who apply to the year-long program will need to have completed residencies in one of three specialties – PM&R, Neurology or Psychiatry. Fellows will work at both Madonna Rehabilitation Hospitals (MRH) Lincoln and Omaha campus locations as well as at Nebraska Medicine. The fellowship will also include research activity.

**Impact:** Every day there are more than 611 traumatic brain injury related hospitalizations in the United States. However, there are only two board-certified brain injury PM&R specialists in Nebraska – Morgan LaHolt, MD, MRH Brain Injury Program Medical Director and Christopher Anderson, DO, assistant professor in the UNMC Department of PM&R. The fellowship will help to increase the number of specialty trained BI physicians in the state of Nebraska and Midwest region. The Brain Injury Fellowship at UNMC is the 20<sup>th</sup> program in PM&R to obtain approval expanding the 28 positions now available in the United States.

**Strategy:** Expand Madonna's cancerrehabilitation program to the Lincoln Campus to enhance the continuum of cancer care provided by the Lincoln community acute care hospitals.

**Progress:** Madonna leadership has engaged in discussions with Lincoln-area oncology service providers to assess the need and interest in collaborating on an inpatient cancer rehabilitation program at the Lincoln Campus. Based on their feedback, there is strong interest in moving forward with the development of a more structured inpatient rehabilitation program. Establishing this program will require identifying physician leadership, and efforts are currently underway to explore potential opportunities for doing so.

**Impact:** 60-90% of patients with cancer develop cancer-related impairments requiring rehabilitation services, and 1 in 3 cancer survivors report limitations in activities of daily living (ADLs).<sup>7,8</sup> Cancer rehab has been shown to improve physical function, reduce fatigue and decrease pain, as well as enhancing emotional well-being. Despite the clear benefits, less than 10% of cancer survivors who could benefit from cancer rehabilitation are referred to services.<sup>9</sup>

<sup>7</sup> Stout et al, Physical Medicine & Rehabilitation, 2016.

<sup>8</sup> CDC, 2020.

<sup>9</sup> Silver et al., Archives of Physical Medicine and Rehabilitation, 2015.

Identification of physician leadership who would build relationships with area oncologists as well as development of a comprehensive inpatient program would allow for greater access to these services and improved quality of life for cancer survivors.

**Strategy:** Investigate the feasibility of Madonna, in partnership with a local acute care hospital, establishing a third campus located in the central portion of Nebraska.

**Progress:** Madonna representatives have had discussions with Kearney area hospital stakeholders with the goal of advancing an affiliate partnership. Discussions are ongoing assessing the feasibility of Madonna expanding regionally providing post-acute services in central Nebraska.

Impact: Kearney is the ideal location for expansion consideration. Kearney is centrally located in Nebraska and has become a destination for health care services and health care training. Kearney houses a university site (the University of Nebraska Kearney [UNK] campus), a level two trauma center hospital (CHI Health Good Samaritan) and is one of the largest cities in the state. Lawmakers have allocated \$60 million of Nebraska's ARPA funds to support the construction of a new UNK-UNMC Health Education Building. This building project will cost \$85 million in total, be constructed adjacent to the UNMC-UNK Health Sciences Education Complex on the UNK campus and allow medical students to be educated in rural Nebraska.

The proximity of other major hospitals in North Platte, Hastings and Grand Island, in addition to hospitals in southern South Dakota and northern Kansas, provide the critical mass of patients needed to support dedicated post-acute hospital services.

# **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 people who represent the broad interest of the community. These community representatives include government officials at the local, state, and federal levels; public health leadership; payer representatives; regional healthcare facility management; academic institutions; 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>10</sup> were also utilized. These sources were used

<sup>10</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.

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 six months 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**

# COMPREHENSIVE POST-ACUTE REHABILITATION CONTINUUM CONSISTING OF THE FOLLOWING THREE COMPONENTS

# 1. Inpatient Rehabilitation Facilities

Inpatient Rehabilitation Facilities (IRFs) are a growing part of the post-acute care landscape, specializing in restoring function and returning people to their life roles and communities after serious traumas and illnesses. Nationally, the number of IRF beds increased by 5.5% from Federal Fiscal Years (FFY) 2010 to 2022. However, the number of patient cases cared for in IRFs has increased significantly. Over the same time period, fee-for-service Medicare cases alone have increased by 41%.<sup>30</sup>

The growth in IRF beds and cases has been entirely within the freestanding rehabilitation hospital segment, which increased beds by 50%, while rehabilitation units within acute care hospitals decreased beds by 21% from FFY 2010 to FFY 2022.<sup>30</sup> Multiple factors may be driving this shift in beds from units to larger freestanding hospitals. Many acute care hospitals are facing a growing demand for acute care beds and converting rehab beds to meet that need is both cost and time efficient. There are also economies of scale that may give larger freestanding facilities an economic advantage over small units. Crucially, a critical mass of patients is necessary to develop and maintain the expertise and technologies necessary to care for the most complex cases; spinal cord injury being a prime example. Large freestanding facilities with a wide catchment area have greater opportunities to develop the critical volume of patients required to operate top quality specialty programs.

The factors discussed above indicate that community needs are growing at a faster rate than available beds. As these needs increase, there will be an even greater need for larger, regional, freestanding centers of rehabilitation excellence as local hospitals begin to close their IRF units or reduce their size. In response to these needs, Madonna increased its total number of rehabilitation beds by 100% from FY 2010 to FY 2023. This allowed Madonna to increase the number of patient cases cared for by 149% from FY 2010 to FY 2025 (annualized). In response to increasing local referrals to the Lincoln campus, Madonna increased rehabilitation staffing to operate a fifth unit within the rehabilitation hospital in January 2025. These bed and staffing increases have been made possible by carefully monitoring local and national trends and adjusting the type of beds operated and staffed based on community needs. In some cases, Long Term Care Hospital (LTCH) beds have been converted to IRF or staffing has been shifted from LTCH to IRF based on changing community needs and shifts in these post-acute care segments.

#### 2. Long-Term Care Hospitals for Critically and Chronically III Patients

While LTCHs continue to play a vital role in the US health care system, providing specialized and extended hospital-level care to the most medically complex and critically ill Medicare beneficiaries, the industry is on a downward trajectory. From 2012 to 2021, the number of facilities and beds decreased by 22% and 24% respectively. Most of the decline has occurred since 2016 while the Medicare-aged population grew by 29% during this same period<sup>11</sup>. Nebraska, like the nation, has experienced a decline in LTCHs. The number of LTCHs in the state had decreased from four to three - two in Omaha and one in Lincoln. The decreases in LTCHs and cases are the result of restrictive Medicare Advantage (MA) plan admission criteria and narrow Medicare payment policies that the Centers for Medicare & Medicaid Services (CMS) started phasing in the beginning of 2016. LTCHs are now fully under the new restrictive CMS payment policy. The MA policies have had a significant impact given MA enrollment saturation has increased to approximately 50% nationally. Recent data reports that MA plan use of LTCHs for enrollees is 65% less than traditional fee for service for Medicare enrollees. A January 2023 healthinsurance.org article reported that 367,000 Nebraskans were enrolled in Medicare, with 29% (106,430 residents) enrolled in Medicare Advantage plans<sup>12</sup>. Although the Nebraska penetration rate is less than the national percentage, the impact on LTCH utilization is the same. The combination of these issues is expected to result in a further decline in LTCHs and reduced patient access to LTCH care in the future. This will also affect acute care hospitals because 90% of admissions to an LTCH follow an inpatient hospital stay. Acute hospital length of stay and ICU occupancy will increase. Community hospitals have stressed that access to post-acute care setting (including LTCHs) is critical to maintaining a community healthcare continuum.

# 3. Long Term Care Beds/Facilities in Nebraska Including Ventilator Care Needs

Nursing and skilled nursing facilities (NF/SNF) are dwindling in number while the need for these levels of care are growing. The American population 65 and older is expected to grow from 56 million in 2020 to 81 million by 2040. Over the past five years, more than 500 NFs have closed nationwide<sup>13</sup>. Hospital systems are reporting that patients cannot leave hospitals for NFs when ready for discharge, spending additional unnecessary days or even weeks in hospitals. The Emergency Department Benchmarking Alliance reports these discharge delays are adding to emergency department backlogs that reached record levels. These transition delays and optimizing the flow of patients through the health system is an ongoing priority nationally, including Nebraska. The Nebraska Hospital Association (NHA), with input from its members, has highlighted this issue. In the past five years, 38, or 16% of Nebraska's NFs have closed. The NHA June 2024 survey report identified 105 patients waiting discharge to post-acute setting greater than seven days. Of these patients, 68% needed placement in NF/SNFs. NHA refers to the placement of NF patients in Nebraska as a "critical issue" 14. Madonna's NF has addressed this need by admitting and caring for residents from every county in Nebraska. Madonna has worked closely with community representatives and contracted with Nebraska's Department of Health and Human Services (DHHS) to establish a program of care for complex residents on a ventilator long-term. Madonna's NF is located in a building constructed in 1971. Although there have been facility updates to portions of the building, much of the infrastructure is original and building renovations are required.

#### Specialized Population Needs in the Rehabilitation Continuum

In addition to the above needs for populations who generally require post-acute rehabilitation, additional specific needs for various diagnostic and age groups were identified.

<sup>11</sup> Ensuring Access to Long-Term Acute Care Hospital Care. National Association of Long Term Care Hospitals Policy Brief; September 6, 2024.

<sup>12</sup> Nursing Homes Close as Need for Care Grows. The Wall Street Journal, August 24, 2023.

<sup>13</sup> Throughput Survey Report. The Nebraska Hospital Association; June 2024.

A Changing PAC Landscape and the Outlook for LTCHs. Dobson-DaVanzo Health Economics Consulting NALTH conference presentation. October 25, 2024.

#### **IDENTIFIED NEEDS OF PERSONS WITH BRAIN INJURY**

The Community Needs Assessment, along with information from the Brain Injury Association of Nebraska<sup>15</sup> and the Nebraska Department of Health and Human Services<sup>16</sup>, identifies several critical areas of need for individuals with brain injuries and their families. These challenges span access to essential services, specialized medical and rehabilitation care, community integration, social determinants of health, and education and advocacy. Additionally, there is a significant need for a cohesive system of care that ensures continuity from emergency response through long-term recovery and community reintegration.

#### Access to Essential Services

- Limited availability of respite care, community day programs, and vocational support.
- o Insufficient mental health resources, including counseling, neuropsychology, psychiatry, and rehabilitation for chronic brain injury-related issues.
- Inadequate substance use disorder services tailored to the unique needs of individuals with brain injuries.

#### Cohesive System of Care & Specialized Medical Rehabilitation

- Need for a comprehensive system of care for individuals with brain injuries that integrates:
  - Emergency medical services and acute trauma care to provide immediate stabilization.
  - A post-acute rehabilitation continuum, including complex medical care, acute rehabilitation, and skilled nursing facilities designed for individuals with brain injuries.
  - Community-based supports that facilitate long-term recovery, reintegration, and access to necessary services.
- Lack of well-trained professionals providing acute concussion assessment and treatment aligned with best practices.
- Individuals with disorders of consciousness often placed in general long-term care facilities without access to specialized rehabilitation.

#### Community Integration & Social Determinants of Health

- Shortage of volunteer and vocational opportunities, limiting meaningful participation in work and social life.
- Limited resources for individuals transitioning back to school or college, with inadequate awareness of academic accommodations.
- Need for affordable housing, accessible transportation, and financial assistance to support independent living and long-term recovery.
- Strengthening peer support networks and mentorship programs to foster independence and connection within the community.

# Education & Advocacy

- Expanding public awareness and training for service providers to improve care and support.
- Stronger policy engagement to advocate for funding and legislation benefiting the brain injury community.

<sup>15</sup> **Brain Injury Association of Nebraska.** (n.d.). *Home*. Retrieved May 22, 2025, from https://biane.org

Nebraska Department of Health and Human Services. (n.d.). *Traumatic Brain Injury Waiver Services*. Retrieved May 22, 2025, from https://dhhs.ne.gov/Pages/TBI-Services.aspx

 Encouraging inclusive employment opportunities and workplace accommodations to help individuals re-enter the workforce.

#### **IDENTIFIED NEEDS OF PERSONS WITH CANCER**

The needs assessment process identified a number of needs for persons with cancer including education regarding the capabilities for cancer rehabilitation and how it can support individuals whether they are moving towards recovery, further treatment or end of life. Beyond medical treatment, addressing social determinants of health-including access to community support, economic stability, and holistic wellness resources-is essential in ensuring comprehensive cancer care. The need for facilitation of community integration and return to participation in various life roles following a serious cancer diagnosis and treatment was also noted, as isolation and loss of identity frequently impact this population. Although various support groups exist for this population, many persons with cancer report that they continue to lack access to local, specialized groups that align with their emotional and social needs. Additionally, education for persons with cancer on appropriate exercise and leisure activities, meditation and mindfulness for stress reduction and food as medicine/nutritional interventions remains an unmet need, highlighting the importance of accessible wellness programs. Programs that promote financial assistance for non-medical needs, vocational reintegration, and housing stability can further empower individuals to navigate life beyond treatment, reinforcing a more holistic and sustainable approach to survivorship and quality of life.

#### **IDENTIFIED NEEDS OF PEOPLE WITH RESPIRATORY DISORDERS**

Indviduals with respiratory needs require additional support to access specialized care and supplies promptly. While all respiratory populations have unique needs, there is a particularly high gap for those with lung transplants and those with ventilators and tracheostomies. Needs identified include timely access to ENT consultations, expanding admission criteria for pulmonary patients to facilitate earlier admission to post-acute care, thereby reducing the duration of acute care hospitalization. Additionally, it involves establishing a process to ensure continuity of care for patients with lung transplants, managing post-tracheostomy decannulation stoma requirements, identifying placement opportunities for tracheostomy patients post-discharge, and ensuring access to necessary supplies upon discharge.

# IDENTIFIED NEEDS OF PERSONS WITH SPINAL CORD INJURY (SCI)

The needs assessment process identified several critical needs for individuals with spinal cord injuries (SCI), including education regarding the capabilities of SCI rehabilitation and how it can support individuals whether they are working toward recovery, receiving further treatment or adapting to long-term care needs. In addition to bridging gaps in medical treatment, addressing social determinants of health, such as economic stability, healthcare access, environmental barriers and social support, is essential in ensuring comprehensive rehabilitation, improving recovery outcomes and long-term well-being. Research highlights that income level, access to healthcare, and environmental factors significantly impact health disparities in the SCI population, with individuals in lower-income groups experiencing higher rates of unmet healthcare needs, secondary health complications, and reduced access to adaptive equipment and transportation.<sup>17</sup>

A full continuum of rehabilitation care, including inpatient care, outpatient therapy, long-term follow-up, and community reintegration programs, is essential for optimizing recovery outcomes. Many individuals face insurance coverage limitations, geographic barriers, and financial hardship, which prevent them from receiving the ongoing, specialized rehabilitation necessary for maintaining independence. Beyond medical treatment, the need for facilitating community integration and resuming life roles were

Botticello, A. L., Murphy, L., & Lequerica, A. (2024). *Development of Composite Measures of Neighborhood Economic Factors for Use in Spinal Cord Injury Outcomes Studies: A Spinal Cord Injury Model Systems Database Study*. **Archives of Physical Medicine and Rehabilitation**.

also identified, as many individuals recovering from SCI face challenges in returning to employment, education, transportation, and accessible housing.

Patients with spinal cord injuries have various needs that must be addressed to ensure comprehensive care and support. These needs include access to power mobility for individuals with tetraplegia through public funding payers, improved access to public transportation, especially for short-notice requirements, and adequate funding for recreational equipment. Additionally, there is a need for return-to-work programs that allow patients to resume employment without losing benefits, accessible parking for group gatherings, increased access to specialists in rural areas, and more social opportunities to interact with peers facing similar challenges.

Furthermore, there is a pressing need for increased funding and accessible transportation in rural areas, reduced wait times for caregivers, particularly those funded by public programs, and the availability of skilled nursing and long-term care staff trained in specialized care for SCI patients. Outpatient therapy funding for the underinsured and accessible housing options for patients transitioning back to the community are also critical.

Moreover, spinal cord injury patients face challenges in accessing durable medical equipment (DME) due to a lack of personnel available for cleaning, repair, and transport, as well as funding for specialty equipment and ramp construction. For the pediatric SCI population, additional needs include bladder management support, experienced pediatric providers in pelvic floor therapy, insurance funding for necessary supplies, knowledgeable urology providers to offer and train in various catheter products and parent education regarding benefits and advocacy for necessary supplies.

#### **IDENTIFIED NEEDS OF PERSONS WITH STROKE**

Individuals with stroke have a number of ongoing needs, including consistent knowledge and application of the 2021 AHA Post-Acute Care Stroke Standards, which aim to increase guideline-based treatment for post-acute stroke patients. A recent needs assessment conducted by Lifeline Stroke Nebraska, a collaboration between the American Heart Association and providers such as Madonna, identified several key areas requiring attention:

- Lack of Insurance Coverage: Healthcare providers reported that the top barrier to providing specialized stroke rehabilitation care and services in Nebraska is a lack of insurance coverage.
- **Limited Specialized Services**: Due to the rural nature of the state, there is a shortage of specialized services, rehabilitation equipment, and technology. Most services are concentrated in the central and southeastern parts of the state, in more urban areas.
- Mental Health Services: There is a lack of knowledge and understanding regarding the
  importance and availability of mental health services, which is critical as 35% of Nebraska
  stroke survivors reported feeling down or depressed after their stroke. The risk of developing
  depression after a stroke is as high as 50% according to literature.
- **Geographic Barriers**: Distance and time required to access acute stroke treatment and post-acute stroke rehabilitation care are significant issues in rural Nebraska.
- Young Adults with Stroke: There has been an increase in young adults suffering strokes in Nebraska and across the country. Their needs are unique compared to older individuals with stroke, requiring specialized rehabilitation services in areas such as returning to work, community re-entry, parenting, sexuality, intimacy, relationships, mental health, and secondary stroke prevention.
- **Peer Support**: In rural areas, the distance to the nearest stroke support group is a barrier, and peer support is lacking.

#### THROUGHPUT OF PATIENTS IN THE HEALTHCARE CONTINUUM OF CARE

Efficient patient throughput is essential to maintaining a responsive and effective healthcare continuum, ensuring that individuals receive timely, appropriate care while optimizing resource utilization. Nebraska is currently experiencing significant challenges with acute care hospitals discharging patients in a timely manner, primarily due to prior authorization requirements that delay access to necessary post-acute services such as inpatient rehabilitation, skilled nursing, and home health care. While post-acute capacity plays a role, the most significant barrier is the administrative delays associated with securing authorization for services, which prolong inpatient stays and prevent hospitals from admitting new patients who require acute care. These inefficiencies create bottlenecks in hospital capacity, increase healthcare costs, and negatively impact patient outcomes. By streamlining authorization processes and improving care coordination, healthcare systems can reduce discharge delays, enhance patient transitions, and alleviate strain on hospital resources. Optimizing throughput also supports financial sustainability by aligning care delivery with reimbursement models that prioritize value-based outcomes. Addressing these systemic inefficiencies is critical to ensuring that Nebraska's healthcare providers can meet the evolving needs of their communities while maintaining high-quality, patient-centered care.

#### **CONTINUED NEED FOR PM&R TRAINING**

The ongoing need for training in Physical Medicine & Rehabilitation (PM&R) physicians in Nebraska is critical to addressing both the state's healthcare workforce shortages and the growing demand for specialized rehabilitative care. As Nebraska continues to face challenges in patient throughput and access to rehabilitative services, ensuring a steady pipeline of well-trained PM&R physicians is essential for improving outcomes for individuals recovering from injury, surgery, or chronic conditions. Advanced training not only equips physicians with the skills to implement evidence-based rehabilitation strategies, but also fosters interdisciplinary collaboration, enhancing overall healthcare efficiency. Furthermore, with an aging population and an increasing prevalence of conditions such as stroke, spinal cord injuries, and neurodegenerative diseases, maintaining robust PM&R training programs is key to sustaining high-quality, accessible care. By investing in continued education and training, Nebraska can strengthen its healthcare infrastructure, retain talent, and ensure that patients receive the comprehensive rehabilitation they need to regain function and independence.

#### **NURSING WORKFORCE SHORTAGES**

Nebraska is facing a significant nursing workforce shortage, which is expected to reach a deficit of 5,435 nurses by 2025.<sup>18</sup> This shortage is exacerbated by an aging nursing workforce, high levels of burnout, and limited resources for nursing education and training.<sup>19</sup> The strain on the nursing workforce has led to challenges in patient care, increased hospital costs, and difficulties in recruiting and retaining healthcare professionals. Nebraska ranked 41st in WalletHub's 2025 report on the best and worst states for nurses, with particularly low scores in opportunity and competition (ranked 46th), though its work environment ranked 25th.<sup>20</sup> The Nebraska Hospital Association has identified prioritizing recruitment and retention strategies as essential to addressing this crisis, particularly as hospitals struggle to maintain adequate staffing levels. Without intervention, the nursing shortage will continue to impact healthcare accessibility, patient outcomes, and the overall stability of Nebraska's healthcare system.

#### **HEALTHCARE DATA SECURITY**

The need for improved healthcare data security has never been more critical as the industry faces increasing cyber threats, data breaches, and regulatory challenges. Healthcare organizations store

<sup>18</sup> Center4nursing.ne.gov

<sup>19</sup> Dhhs.ne.gov

<sup>20</sup> WalletHub. (2025). *Best & worst states for nurses*. Retrieved from https://www.beckershospitalreview.com/rankings-and-ratings/best-worst-states-for-nurses-in-2025/

vast amounts of sensitive patient information, including medical histories, billing details, and personal identifiers, making them prime targets for cyberattacks. Weak security measures can lead to unauthorized access, identity theft, and disruptions in patient care. Additionally, compliance with regulations such as HIPAA requires stringent protections to safeguard patient privacy and ensure data integrity. Strengthening cybersecurity infrastructure through encryption, multi-factor authentication, and regular security audits can mitigate risks and enhance trust between providers and patients. As healthcare systems continue to adopt digital solutions, investing in robust data security measures is essential to protecting patient information, maintaining operational stability, and ensuring compliance with evolving legal standards.

#### **HEALTHCARE DATA ACCESS**

Improving healthcare data access is essential for enhancing patient care, streamlining operations, and supporting informed decision-making. Limited or fragmented access to medical records can lead to delays in treatment, redundant testing, and inefficiencies in care coordination. A tightly integrated system where registration, clinical and financial activities all take place in a single software solution. We are anticipating that this will greatly improve efficiencies and the potential for operationalizing interoperability in our registration workflows. By implementing interoperable systems and standardized data-sharing protocols, healthcare providers can ensure that critical patient information is readily available across different care settings. Enhanced data access also empowers patients to take an active role in their health management, improving engagement and outcomes. Additionally, researchers and policymakers rely on comprehensive healthcare data to identify trends, address disparities, and develop evidence-based solutions. Investing in secure, efficient, and accessible healthcare data systems is crucial for advancing medical innovation, reducing costs, and delivering high-quality, patient-centered care.

# **AVAILABLE RESOURCES TO ADDRESS HEALTH NEEDS**

In regard to offering post-acute care, there are approximately 1,180 inpatient rehabilitation facilities (IRFs)<sup>21</sup> and 331 long-term acute care hospitals (LTCHs)<sup>32</sup> in the United States. As an organization, Madonna is approved and licensed for 253 post-acute care hospital beds by the state of Nebraska: The rehabilitation hospital in Lincoln has 67 IRF beds; specialty hospital in Lincoln has 77 LTCH beds, and the specialty hospital in Omaha has 77 IRF beds and 32 LTCH beds. In addition, Madonna skilled nursing has 103 NF beds, 79 of which are certified as SNF. There are currently 92 IRFs and 20 LTCHs located in Madonna's region<sup>22</sup>. Services at these facilities differ programmatically from those offered by Madonna.

#### PROGRAMS SUBSIDIZED BY MADONNA TO ADDRESS UNMET HEALTH NEEDS

Madonna currently subsidizes several programs to meet the needs of the medically underserved. These programs are either not covered by a payer source or not adequately covered but have been identified as critical in the recovery process in building and sustaining independence. In addition to bridging gaps in medical coverage, these programs focus on broader health and wellness factors that impact recovery, independence, and long-term success. By addressing social determinants of health—including fostering independence, resuming life roles, and ensuring equitable access to necessary resources—Madonna empowers individuals to rebuild their lives beyond the clinical setting. These initiatives support not only physical rehabilitation but also emotional, social, and vocational reintegration, ensuring a holistic approach to recovery

<sup>21</sup> MedPAC Report to Congress: Medicare Payment Policy – Inpatient Rehabilitation Facility Services, March 2024 – Count as of 2022. March 2024 Report to the Congress: Medicare Payment Policy – MedPAC

<sup>22</sup> Data.CMS.gov: Madonna's region is defined as the States of Nebraska, Iowa, Kansas, Missouri, North Dakota and South Dakota.

<sup>&</sup>lt;sup>31</sup> Medicare Cost Reports – Macro, Federal Fiscal Years 2010-2022

<sup>&</sup>lt;sup>32</sup> Data.CMS.gov, Long-term care hospitals, Long-term care hospitals | Provider Data Catalog

#### ADAPTIVE SPORTS AND RECREATION THERAPY

There are very limited opportunities for people with different abilities to participate in community-based recreation and sports. Madonna continues to employ several recreation therapists at each campus to provide skilled recreation therapy assessment and intervention, group activities and community outings for both inpatients and outpatients. Although this service is not compensable by health insurers, this early introduction to adaptive recreation opportunities helps instill hope and confidence as patients reintegrate into the community and is known to improve outcomes and quality of life. At the Wellness Center, although Adaptive Sports and Recreation programming is more limited than it was prior to the pandemic, in 2024 Madonna began offering the Adaptive Athletes in Motion program, a high intensity functional fitness class designed for individuals with various physical abilities.

#### **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 delay 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 number of emergent situations which often result in emergency room trips and increased costs. Madonna Transportation has shown impressive resilience in returning to near-normal operations after the pandemic while maintaining a strong commitment to safety. The increase in trips from 8,796 trips in FY 2022 to 12,134 trips in FY 2023 reflects significant growth, and the slightly lower number in 11,863 trips in FY 2024 still indicates a high level of service. Continuing precautions like sanitizing equipment and cautious multi-loading demonstrate the dedication to patient safety and community health.

#### **FINANCIAL ASSISTANCE**

Madonna remains committed to supporting as many patients as possible, including providing specialty equipment for home use upon discharge and offering emergency financial assistance to patients, their families, and staff. Two dedicated funds exist to address these needs.

The **St. Benedict Fund** provides financial assistance for basic needs in emergency or unforeseen circumstances when current income is insufficient, causing undue hardship. It also supports patients and residents in preserving dignity, independence, and well-being. Eligible applicants may receive financial assistance of up to \$500 within a 10-year period.

The **First Hope Equipment Fund** covers the cost of mobility, communication, environmental control, and recreation equipment recommended by therapists for patients unable to purchase these items out of pocket. The equipment is intended for personal use at home, school, and in the community.

Over the past three years, these funds have helped more than 1,300 individuals meet essential needs and successfully reintegrate into their communities.

#### St. Benedict Funds

FY 21-22

Total Amount: \$93,347.22 Total Individuals: 455

FY 22-23

Total Amount: \$94,396.13 Total Individuals: 418

#### FY 23-24

Total Amount: \$92,492.62 Total Individuals: 419

#### First Hope Patient Equipment Funds

FY22 - \$46,951 (3 infants, 5 youth, 28 adults) FY23 - \$48,925 (1 infant, 8 youth, 46 adults) FY24 - \$30,218 (1 infant, 8 youth, 40 adults)

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

# SPINAL CORD INJURY PROGRAM (SCI PROGRAM) DURABLE MEDICAL EQUIPMENT, PEER SUPPORT AND EDUCATION

Since the 1990s, the spinal cord injury (SCI) program at Madonna has proudly maintained CARF accreditation, addressing the comprehensive needs of individuals with SCI during hospitalization and after discharge into the community. In FY2024, the SCI Program partnered with the Assistive Technology Partnership of Nebraska and the Methodist Loan Program to provide 15 individuals with essential durable medical equipment (DME), free of charge, which was necessary for independent living but not funded. The program also conducted peer-to-peer appeals and collaborated with local vendors to successfully overturn multiple equipment denial decisions.

In 2023, the Nebraska Chapter of the United Spinal Association was established and continues to be organized by the SCI Program Manager. This initiative aims to enhance patient access to peer support and specialized resources. As part of this effort, the chapter hosted three United Spinal Association of Nebraska events at Madonna, providing adequate parking and accessible facilities. The organization provided multiple webinars to provide education to healthcare providers, individuals with disabilities and their caregivers on topics including Traveling with a Disability, Prevention and Treatment of Pressure Injuries, the Ticket to Work Program, Benefits and Work Incentives, Easter Seals and the Aging and Disability Resource Center.

Moreover, the SCI Program remains committed to ongoing education by conducting numerous continuing education events at local and regional healthcare organizations. These events aim to educate healthcare providers on the standards and best practices for treating individuals with spinal cord injury.

#### STROKE PROGRAM COLLABORATION ON RESOURCE DEVELOPMENT

Madonna partnered with the American Heart Association on the Lifeline Stroke Nebraska project to improve stroke systems of care within the state of Nebraska. In response to this, the project worked to develop resources to facilitate the transition of Nebraskans with stroke to the most appropriate level of post-acute care including one for healthcare providers and one for patients/caregivers. These resources are now available at <a href="https://www.heart.org/missionlifelinene">www.heart.org/missionlifelinene</a>. In addition, the Madonna stroke program leadership is participating in the Nebraska State Stroke Task Force to improve systems of care for persons with stroke in the state.

#### THERAPEUTIC LEARNING CENTER

Transitioning back to everyday activities after an injury can be challenging, and Madonna recognizes this need as a critical aspect of the recovery process. The Therapeutic Learning Center (TLC) at

Madonna stands as the only on-site, classroom-based hospital program of its kind in the region. The TLC assists student patients in maintaining and, when necessary, re-learning academic skills, developing new study strategies and coping mechanisms, and collaborating with parents and schools to ensure a smooth transition back to the classroom.

Due to the educational nature of the TLC program, medical insurance does not cover the cost of patient sessions. Furthermore, educational funds are unavailable because the services are provided in a medical setting. Despite these challenges, TLC services are offered at no cost to patients at both the Lincoln and Omaha campuses. In FY2024, the TLC supported 112 student patients.

#### **COMMUNITY EDUCATION AND OUTREACH**

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 is available in Appendix C. In addition, educational literature is available at the facility and on Madonna's website, www.madonna.org.

# **NEEDS REVIEW PROCESS**

After data is collected through the means identified earlier in this report, 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 were discerned through the 2024 community health needs assessment process, building upon the impact of the previously conducted CHNA.

Prioritization criteria were 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) Expand the resources available to support world-class rehabilitation and the advancement of evidence-based treatment and scientific research through public-private partnerships
- 2) Facilitate efficient throughput of the community healthcare system maintaining a comprehensive post-acute care rehabilitation continuum and formalize collaborative partnerships with hospitals to ensure patient placement at the appropriate level of care.
- 3) Ensure a strong and stable healthcare workforce.
- 4) Modernize the information technology infrastructure in order to ensure healthcare data security and healthcare information access.

# **IMPLEMENTATION STRATEGY**

Madonna's Implementation Strategy sets forth the plan to address each prioritized community health need indicated in the 2024 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 www.madonna.org. A copy of Madonna's CHNA is also available at no charge in hard copy format upon request.

#### **APPENDIX A**

#### **COMMUNITY ORGANIZATIONS**

#### PROFESSIONAL ORGANIZATIONS

American Board of Clinical Neuropsychology

American Board of Professional Psychology

American Board of Swallowing & Swallowing Disorders

American Cancer Society

American College of Healthcare Administrators

American College of Healthcare Executives

American Congress of Rehabilitation Medicine

American Heart Association

American Healthcare Association/National Center for Assisted Living

American Medical Rehabilitation Providers Association

American Occupational Therapy Association

American Physical Therapy Association

American Physical Therapy Association-Nebraska Chapter

American Medical Rehabilitation Providers Association

American Speech/Language Hearing Association

Association for Nursing Professional Development

Association of Occupational Health Professionals in Healthcare

Association of Rehabilitation Nurses

Case Management Society of America

Commission on Accreditation of Rehabilitation Facilities

International Pediatric Rehabilitation Collaborative

Lincoln Education Association

Lincoln/Lancaster County Safe Kids Coalition

Lincoln Public Schools Medical Advisory Committee

Lincoln Stroke Partnership

Nebraska Academy of Nutrition & Dietetics

Nebraska AgrAbility

National Association of Long Term Care Hospitals

Nebraska Brain Injury Conference

National Education Association

Nebraska Academy of Nutrition & Dietetics

Nebraska Adaptive Sports Organization

Nebraska AgrAbility Advisory Council

Nebraska Brain Injury Advisory Council

Nebraska Foundation for Physical Therapy

Nebraska Hospital Association

Nebraska Nursing Facility Association / Nebraska Assisted Living Association

Nebraska Occupational Therapy Association

Nebraska Physical Therapy Association

Nebraska Society of Respiratory Care

Nebraska Speech-Language Hearing Association

Nebraska State Stroke Task Force

Nebraska State Trauma Board

Nebraska Stroke Advisory Council

Nebraska Wesleyan University Nursing Advisory Council

Neuro-Developmental Treatment Association

Omaha Stroke Consortium

Regional Stroke Coordinators

Stroke Advisory Council

United Stroke Alliance

Workers Compensation Association of Nebraska

#### **WORKERS' COMPENSATION PAYERS**

Accident Fund

Acuity

Bitco

Broadspire

Burlington Northern Santa Fe

**CCMSI** 

Chubb Insurance

City Utilities of Springfield, MO

Corvel

Creative Risk Solutions

**EMC** Insurance

**ESIS** 

Gallagher Bassett

**Great West Casualty** 

Intact Insurance

Liberty Mutual

Midwest Insurance

Missouri Employers Mutual

Nationwide

**Next Level Administrators** 

Penn Miller's Insurance

RAS

Sedwick

Sedgwick CMS

Sentry Insurance

SFM

Travelers

Tri Star

United Fire and Casualty

West Bend Insurance

Zurich

#### **HEALTHCARE FACILITIES**

Atrium Health Carolinas Rehabilitation - Charlotte, NC

Avera McKennan Hospital – Sioux Falls, SD

Beatrice Community Hospital – Beatrice, NE

Boys Town National Research Hospital - Omaha, NE

Brooks Rehabilitation Hospital - Jacksonville, FL

Casa Colina Hospiital and Centers for Healthcare – Pomona, CA

Bryan Medical Center - Lincoln NE

Centerpoint Medical Center - Independence, MO

CHI Health Creighton University Medical Center

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

Cox Medical Center South – Springfield, MO

Faith Regional Health Services - Norfolk, NE

Filmore County Hospital – Geneva, 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

Hackensack Meridian Health JFK Johnson Rehabilitation Institute - Edison, NJ

Iowa Methodist Medical Center - Des Moines, IA

Jefferson County Hospital – Fairbury, NE

Jennie M. Melham Memorial Medical Center – Broken Bow, NE

Liberty Hospital – Liberty, MO

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 Hospital - St. Louis, MO

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

Nebraska Medicine Bellevue – Bellevue, NE

North Kansas City Hospital – North Kansas City, MO

Overland Park Regional Medical Center – Overland Park, KS

Regional West Garden County - Oshkosh, NE

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 – Fargo, 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 North Hospital – Kansas City, MO

St. Luke's Regional Medical Center - Sioux City, IA

Stormont-Vail Healthcare - Topeka, KS

Swedish Medical Center – Englewood, CO

TIRR Memorial Hermann - Houston, TX

Trinity Regional Medical Center – Fort Dodge, IA

Truman Medical Center - Kansas City, KS

University of Iowa Hospital – Iowa City, IA

University of Kansas Medical Center – Kansas City, KS

University of Kansas St. Francis – Topeka, KS

University of Missouri Medical Center – Columbia, MO

University Nebraska Medical Center - Omaha, NE

Via Christi Hospital St. Francis – Wichita, KS

Wesley Medical Center - Wichita, KS

York General Hospital - York, NE

#### **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 Mike Flood

Office of Senator Pete Ricketts

Office of Senator Deb Fischer

State of Nebraska

#### **COMMERCIAL PAYERS**

Accident Fund Insurance

**ACIG** Insurance

Acuity

Aetna

Aetna Better Health

Aetna Choice

Allegiance

Allied Benefit

Allied Health

Ambetter

Amerivantage

Anthem Blue Cross Blue Shield

**Assured Benefits** 

Auxiant

Avera Health Plan

Berkshire Hathaway

Blue Cross Blue Shield

Blue Cross Blue Shield - Iowa

Blue Cross Blue Shield - Kansas

Blue Cross Blue Shield -- Missouri

Blue Cross Blue Shield - Nebraska

Blue Cross Blue Shield - North Dakota

Blue Cross Blue Shield - South Dakota

Centivo

CIGNA

Coresource

Cypress

Encova

Farm Bureau Insurance

Federated Insurance

First Choice Health

First Health Network

Gallagher Bassett

**GEICO** 

Golden Rule Insurance

Grinnell Mutual Reinsurance

Hartford Insurance

Health Partners

Health Plan Inc.

Heritage Health

Humana

Iron Road Healthcare

Lucent

Medica

Meritain

Mid-American Benefits

Midland Health Partners

Molina

Penn Miller Insurance

Performance Health

Progressive

Sanford Health Plan

Sentry

SFM

Silverscript Insurance

The Health Plan/Healthlink

Travelers

Tristar Group

Trustmark

United Healthcare

**USA Managed Care** 

Wellmark

West Bend Mutual

#### OTHER ORGANIZATIONS

A Time to Heal (ATTH) Cancer Foundation

Ameritas Life Insurance Corp

**Baxter Auto** 

Brain Injury Regional School Support Teams

Briar Cliff Physical Therapy School

**Bridges Trust** 

Catholic Social Services

Cline Williams Wright Johnson & Oldfather Law Firm

Clinic with a Heart

Creighton University

Curbell Medical Products Inc.

D.A. Davidson and Co.

Dobson DaVanzo

**Education Quest Foundation** 

First National Bank

**Five Nines** 

Hanger Institute for Clinical Research & Education, LLC

HBE Becker Meyer Love, LLP

Home Care Partners

KNG Health

Lamson Dugan & Murray LLP

Leadership Lincoln

Lincoln Chamber of Commerce

Lincoln Children's Museum

Lincoln Education Association

Lincoln/Lancaster County Safe Kids Coalition

Lincoln Literacy Council

Lincoln Parks and Recreation

Lincoln Partnership for Economic Development

Lincoln Public Schools

Lincoln Youth Symphony

Love Signs

Lyman-Richey Corporation

Matheson Linweld

Matt Talbot Kitchen & Outreach

Medics at Home

Methodist College

Metro Community College

National Catholic Conference

National Education Association

Nebraska Chamber of Commerice

Nelnet

Omaha Chamber of Commerce

Omaha Media Group

O'Neill, Heinrich, Damkroger, Bergmeyer, Schultz PC, L. L.O.

Pillen Family Farms

**Purdue University** 

Rembolt Ludtke, LLP

Robinette Farms

Sampson Construction

Scorebuilders

Southeast Community College

Sports Art Inc.

St. Vincent de Paul Society

ThinkFirst
Union Bank and Trust
Union College
University of Nebraska – Lincoln
University of Nebraska - Omaha
University of South Dakota
US Bank
V2 Content
Werner Enterprises
World's Foremost Bank
YMCA

#### **APPENDIX B**

#### **Madonna Employee Organization Affiliations**

- Tiffany Armstrong, MSN, RN, CRRN, CBIS, Quality Specialist RN /Brain Injury and Neuro Program Leader, serves as the Vice Chair of the Nebraska Brain Injury Advisory Council as well as the Chair of the Public Policy Committee. She also serves on the Brain Injury Oversight Committee. Tiffany is a member of the Association of Rehabilitation Nurses and is a part of the Behavioral Issues Special Interest Group. She is also a member of ACRM (American Congress of Rehabilitation Medicine) and serves on the Brain Injury Interdisciplinary Special Interest Group (BI-ISIG), Chronic Brain Injury Task Force and the newly formed Neurobehavioral Task Force. She is also a member of the United Spinal Association.
- **Lisa Andersen**, OTR/L, CDRS is a member of the Association for Driver Rehab Specialists, American Occupational Therapy Association, and Nebraska Occupational Therapy Association.
- Jessica Brietzke, PT, DPT, Continence Program Leader, is a member of the American Physical Therapy Association, neurology section, and is a member of the United Spinal Association, Nebraska Chapter.
- Deb Buchholz, Therapeutic Educational Coordinator is a member of the Nebraska State Education Association (NSEA), National Education Association (NEA), & Hospital Educators & Academic Liaisons Association (HEAL)
- Judith M. Burnfield, PhD, PT, Director, Institute for Rehabilitation Science and Engineering, serves as graduate faculty at the University of Nebraska Medical Center (UNMC) and maintains adjunct faculty appointments in the Department of Biological Systems Engineering at University of Nebraska Lincoln (UNL), the Department of Mechanical and Materials Engineering at UNL, the School of Pharmacy and Health Professions at Creighton University, the Department of Physical Medicine and Rehabilitation, College of Medicine at UNMC, the Division of Physical Therapy Education at UNMC, and the Department of Physical Therapy at the University of South Dakota. Dr. Burnfield serves as an advisory board member with Hanger Institute for Clinical Research and Education, LLC and collaborates on post-COVID-19 research with the NALTH Research and Quality Committee. She is currently collaborating with Curbell Medical Products, Inc. and SportsArt Inc. to advance novel technology developed in Madonna's Research Institute to market.
- Heather Comstock, MS, RD, LMNT, FAND, Patient Food Services Manager, is a board member of Nebraska Academy of Nutrition & Dietetics
- **Danielle D'Amore**, PT, DPT, NCS is a member of the American Physical Therapy Association and the Nebraska Physical Therapy Association.
- Scott Deckert, RPH, Director of Pharmacy, is an Adjunct Faculty Instructor Department of Pharmacy Practice for the University of Nebraska Medical Center School of Pharmacy. He also serves as an Adjunct Faculty Instructor for the University of Kansas, School of Pharmacy. He is the Program Director for the Pharmacy Technician Certification Board (PTCB) Madonna Pharmacy Technician Training Program. He also serves as a clinical preceptor for Southeast Community Collage Pharmacy Technician Program. Mr. Deckert is a member of the Nebraska Pharmacy Association and serves on the Nebraska Pharmacy Association Legislation Committee.
- Paul Dongilli Jr., PhD, FACHE, President and CEO, serves on the Board of Directors of the National Association of Long Term Hospitals (NALTH) and is Chair of the Education Committee. He is also a board certified fellow of the American College of Healthcare Executives (ACHE).
- Alex Eilers, PT, DPT I am member of the APTA- American Physical Therapy Association
- Erin Engleman, OT, is a member of the Lincoln Stroke Partnership.
- **Terasa Farlin**, BSN, RN, CRRN Vice President of Patient Care & CNO serves on the Board of Directors for Nebraska HOSA, is an active member of the Nebraska Nurses Association, American

- Nurses Association, and the Association of Rehabilitation Nursing where she serves on the engagement taskforce committee.
- Kristi Felix, MSN, RN, CRRN, CIC, LTC-CIP, FAPIC, Infection Prevention Manager is a fellow of the National Association for Professionals in Infection Control and Epidemiology (APIC) and serves as Subject Matter Expert for Post-Acute Care/Long Term Care. She is also a member of the APIC Nebraska Chapter where she serves on Education Committee. She is on the Certification Board for Infection Control and Epidemiology (CBIC) Test Item Review Committee and the Nebraska Infection Control Network (NICN) where she serves as a Board Member and on the Education Committee. Kristi is an instructor for the NICN Basic Infection Prevention Course, a member of the State of Nebraska Healthcare Associated Infections Advisory Council where she serves as member representing the LTACH setting, and she also serves on the MDRO Subcommittee for this advisory council.
- Amy Ferris, RN, BSN, CRRN, Employee Health and Safety RN Specialist, is a member of the Association of Occupational Health Professionals in Healthcare.
- Melody Gagner, RN, BSN, NHA, Administrator Long Term Care Services, serves as a member of
  the American Health Care Association/National Center for Assisted Living (AHCA/NCAL) and the
  Nebraska Nursing Facility Association and Nebraska Assisted Living Association (NNFA/NALA).
   Ms. Gagner is a Certified Nursing Home Administrator Preceptor through the American College of
  Health Care Administrators (ACHCA).
- Amy Goldman, PT, DPT, Stroke Program Manager, is a member of the Nebraska State Stroke Task
  Force and serves as Chair of the Nebraska State Stroke Task Force Rehabilitation Committee.
  Goldman is also a member of the Nebraska Stroke Consortium, Lincoln Stroke Partnership, and
  serves on the board of directors of A Time To Heal Cancer Foundation.
- Danni Grotzky, RN, Quality Risk manager is a member of AMRPA Quality Committee and Partnership for Quality Measurement's Pre-Rulemaking Review committee on the Post-Acute Care/ Long-Term Care committee as an advisory member.
- Melissa Gulizia, BS, RRT, Director of Respiratory Therapy and Pulmonary Program, serves as
  Delegate for the Nebraska Society of Respiratory Care and is a board member for the Foster Care
  Review Office.
- Lynn Hallowell-Gottsleben, DPT, FACHE Vice President Rehabilitation, is a board certified fellow of the American College of Healthcare Executives (ACHE), is a member of the American Medical Rehabilitation Providers Association (AMRPA) Outpatient and Therapies Committee, a member of the Physical Therapy Association of Nebraska and the Practice Management and Reimbursement Committee and the Southeast Community College Physical Therapist Assistant advisory council.
- **Sarah Hamilton**, OTD, OTR/L, CDRS serves as the president for the Nebraska/lowa Chapter of The Association for Driver Rehabilitation Specialists.
- **Michael Hedderman**, Vice President and Chief Financial Officer, is a member of the National Association of Long Term Hospitals (NALTH) Policy Committee.
- **Kayla Hoge**, OTD, OTR/L is a member of the Nebraska Occupational Therapy Association, The American Occupational Therapy Association
- **Joyce Jaixen** PT, serves on the Learning Innovations Committee and Education/Student Learning subcommittees for the Neuro-Developmental Treatment Association (NDTA).
- Ryan Knight, PT, DPT, post-COVID Program Manager, serves as co-chair of the 'Moving Forward Knowledge Translation Task Force' as a member of the Academy of Neurologic Physical Therapy (ANPT), he is also a member of the American Physical Therapy Association (APTA), American Congress of Rehabilitation Medicine (ACRM), and the ACRM International Interdisciplinary Special Interest Group COVID-19 Task Force.
- **Sarah Koebernick**, PT, GCS, Inpatient Physical Therapy Clinical Director, is a member of the American Physical Therapy Association and the Nebraska Physical Therapy Association.
- **Jackie Krason**, MSN, RN, CRRN, Director of Quality and Risk Management is a member of the Workers' Compensation Association of Nebraska and the Association of Rehabilitation Nurses.

Member of: American Society for Health Care Risk Management, National Association of Healthcare Quality

- Andrea Kremeier, MS, CCC, SLP, is a member of the Nebraska Speech-Language Hearing Association
- **Lindsy Kroenke**, BSN, RN, CIC, Infection Prevention Coordinator, is a member of the Association for Professionals in Infection Control and Epidemiology (APIC) and the APIC Nebraska Chapter
- Carrie Kuta, BSN, RN, CRRN, Nursing Education Coordinator, in a member of the Nebraska Affiliate of Association of Nursing Professional Development
- **Jill Larsen**, CPCS, Medical Staff Credentialing and Privileging Manager, is a member of the National Association Medical Staff Services (NAMSS) and serves as the President of the Nebraska Association Medical Staff Services (NeAMSS).
- Christopher Lee, MSPT, FACHE, Vice President & Chief Operations Officer, is a board certified fellow of the American College of Healthcare Executives (ACHE) and serves in the ACHE mentor program. Chris is also Chair of the Board of Directors of the American Medical Rehabilitation Providers Association (AMRPA) and the co-chair of the association's Data committee.
- Sara Lockard, PT, DPT, Outpatient brain injury program leader is a board member of Heartland Cancer Foundation.
- 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 and on Nebraska Child Passenger Safety advisory committee.
- Brooke Murtaugh, OTD, OTR/L, CBIST, BT-C Brain Injury Program Manager, is a member of the Nebraska Brain Injury Advisory Council, Nebraska Neurological Society, American Burn Association Rehabilitation Committee Member, American Congress of Rehabilitation Medicine Disorder of Consciousness and Cognitive Rehabilitation Task Force, International Brain Injury Association Member and Disorders of Consciousness Special Interest Group. Brooke co-chairs the Family Education Committee for Disorders of Consciousness for both IBIA and ACRM. Co-Chair for the Curing Coma Campaign Scientific Work Group Caring for the Patient in Coma. American College of Surgeons Traumatic Brain Injury Best Practice Guidelines Committee Member. Volunteer Faculty for Creighton University Department of Occupational Therapy. Volunteer Faculty for University of Nebraska Medicine Physical Therapy and Occupational Therapy Department. Clinical Assistant Professor University of South Dakota School of Health Sciences 2021-2024. Brain Injury Association of American Education Committee member.
- Kelly Quinn, MSOT, OTR/L, CBIS, Work Re-entry Program leader, is an adjunct professor of
  pediatrics at Union Adventist University in Lincoln, NE. She is as member of the American
  Occupational Therapy Association and Nebraska Occupational Therapy Association. Mrs. Quinn
  serves on the education committee of the International Pediatric Rehabilitation Collaborative
  including subcommittees on medically complex infants and pediatric bowel and bladder. She serves
  on the advisory board of the University of Nebraska Medical Center Program in Occupational
  Therapy.
- **Kipp Ransom**, MS, LPC, LIMHP is a professional counselor with ThinkFirst national injury prevention foundation.
- Dustin Reinbold, MSPT, ATC, OHC serves as a Clinic Leader at Clinic with a Heart in Lincoln, NE.
- Kathy Schmidt, OTR/L is a member of the American Occupational Therapy Association.
- **Nicole Slusher**, OTR/L, CLT, serves on the Competency Development Tool Committee for the National Board for Certification in Occupational Therapy
- **Tabatha Sorenson**, OTD, OTR/L, ATP, CAPS, Rehabilitation Engineering Program Leader, Virtual Services Coordinator, Home Assessment Specialist, member of Nebraska Occupational Therapy Association and American Occupational Therapy Association.
- Melissa Starr, PT, DPT, Inpatient Physical Therapy Clinical Director, is a member of the UNMC PT program clinical advisory panel, American Physical Therapy Association and the Nebraska Physical Therapy Association.

- 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.
- **Virginia Schweitzer**, COTA/L, Program Leader for Work Reentry, is a board member for the Occupational Therapy Assistant program at Union College in Lincoln, NE.
- **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. Mr. Stec is also a program surveyor for Commission on Accreditation of Rehabilitation Facilities (CARF) International.
- **Jodee Sun**, BSN, RN, LTC-CIP, CRRN, Infection Prevention Specialist, is a member of the Association of Professionals in Infection Control and Epidemiology (APIC) and the APIC Nebraska Chapter.
- Lori Terryberry-Spohr, PhD., ABPP, Director of Rehabilitation Programs, serves as a diplomate
  for the American Board of Professional Psychology and the American Board of Clinical
  Neuropsychology. She is also a member of the American Medical Rehabilitation Providers, the
  American Congress of Rehabilitation Medicine, the Nebraska State Trauma Board, and the Lincoln
  Public Schools Medical Advisory Committee.
- Diane Ulmer, OTR/L, Spinal Cord Injury Program Manager, is a member of the Nebraska AgrAbility Advisory Council, Academy of Spinal Cord Injury Professionals and the Nebraska Occupational Therapy Association. Serves as chair of the pediatric neurogenic bowel/bladder committee for the International Pediatric Rehabilitation Collaborative (IPRC).
- **Jessica Virgil**, MOT, OTR/L, CBIS, Vision Program Leader, is a member of the Neuro-Optometric Rehabilitation Association.
- **Katie Williams**, Director of Marketing and Communications, is the Communications Committee Chair for the American Medical Rehabilitation Providers Association (AMRPA) and is a member of the Society for Healthcare Strategy & Market Development

#### **APPENDIX C**

### STAFF PRESENTATIONS<sup>23</sup>

- **Emily Adams** and **Brooke Murtaugh** presented "Adaptive Equipment for B Amputation post electrical burn" *American Burn Association National Conference* in Las Vegas NV.
- Nova Adams presented "Return to Learn after concussion" to UNL Psychology students in Lincoln, NE.
- Lacy Albrecht presented "Pediatric Feeding The Basics" at the College of St Mary in Omaha NE.
- **Abigail Allen** presented "Safe Patient Handling and Movement- impact and improvement" with Michelle Claycomb at *Union College* in Lincoln, NE.
- **Tiffany Armstrong** made the following presentations:
  - o "Disorders of Consciousness after Severe Traumatic Brain Injury" with **Samantha Trausch** at the *2024 Nebraska Brain Injury Conference* in Kearney, NE.
  - o "Lovin', Walkin', Talkin': Post-Acute Stroke Care from the Rehab RN Perspective" at the *lowa Stroke Conference 2023* in Des Moines, IA.
  - o "Rehabilitation Nursing" at the 2023 HOSA State Leadership Conference in Omaha, NE.
  - o "Managing Behavioral Concerns for Residents with Brain Injuries" at *Azria Ashland Brain Injury Education* in Ashland, NE.
  - o "Behavior Management: Managing Agitation After a Brain Injury" at the *Nebraska Brain Injury Conference* in Kearney, NE.
- **Dani Aylward** and **Thomas Janousek** presented "Stress Management and Coping" at lunch and learn in Lincoln, NE and Zoom.
- **Jennifer Bausch** presented "Geriatrics" at a Geriatric lecture at *Southeast Community College* in Lincoln, NE.
- Tim Bausch presented "Major Multiple Trauma" at Madonna Worker's Comp Summit in Lincoln, NE.
- Cory Behrens made the following presentations:
  - o "Weeding through Common Hand Injuries" at the *Orthopedic hand-injury prevention* event at Beatrice YMCA.
  - o "Weeding through Common Hand Injuries" at the *Orthopedic hand-injury prevention* event at the Lancaster County Extension office.
- Ryan Burger presented "Ergonomic Assessments and Cumulative Trauma Disorders" in Omaha, NE.
- Amy Burggraff presented "Auditory, Vestibular, & Visual Impairments" at the PM&R Presentation with Kayla Hoge at the MRH residency lounge.
- **Judy Burnfield** made the following presentations:
  - o "Madonna Model System of Rehabilitation Care for Patients" post-COVID-19" with **Ryan Knight** at the *Nebraska Hospital Association annual conference* in Omaha, NE.
  - "The Intersection between COVID-19 and Brain Injury: Advancing Understanding and Rehabilitation Outcomes" with **Ryan Knight** at the *Nebraska Brain Injury Conference* in Kearney, NE.
  - "Bryan Neurology Group Presentation" with Allison Carson for lunch and learn in Lincoln, NE.
  - o "Progressive Debilitating Flat Foot Deformity: Diagnosis and Management" at the 2018 Nederlandse Vereniging van Podotherapeuten Conference in Nieuwegein, Netherlands.
  - o "Invited Keynote: Foot and Ankle Rockers: Contributions to Progression, Shock Absorption and Stability during Gait" at the 2018 Nederlandse Vereniging van Podotherapeuten Conference in Nieuwegein, Netherlands.
- Michelle Claycomb made the following presentations:
  - o "Safe Patient Handling and Movement- impact and improvement" with Jody Kadavy at a

- SSC College visit in Lincoln, NE.
- o "The Toolbox for Safe Patient Handling" with **Jody Kadavy** at the *Nebraska Health Care Association* event in Kearney, NE.
- o "Thinking out side of the box, 24/7 rehabilitation" at Madonna Lincoln, NE.
- o "SPHM the Madonna Story" at the *Coverys- work comp self-insure group webinar* in Lincoln, NE.
- Danielle D'Amore had repeated presentations for SOAP Note Feedback Lecture with UNMC Division of PT education, in Omaha, NE.
- **Heather Dienstbier** presented "NECC Neuroaquatics Lab" at the *NECC Neuroaquatics Lab for PTA students* in Omaha, NE.
- **Erin Engelman** made repeated presentations of "Apply neuroplasticity concepts using Armeo®Power from the early stage of rehabilitation" through multiple Webinars.
- Susan Fager and Tabatha Sorenson presented "New and Emerging Multimodal/Multi-input Access for Severe Physical Impairment" at the Assistive Technology Industry Organization Conference in Orlando, FL.
- **Terasa Farlin and Kathy Schmidt** presented "Improved Compliance, Outcomes, and Reimbursement with SunriseTM Rehabilitation" at the *ACE HHS Conference* in Dallas, TX.
- **Kristi Felix** presented "Personal Protective Equipment and Hand Hygiene" at the *Nebraska Infection Control Network Primary Infection Prevention Course* in Omaha, NE.
- **Annie Ferguson** presented "What is a Registered Dietitian?" for a High School Nutrition class as a class speaker in Sedan, Kansas via Zoom.**Gail Finsand** made the following presentations:
  - "Speech Therapy Evaluation of Mild-Moderate TBI" for Guest Lecture at UNL Communication Disorders Course SLPA 982.
  - o "Evaluation of Mild-Moderate TBI" at the University of Nebraska-Lincoln.
- Amy Goldman made the following presentations:
  - o "Locomotor Training for Adults with Neurological Conditions" with **Cali Carlson** at the *UNMC PT education* as a guest lecture.
  - o "Step by Step: Implementing Post-Acute Stroke Standards" at the *International Stroke Conference* in Phoenix, AZ.
  - o "Stroke Rehabilitation: An Evidence-Based Update" at the *Mosaic Stroke and Trauma Conference* in St. Joseph, MO.
  - o "Stroke Rehabilitation: Current Guidelines, Treatments and Technologies" at the *Mosaic Life Care stroke rehab presentation* in St. Joseph, MO.
  - "Locomotor Training for Adults with Neurological Conditions" with Cali Carlson at the UNMC PT education as a guest lecture.
  - o "Rural Needs and Gaps in Stroke Rehabilitation: Results of Statewide Healthcare Provider and Patient Survey" at the *ACRM National Conference* in Chicago, IL.
  - o "Stroke Rehabilitation: Current Guidelines, Treatments and Technologies" with the *Stroke Interdisciplinary Team* at NE Medicine.
  - o "Management of Patients Post-Stroke: An Evidence Update" at the *Mission: Lifeline Stroke Post-Acute Care Workshop* at the Country Inn & Suites Hotel and Conference Center in Lincoln, NE.
  - o "Management of Patients Post-Stroke: An Evidence Update" at the 2023 Mission: Lifeline Stroke Post-Acute Care Workshop in Lincoln, NE.
  - o "Mission Possible: Self Advocacy Can Impact Recovery" at the *Mission Possible:* Improving Stroke Care in 2022 virtual event.
  - o "Locomotor Training for Adults with Neurological Conditions" with **Cali Carlson** as guest lecturers for *UNMC Division of PT Education*.
  - o "Young Adult Stroke Rehabilitation: What Makes it So Unique?" at the *Regional provider* education webinar.

- o "Madonna Stroke Rehab Program Overview" at the *UNMC HS Alliance* on Madonna Omaha campus.
- o "Professional Development Panel Discussion" at the UNMC Division of PT education.
- o "Body Weight Supported Gait Training" with **Cali Carlson** as a guest lecture at *UNMC Division of PT education*.
- o "Stroke Rehabilitation: Current Guidelines, Treatments and Technologies" at the Stroke Rehab CEU presentation at *NE Medicine*.
- o "Stroke Rehabilitation: Qualifications, Criteria and Outcomes" at Lunch and learn: *Stroke Rehab CEU presentation* in Kearney, NE.
- o "Body Weight Support Treadmill Training" with **Cali Carlson** at the *UNMC PT education* event.
- o "Introduction to Neurodevelopmental Treatment (NDT)" for the Intro to NDT course at MRH-L.
- o "AHA/ASA Guidelines for Adult Stroke Rehabilitation and Recovery" at the North Dakota Mission: Lifeline Stroke Webinar from *MRHO to ND*.
- o "Qualifications and Criteria for Stroke Rehabilitation, Effective Use of the Continuum of Stroke Care" at the *NE Mission: Lifeline Stroke & Rehab Symposium* in Kearney, NE.
- o "Neuroscientific Principles Guiding Gait Rehabilitation" with **Matthew Ulmer** at the *Locomotor Training Conference 2019* at the MRH-L Research Institute.
- o "Lower Limb Orthoses" for lunch and learn at the UNMC PMR physician education event at MRHO.
- o "Stroke Rehabilitation: Qualifications, Criteria and Outcomes" for lunch and learn at *Phelps Memorial Hospital* in Holdrege, NE.
- o "Stroke Rehabilitation: Current Guidelines, Treatments and Technologies" at the *Annual AHA Nurses Conference* in Lincoln, NE.
- "Evolution of Rehabilitation: Qualifications, Criteria and Outcomes" at the 20th Annual KC Stroke Symposium in Kansas City, MO.
- o "Evolution of Rehabilitation: Qualifications, Criteria and Outcomes" at the *Mosaic Life Care stroke rehab presentation* in St. Joseph, MO.

# Melissa Gulizia made the following presentations:

- o "Returning Patients with Complex Medical Needs to their Rural Communities" for lunch and learn, *Mercy One Sioux City* in Sioux City, Iowa.
- o "Returning Patients with Complex Medical Needs to their Rural Communities" at the *Kohlls Conference* in Omaha, NE at the Kohlls Pharmacy.
- o "Returning Patients with Complex Medical Needs to their Rural Communities" at the Kearney Good Sam Hospital through Zoom.
- o "Returning Complex medical patients to rural communities" for lunch and learn at the Fremont Respiratory Therapy CEU at Fremont Health.
- "Respiratory Therapists in Rehab" at the 2023 HOSA State Leadership Conference in Omaha, NE.
- "Effective Discharge Planning-Moving from Acute Care to the Community" with **Diane Ulmer** at the *Nebraska Society of Respiratory Care* virtual event.
- o "Pulmonary conditions across the medical continuum" with **Tina (Christina) Loft** for lunch and learn for Avera Case Management at *Avera McKennan Hospital*.
- o "Returning Patients with Complex Medical Needs to their Rural Communities" with **Diane**Ulmer at the *American Association of Respiratory Care Congress Conference* via Zoom.
- o "This and That.....Trachs, Madonna, and More" at the *Methodist College-RT Students* event via Zoom.
- o "This and That......Trachs, Madonna, and More" for Methodist College in Omaha, NE.
- o "Complex Medical and the Role of LTACH" for lunch and learn at Fremont Hospital in

- Fremont, NE.
- o "Navigating Levels of Care to Produce Optimum Outcomes" with **Brooke Murtaugh** at the *2019 Madonna Work Comp Summit* in Omaha, NE.
- **Sarah Hamilton** made the following presentations:
  - o "Driving Evaluation and Vehicle Modifications" the *Work Comp Symposium* at Madonna Rehabilitation Hospitals Lincoln.
  - o "Driver Rehabilitation" at the OT presentation on driver rehabilitation at CSM.
  - o "Driver Rehabilitation" the CSM student presentation at the *College of Saint Mary* Omaha, NE.
  - "Technology Options to Enhance Occupational Therapy Outcomes" with Marin E.
     Salisbury for the BIG speaker Series at UNO Mammel Hall, Omaha NE.
  - o "Driver Rehabilitation" for the Driving Rehabilitation Presentation at *Madonna Rehabilitation Hospitals* Omaha.
  - o "Driver Rehabilitation" as a guest lecture at Creighton University in Omaha, NE.
- **Kristin Hasenauer** presented "Orthotic Provisions in Pediatric Practice" for the *Creighton University Occupational Therapy Program* in Omaha, NE.
- **Shelbi Hatfield** presented "Therapeutic Exercise" for the *Residency Lecture of Therapeutic Exercise* at Dodge A.
- **Betsy (Elizabeth) Havekost** presented "Cognition in Occupational Therapy Practice" for the *Creighton University Presentation* in Omaha, NE.
- **Kayla Hoge** presented "Interdisciplinary Neurological Vision Treatment Approaches: Understanding Vision, Perception, and Cognition" at the *St. Joseph Medical Center* in Kansas City, KS.
- **Sonya Irons** made the following presentations:
  - o "Physical Therapy—Is it the right career choice for you?" as a guest lecture at *UNL* in Lincoln, NE (five times).
  - o "Cardiovascular and Pulmonary Physical Therapy" as a guest lecture at *Briar Cliff University*, Sioux City, Iowa (four times).
  - "Rehabilitation for the Post-Operative Patient S/p Cardiovascular Surgery as a guest lecture at Creighton University to Occupational Therapy's OTD 457 in Omaha, NE via Zoom.
  - o "PTD 616 Integrated Lab VI" at *Creighton University*, Department of Physical Therapy, PTD 616 Integrated Lab VI in Omaha, NE.
  - o "Clinical Application of EKG" as a guest lecture at *Creighton University* in Omaha, NE (two times).
  - "Business Management Course" at the Business Management Course panel in Sioux City.
     IA.
  - o "Physical Therapy for the Post-Operative Patient S/p Cardiovascular Surgery" as a guest lecture at *Creighton University* in Omaha, NE (three times).
  - o "Physical Therapy: Options to Specialize" as a guest lecture at UNL in Lincoln, NE.
  - o "Physical Therapy: Role in Gerontology" as a guest lecture at UNL in Lincoln, NE.
- **Joyce Jaixen** made the following presentations:
  - o "NDT Lab" at the NDT lab for UNMC PT students at UNMC Omaha.
  - o "Stroke Rehabilitation" for a CVA lecture/lab at Southeast Community College.
  - o "Neuro Transfer Competency Training" for the Neuro Transfer Competency Training at MRH-L.
  - o "Intro to NDT" at the PT/OT/SLP CEU event at MRH-L.
- Aubrey Janousek presented "Auditory, Vestibular, and visual impairments" at the PM&R lecture in Omaha, NE.
- Thomas Janousek made the following presentations:
  - o "Panelist Health and Life Beyond High School" at the Leadership Lincoln event on

- Zoom.
- o "Depression, Coping and Work Life Balance" at the *NRECA Depression Presentation* for lunch and learn in Lincoln, NE.
- o "Work Life Balance" for lunch and learn in Lincoln, NE.
- o "Neuropsychology as a Career" at the Pius X Community Outreach event in Lincoln, NE.
- o "Unconscious and Implicit Bias" at the *Madonna Management Seminar* in Lincoln, NE via Zoom.
- Katherine Johnson made the following presentations:
  - o "Introduction to communication and swallowing disorders" at the *Creighton University* presentation to PT students in Omaha, NE.
  - o "Dysphagia as Initial Indicator of Post-operative Complication: A Single Case Study" at the *Nebraska Speech-Language Hearing Association* event in Kearney, NE.
- **Susan Klanecky** presented "Video Surveillance with Video Monitor Technicians" at the *NALTH Spring Clinical Education & Annual Meeting* in Las Vegas, NV.
- **Ryan Knight** made the following presentations:
  - o "Madonna Model System of Rehabilitation Care for Patients" post-COVID-19" with **Erin Connelly** for a presentation via Zoom.
  - o "Moving Forward: Using evidence to elevate your practice, patient outcomes and the profession" at the *Utah Physical Therapy state conference* in Salt Lake City, UT.
  - o "It Takes a Village...., Be a Part of Restoring Lives" at HOSA in Omaha, NE.
  - o "Madonna Model System of Rehabilitation Care for Patients" post-COVID-19" at the UNMC Center College of Nursing education in Omaha, NE.
  - o "Madonna Model System of Rehabilitation Care for Patients" post-COVID-19" at the *Nebraska Nurse Practitioners* event in Lincoln, NE.
  - o "Active Leadership to Advance Clinical Practice: Are We Truly Providing Evidence Based Care?" at the *ACRM National Conference* is Chicago, IL.
  - o "Evidence Elevates: Promoting Best Practice Across Neurologic Physical Therapy" at the Combined Sections Meeting in San Diego, CA.
- Amber Koch made the following presentations:
  - o "Introduction to Dysphagia" at the College of Saint Mary in Omaha, NE.
  - o "Speech Therapy Services for People with Dementia" at the *Speech Therapy Services for People with Dementia* event in Omaha, NE.
- **Kelly Koch** presented "Trachs, Vents, and Everything in Between. What An SLP Needs to Know About "The In Between" at the *Nebraska Speech Language Hearing Association Fall Convention* in Kearney, NE.
- Jen Korinek made the following presentations:
  - "Vestibular Rehabilitation: Assessment of the Patient with Dizziness and Balance Problems" at the Madonna Staff Education at *Madonna Rehab Hospital* via Zoom, Lincoln, NE.
  - o "Dizziness and Vertigo" on The Ticket Radio Show in Lincoln, NE.
  - o "Vestibular and Balance Therapy" at the Vestibular PT lecture at UNMC in Omaha, NE.
- **Andrea Kremeier** made the following presentations:
  - "SLP Role in an LTACH Setting" at the UNL Chapter Meeting of National Student Speech Language Hearing Association at the UNL Barkley Center.
  - "Rehabilitation of Motor Speech Disorders in the COVID-19 Population in an LTACH Setting" at the 2022 American Speech-Language-Hearing Association National Convention virtually or in-person in New Orleans, LA.
  - o "Student Share Fair" at the *Nebraska Speech-Language Hearing Association Fall Convention* 2022 in Lincoln, NE.
- Bethany Kusek presented "A Case Study Review: Assessment and Treatment of a Medically Complex

Patient" at the Nebraska Speech Language Hearing Association Convention in Kearney, NE.

- Chris Lechner presented "Day of the Week" for It's Tuesday.
- **Christopher Lee** presented "Management for Everyone (Healthcare Management & PAC PPS)" at the UNMC PT Class at the *UNMC Omaha and Kearney* (simulcast).
- **Sara Lockard** made the following presentations:
  - o "Parkinson Disease and benefits of exercise" at the Parkinson Support Group in Lincoln, NE.
  - o "Concussion Education/ Details on the latest research and recommendations to manage acute and sub-acute MTBIs" for lunch and learn at the *Pediatric clinics concussion* education in Lincoln, NE.
- **Jennifer Luethje** presented "Wheelchairs and Seating Systems" at the *Wheelchairs and Seating Systems PMR Residents* educational presentation at Madonna Omaha.
- **Kristin Luethje** made the following presentations:
  - o "Safe Travels for All Children Car Seat Updates" at the *Nebraska Child Passenger Safety Tech update* in York, NE.
  - o "Zoom" with **Sarah Economides** at the *IPRC International Pediatric Rehabilitation Collaborative* via Zoom.
  - o "Carseat Safety" at Belmont Elementary in Lincoln NE.
  - o "Anatomy of Spinal cord" at the Thinkfirst event at the Career Academy.
  - o "Child passenger safety law update" at the *Messiah Lutheran church preschool* in Lincoln, NE.
- **Susan Luethke** presented "Improving Efficiencies and Clinician Well Being with Sunrise Compass" at the *Allscripts Client Experience (ACE) User Conference* in Dallas, TX.
- Sarah Messerle made the following presentations:
  - o "Pediatric Traumatic Brain Injury" to the UNL Graduate Class at the *UNL Barkley Center* in Lincoln, NE.
  - o "Vents, Trachs, Decannulation & Everything In Between" with **Cheryl Wagoner** at the *On With Life's Annual Neuro Rehabilitation Conference* in Ankeny, IA.
- **Megan Mills** made the following presentations:
  - o "What is Physical Therapy" in Omaha, NE.
  - o "Rehabilitative Design" with **Tyler Pribnow** in Omaha, NE.
- **Dr. Andrew Moellering** made the following presentations:
  - o "Acute Medical Issues Inpatient HTN Management & Pre OPA" to the *PMR residents* in Omaha, NE.
  - o "Medical Management of Spinal Cord Injury" with **Melissa Gulizia** at the *Madonna Work Comp Summit* in Omaha, NE.
- Sara Munzesheimer presented "Incontinence and Pelvic Floor Disorders: An Occupational Therapist's Role" at Creighton Pi Theta Honors Society meeting and Creighton Older Adults Rehabilitation course in Omaha, NE.
- **Brooke Murtaugh** made the following presentations:
  - o "High Impact: Neurological Consequences of Repetitive Head Injury" at the *Mosaic Stroke and Trauma Conference* in St. Joseph, MO.
  - o "Burning Questions: Navigating the Burn Rehabilitation Continuum of Care" at the *Madonna Work Comp Symposium* in Lincoln, NE.
  - o "Family Engagement in Disorders of Consciousness Care" at the *Madonna Work Comp Symposium* in Lincoln, NE.
  - "This is How We Do It: Wound Care for the Complex Burn Utilizing an Implementation Science Framework" at the American Congress of Rehabilitation Medicine event in Atlanta, GA.
  - o "Knowledge Translation in Action: A Comprehensive Web-Based Resource for Family Caregivers of Persons with Doc" at the *International Brain Injury Society Association* webinar.

- "Systematic Family Education Following Severe TBI: An Evidence Informed Dynamic Model for Clinical Best Practices" at the North American Brain Injury Society Conference in Las Vegas, NV.
- "Don't Judge a Book by Its Cover: A Multidisciplinary, Interactive Course on Neurobehavioral Assessment of DoC" at the North American Brain Injury Society Conference in Las Vegas, NV.
- "Avoiding Disordered Care in Disorders of Consciousness: Promoting Evidence-Based Care Along the Recovery Continuum After Severe TBI" at the *Insurance Rehabilitation* Synergy Group National conference in Miami, FL.
- o "Madonna Rehabilitation Hospitals" at the Paradigm National Conference in Orlando, FL.
- o "Disorders of Consciousness after Severe Traumatic Brain Injury" at the *Trauma Grand Rounds* virtual event.
- o "Disorders of Consciousness after Severe Traumatic Brain Injury" at the *Grand Rounds* event in Topeka, KS.
- o "Disorders of Consciousness after Severe Traumatic Brain Injury" at the virtual Research Medical Center Trauma Conference.
- o "The Curing Coma Campaign: What Are We Doing Today to Care For the Patient in Coma?" at the *Neurocritical Care Society Annual Meeting* in San Antonio, TX.
- o "Switching Up Transitions: Helping Patients Navigate Healthcare Transitions" at the *Annual Assembly of Physical Medicine and Rehabilitation* in Baltimore, MD.
- "Implementing Minimal Competency Recommendations for Disorder of Consciousness Rehabilitation: Optimizing Care Quality and Outcomes Across the Continuum of Recovery" at the ACRM National Conference in Chicago, IL.
- o "Disorders of Consciousness Family Education Materials Update: Implementation and Dissemination" at the *ACRM National Conference* in Chicago, IL.
- o "Interdisciplinary Rehabilitation Interventions for the Burn Survivor" at the *ACRM National Conference* in Chicago, IL.
- o "Confounds to Consciousness: Spasticity Management in Disorders of Consciousness Part 1" at the *ACRM National Conference* in Chicago, IL.
- o "Confounds to Consciousness: Spasticity Management in Disorders of Consciousness Part 2" at the *ACRM National Conference* in Chicago, IL.
- "Curing Coma Campaign: Pathway to Curing Coma Through Scientific Discovery, Evidence-Based Practice and Interdisciplinary Collaboration" at the ACRM National Conference in Chicago, IL.
- o "Developing Quality Burn Rehabilitation Services in a Post-Acute Care Setting" at the *ACRM National Conference* in Chicago, IL.
- o "Are They Even Awake: Evidence-Based Rehabilitation for Disorders of Consciousness" with **Ryan Knight** at the *Combined Sections Meeting* in San Diego, CA.
- o "Evidence-Based Advances in Assessment and Treatment of Persons with Disorders of Consciousness" at the *World Congress on Brain Injury* event in Dublin, Ireland.
- o "Disorders of Consciousness Services and Programs: A Global Analysis" at the *World Congress on Brain Injury* event in Dublin, Ireland.
- o "Disorders of Consciousness after Severe Traumatic Brain Injury" at the *Midwest Trauma* Society Annual Conference in Kansas City, MO.
- "Occupational Therapy with Complex Populations" at the virtual Occupational Therapy with Complex Populations event.
- o "Pediatric Disorders of Consciousness After Severe TBI" at the *Children's Trauma Conference* in Omaha, NE.
- o "Rehabilitation with Disorders of Consciousness" at the World Coma Day virtual event.
- o "Long Term Management of MTBI" at the Work Comp virtual event.

- o "Clinical Practice and Rehabilitation with Disorders of Consciousness" at the Carle Rehabilitation Hospital Brain Injury Symposium that was virtual and in Illinois.
- o "Disorders of Consciousness in Acute Care" at the virtual *Nebraska Medical Center Trauma Conference*.
- o "Disorders of Consciousness: Implementation and Application of Clinical Guidelines" at the virtual *National PMR Conference-AAPMR Assembly*.
- o "Disorders of Consciousness: Practice Guidelines and Practical Considerations" at the virtual *American Academy of Physical Medicine and Rehabilitation Annual Assembly* event.
- "Recommendations and Clinical Insights for Implementation of Disorders of Consciousness Practice Guidelines" at the virtual American Academy of Physical Medicine and Rehabilitation Spotlight Event.
- o "Disorders of Consciousness: Application of Practice Guideline Recommendations" at the virtual *ACRM National Conference*.
- o "Pediatric Burn Rehabilitation" at the Children's Hospital Trauma Conference at the *Children's Hospital and Medical Center* in Omaha, NE.
- "Therapy Dosing and Intervention in the Multidisciplinary Burn Care Environment:
   Examining Available Evidence, Practice Standards, and Protocols" at the virtual American Burn Association National Conference.
- o "Understanding Disorders of Consciousness after Severe Brain Injury" at the virtual *Madonna National Work Comp Symposium*.
- o "Brain Injury in Acute Care" at the Centerpointe Trauma Center Virtual Symposium in Independence, MO.
- o "Preparing the Neurological Patient for Intensive Rehabilitation" with **Diane Ulmer** at the North Platte Education event at the *Great Plains Regional Center* in North Platte, NE.
- o "Disorders of Consciousness: Implementation of Guideline Recommendations in Interdisciplinary Care" at the virtual *ACRM National Conference*.
- o "Burn Injury: Post-Acute Care and Rehabilitation" at the *Post-Acute Medical Burn Course* event in Denver, CO.
- o "Severe Brain Injury and Disorders of Consciousness" at the *National Worker's Compensation* webinar.
- o "Disorders of Consciousness" at the EMC work comp webinar.
- o "Disorders of Consciousness after Severe Brain Injury" at the WCRA work comp webinar.
- o "Pediatric Burn Care" at the Lincoln Pediatric Hospitalists Education Forum webinar.
- o "Brain Injury Rehabilitation" at the *Methodist College* OT school lecture webinar.
- o "Program Update, Tips for Success and Discussion with BT-C Certified Therapists" at the American Burn Association virtual conference.
- o "Disorders of Consciousness: Application of DoC Practice Recommendations" at the *North American Brain Injury Society Conference* in New Orleans, LA.
- o "Rehabilitation for TBI" at the Mosaic Lunch and learn in St. Joe, MO.
- o "Persistent post concussive symptoms" at the *Sedgwick work comp* lunch and learn in Des Moines, IA.
- o "Brain Injury" at the *Certified Brain Injury Specialist Course* at Madonna Rehabilitation Hospitals.
- o "Rehabilitation with Disorders of Consciousness" at the University of Nebraska Lincoln Education event at the Barkley Center.
- o "Chemical and Electrical Burns" at the National Webinar for Madonna.
- o "Rehabilitation and the Continuum of Care" with **Melissa Gulizia** at the Madonna Work Comp Symposium at *Madonna Rehabilitation Hospital* in Omaha, NE.
- o "Traumatic Brain Injury Rehabilitation" at the *Creighton University* Occupational Therapy Program in Omaha, NE.

- o "Management of Persistent Post Concussive Symptoms" at the *Sentry Lunch and Learn* in Stevens Point. WI.
- "Respiratory Management of the Brain Injury Patient Across the Continuum of Care" with
   Melissa Gulizia at the Nebraska Respiratory Conference in Nebraska City, NE.
- o "Spasticity Management in the Neurological Population" at the *Sanford Health CEU* course in Bismarck, ND.
- o "Disorders of Consciousness" at the Nebraska Brain Injury Conference in Kearney, NE.
- o "Persistent post concussive symptoms at the Lunch and Learn *MEM work comp* in Columbia, MO.
- o "Cognition, Vision and Perception" at the Nebraska Medicine Physical Therapy Program at *UNMC* in Omaha, NE.
- o "Intimacy and Sexuality After Disability" with **Diane Ulmer** at the *Nebraska Occupational Therapy State Conference* in Omaha, NE.
- o "Traumatic Brain Injury Rehabilitation" with **Amy Potter** at the Traumatic Brain Injury Rehabilitation event at *Madonna Rehabilitation Hospital* in Lincoln, NE.
- o "Traumatic Brain Injury Rehabilitation" with **Tiffany Armstrong** at the Traumatic Brain Injury Rehabilitation CEU course at *Madonna Rehabilitation Hospital* in Omaha, NE.
- o "Traumatic Brain Injury and Impact on Sleep" at the Nebraska Sleep Conference at Southeast Community College.
- o "Respiratory Management of the Brain Injury Patient across the Continuum" with **Melissa Gulizia** at the *Nebraska Society of Respiratory Care Conference* in Nebraska City, NE.
- o "Cognitive Communication Disorders and TBI" with **Tiffany Armstrong** at the *TBI Rehabilitation* event in Lincoln, NE.
- Celeste Newstrom made the following presentations:
  - "An Oncology Rehabilitation Competency Tool- Development & Validation" at the ACRM event in Chicago, IL.
  - o "Relevance of Patient Related Outcomes (PROs) in defining the benefits of Rehabilitation to Function and Quality of Life" at the *ACRM* webinar.
  - o "Therapeutic interventions for persons with cancer" at the *Comprehensive Cancer Conference* webinar.
  - "Implementation of Cancer Rehabilitation Competencies: How to Educate for the Future" at the ACRM event in Atlanta, GA.
  - o "Integrative Rehabilitation Techniques for the Person with Cancer" at the *Cancer Comprehensive Conference* in Omaha, NE.
  - o "Competencies for Cancer Rehabilitation: A National Delphi Study" at the *ACRM* event in Chicago, IL.
- Mandy Parry presented "Madonna as a Community Resource" at the Community Resources 1150 Course at MCC campus in Omaha, NE.
- **Alexandra E. Petersen** made the following presentations:
  - "Manipulation, Traction and Massage" at the PM&R Didactic Resident Lecture at Madonna Rehabilitation Hospital in Omaha, NE.
  - o "Amputee Lab" with **Amy Burggraff** at the Amputee Lab hosted at *Madonna TherapyPlus* Omaha, NE.
- **Kelly Quinn** made the following presentations:
  - o "Tips for Working with Students" for lunch and learn OT staff meeting in Lincoln, NE.
  - o "Family Centered Care Approach to Developmental Transitions" with **Jeff Stec** at the *Pediatric Nurse Residency Training* in Lincoln and Omaha, NE.
  - o "Introduction to Cortical Visual Impairment" at the Lunch and learn *Cortical Visual Impairment training* in Lincoln, NE.
  - o "Occupational Therapy" at the *University of Nebraska- Lincoln* Introduction to Health

- Professions Course
- o "Occupational Therapy" at the UNL Health Education Lecture at the *University of Nebraska-Lincoln*.
- **Kipp Ransom** made the following presentations:
  - o "Safety Club" with **Kristin Luethke** at the Safety Club event at *Belmont Elementary*.
  - o "Importance of the usage of a Bicycle Helmet" with **Patricia Walker** at the *Safety Fair at Lourdes Central Catholic* in Falls City, NE.
- Teresa Raven presented "The Role of the Nurse" at Southwest High School in Lincoln, NE.
- Mary Reece made the following presentations:
  - o "Introduction to Health Care Professions" at the *Health Careers Opportunity Program* over Zoom call and in Omaha, NE.
  - "Acute Mental Health Crisis Management" with Austin Fiala at the All Outpatient Staff Meeting via Zoom.
  - "Psychological Aspects to Neurogenic Bowel" for lunch and learn at Mentor Monday in Lincoln, NE.
  - o "Behavioral Treatment of Chronic Pain" at the Stroke Camp at *Camp Joy Holling* in Ashland, NE.
- **Erin Reier** made the following presentations:
  - o "Problem Feeders" with **Michelle Wieser** at the Problem Feeders event at *Madonna Rehabilitation Hospital* CEU in Omaha, NE.
  - o "Pediatric Transition to Solids" with **Michelle Wieser** at the Pediatric Transition to solids event at *Madonna Rehabilitation Hospital* in Omaha, NE.
- **Emily Rumery** presented "Telehealth Tuesday" with **Mark Hakel** for a webinar that was live & recorded for Lincoln & Omaha campuses.
- Christopher Sanders presented "Meyers Neuropsychological System" in Omaha, NE.
- **Kaitlyn Sassen** presented "Introduction to Communication and Swallowing Disorders" at the *Creighton University* Physical Therapy Student Presentation in Omaha, NE.
- **Virginia Schweitzer** presented "Return to Work is it possible" at the Workers Comp Summit for Workers Comp adjusters, social workers and case managers.
- Jodi Segawa presented "Lymphedema" at Creighton University in Omaha, NE.
- Sarah Siegel made the following presentations:
  - o "Postoperative Management of the New Amputee" for the lunch and learn Madonna Webinar Series.
  - o "Acute Rehabilitation and the New Amputee" at the *Madonna Work Comp Symposium* in Lincoln, NE.
- **Kathy Sievers** presented "Acute and Post Acute Management of Spinal Cord Injured Patients" at *Creighton University* in Omaha, NE.
- Dr. Sheilah Snyder presented "Rethinking Recovery After Injury" with Diane Ulmer at the 27th Annual Practical Pediatrics Conference as a Virtual Conference for Creighton University office of Cont. Ed.
- Tabatha Sorenson made the following presentations:
  - "Assistive Technology--the role of Occupational Therapy Assistants" with Kristen L Mills at the Assistive Technology Lab at Union College in Lincoln, NE.
  - o "Assistive Technology in Occupational Therapy" at the Assistive Technology Lab at the College of Saint Mary in Omaha, NE.
  - o "Head Tracking is Head Tracking, Right??" with **Kristen L Mills** at the *Assistive Technology Industry Association* event in Orlando, FL.
  - "Assistive technology hands on learning" with Kristen L Mills at the Assistive technology hands on learning at *Union College*.
- **Lori Spohr** made the following presentations:

- o "Overview of Madonna" with **Elizabeth White** for Lunch and Learn with *Mosaic Neurology Group* in St. Joseph, MO.
- o "Trauma and the Continuum of Care" at the *Region 7 Trauma Conference-American College of Surgeons* in Kansas City, MO.
- o "Trauma and the Continuum of Care" at the *UNMC Trauma Nurse Specialist Course* in Omaha, NE.
- o "Overview of Madonna Rehabilitation Hospitals" for the Travelers Insurance Tour and Overview in Lincoln, NE.
- o "Overview of Madonna Rehabilitation Hospitals" for the *Great West Insurance Educational Retreat* in Sioux City, Iowa.
- o "Trauma and the Continuum of Care" for Blue Cross Blue Shield of Kansas via MS Teams.
- o "Madonna Overview 2022" at the United Health Care Presentation via Zoom.
- "Understanding the Team Meeting" with Lisa Blecha at the Workers Comp Summit in Omaha, NE.
- o "Madonna Services Overview and Virtual Tour" with **Kara Merchant** at the *OLLI UNL* Onsite Virtual Presentation.
- o "Working with Exceptional Families" at the Paradigm Workers Compensation Summit in Chicago, Illinois.
- o "Navigating Levels of Care to Produce Optimum Outcomes" at the Brain Injury Association of Kansas in Overland Park, KS.
- o "Working with Exceptional Families" at the Workers' Compensation Association of Nebraska Annual Conference, Lincoln, NE.
- **Teresa Springer** made the following presentations:
  - o "Complex Dysphagia Cases" at the *Nebraska Speech Language Hearing Association State Conference* as a Virtual Conference in Nebraska.
  - o "Memory Notebook Training in the Rehabilitation Setting" at the *Nebraska Speech Language Hearing Association* event in Lincoln, NE.
  - "Benefits of Nursing Education in the area of Dysphagia" at the Nebraska Speech Hearing Language Association event in Lincoln, NE.
- **Melissa Starr** made the following presentations:
  - o "Cardiovascular PT, Pulmonary PT, and Management of the Medically Complex Patient" for the SCC PTA Program in Lincoln, NE.
  - "LVADs and Heart Transplantations" for the Creighton University PT Program in Omaha, NE.
  - o "Peripheral Vascular Disease" for the Creighton University PT Program in Omaha, NE.
  - "LVADs and Heart Transplantations" for the Creighton University PT Program in Omaha,
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  - o "Peripheral Vascular Disease" for the Creighton University PT Program in Omaha, NE.
  - "Cardiovascular PT, Pulmonary PT, and Management of the Medically Complex Patient" at the Southeast Community College PTA Program Advanced Interventions Course in Lincoln, NE.
  - o "Now more VITAL than ever, Vitals are Vital" at the *American Physical Therapy Association of Nebraska Eastern District Meeting* in Lincoln, NE and Zoom.
  - o "A Day in the Life of a CI" for the *Creighton University* PT Program Professional Formation Panel in Omaha, NE.
  - o "PT Cardiovascular and Pulmonary Labs" at the *Creighton Physical Therapy Program Cardiovascular and Pulmonary Labs* in Omaha, NE.
  - o "Excellence in Cardiovascular and Pulmonary Therapy" for the *Creighton Physical and Occupational Therapist Residents* in Omaha, NE.
  - o "Cardiovascular and Pulmonary Physical Therapy" for the Southeast Community College

- PTA Program in Lincoln, NE.
- "Cardiovascular and Pulmonary Lectures and Labs for PTD 516, PTD 616" for the Cardiovascular and Pulmonary Lectures and Labs for PT students at *Creighton University* in Omaha, NE.
- o "Cardiovascular and Pulmonary Labs for PHYT 610" for the Cardiovascular and Pulmonary Labs for PT students at *UNMC* in Omaha, NE.
- "Cardiovascular, Pulmonary, and Complex Medical Rehabilitation Considerations" for the Cardiovascular, Pulmonary, and Complex Medical for PTA students presentation at Southeast Community College in Lincoln, NE.
- **Jeff Stec** made the following presentations:
  - o "Social Determinants of Health in the Pediatric Population" at the Social Determinants of Health presentation at *UNMC* in Omaha, NE.
  - "Pediatric Case Study" with Kelly Quinn at the Pediatric Case Study Presentation in Omaha, NE.
- **Jett Stenson** made the following presentations:
  - o "Assessment & Treatment of Dysphagia" at the *Laramie County Community College* SLPA Program virtually with an audience based in Cheyenne, WY.
  - o "Rehabilitation of Motor Speech Disorders in the COVID-19 Population in an LTACH Setting" at *the 2022 American Speech Language Hearing Association Convention* virtually, however in-person event occurred in New Orleans, LA.
- **Sarah Synek** made the following presentations:
  - o "Research and Implementation of 3D Printing Techniques Into Current Clinical Practice: An Integrative Approach" at the Kohlls CEU Conference at *Kohlls Pharmacy* in Omaha, NE.
  - o "Implementation of 3D Printing Techniques into Current Clinical Practice for Occupational Therapists: An Evaluation of Orthotic Fabrication and Adaptive Technology" for the 3D printing techniques for Orthoses and Adaptive Equipment event in Omaha, NE.
  - "3D printing orthoses for individuals with upper motor neuron lesion conditions: An alternative method to orthotic fabrication" as a Guest Lecture at *Creighton University* in Omaha, NE.
  - o "The Effectiveness of Upper Extremity Orthotic Interventions on Functional Participation for Adults with Stroke" at the *AOTA Inspire Conference* in Kansas City, MO.
- **Samantha Trausch** made the following presentations:
  - o "Pain Management After Brain Injury" with **Tiffany Armstrong** at the *2024 Nebraska Brain Injury Conference* in Kearney, NE.
  - "Are They Even Awake? Evidence-Based Management of Disorders of Consciousness After Severe Brain Injury" with Ryan Knight at the Combined Sections Meeting in San Diego, CA.
  - o "Are They Even Awake? Evidence Based Management of Disorders of Consciousness after Severe Brain Injury" with **Brooke Murtaugh** at the *American Physical Therapy Association Combined Sections Meeting* (APTA CSM) in San Diego, CA (Three times).
- **Diane Ulmer** made the following presentations:
  - "Preparing a trauma patient for rehab" with Melissa Gulizia at a CEU staff education event at Bergan Mercy.
  - o "From the field to rehab and beyond" at the Topics in Trauma event at *Stormont Vail* in Topeka, KS.
  - o "Spinal Cord Injury-Understanding Levels of Injury & Components of Care" at the *Nebraska Workers' Compensation Symposium* at Embassy Suites in Lincoln, NE.
  - o "Spinal Cord Injuries: From the Field to Rehab and Beyond" at the *Sanford Trauma Symposium* in Sioux Falls, SD.
  - o "Returning patients with complex medical needs to their rural communities" with Melissa

- Gulizia at the Academy of Spinal Cord Injury Professionals in San Diego, CA.
- o "Preparing a trauma patient for rehab" with **Melissa Gulizia** at the Trauma Conference at *Des Moines Medical Center* in Des Moines, IA.
- o "Specialized Rehabilitation Strategies after a Major Multiple Trauma" for the virtual Madonna Webinar Series.
- o "Spinal Cord Injury Rehabilitation" with **Jaymie Budler** at a Work Comp event at *Great Western* in Sioux City, IA.
- o "Traveling after SCI" for a virtual Spinal Cord Injury Support Group.
- o "Program Update" to the Nebraska AgrAbility Advisory Council in Kearney, NE.
- o "Update on Pediatric neurogenic bowel and bladder committee" at the virtual *IPRC* Committee Chair event.
- o "Trauma Recovery from ICU Back into the Rural Community A Case Study Review" with **Lori Spohr** at the *UNMC* Trauma Symposium, in Omaha, NE.
- o "Preparing a patient with SCI for rehab" at a Staff Education event at a Research Medical Center in Kansas City, MO.
- o "Preparing a patient with SCI for Rehab" at the event Preparing a patient with SCI for Rehab at *Stormont Vail* in Topeka, KS.
- o "Managing the Neurogenic bladder through the continuum of care" with **Courtney Kossow** for a Webinar series.
- o "Spinal Cord Injury" for a SCI Lecture/Lab at Methodist College in Omaha, NE.
- o "Preparing a patient with SCI for Rehab" as a Zoom webinar for Cedar Rapids, IA.
- "Early Interventions to maximize outcomes for patients with SCI" at the Snowy with a Chance of Trauma at the Virtual conference for *Truman*, *University Health systems*, *Trauma services*.
- o "From the field to rehab and beyond-the needs of those with SCI through the continuum" for the Trauma Tuesday Webinar for *Mercy Hospital Springfield*.
- o "From the field to rehab and beyond" at the Centerpointe Trauma Consortium at Centerpointe Medical Center in Independence, MO.
- o "Trauma Recovery from ICU back into the rural community" with **Lori Spohr** at the *2022 Trauma Symposium* in Omaha, NE.
- "Best Practices in treatment of the patient with SCI" at the UNMC Trauma Grand Rounds in Omaha, NE.
- o "Understanding Neurogenic bowel and bladder strategies to facilitate independent management" with **Courtney Kossow** at the *IPRC Webinar*.
- o "Preparing a patient with SCI for rehab" at the UNMC Webinar.
- "Spinal Cord Injury Rehabilitation" with Brianna Eaves for the Spinal Cord Injury Lecture/ Lab at the Nebraska Methodist College.
- "Returning patients with complex medical needs to their rural communities" with Melissa Gulizia at the Nebraska Occupational Therapy Association Conference at Creighton University in Omaha, NE.
- o "Preparing a patient with SCI for rehab" at the *St. Francis* Clinical education event for a webinar from Lincoln, NE to Topeka, KS.
- o "Preparing the Patient with Neurological injury for rehab" with **Brooke Murtaugh** at the *Great Plains Medical Center* in North Platte, NE.
- o "Spinal Cord Injury" at the Methodist College OT lab webex event.
- o "Transition planning for clients with Spinal cord injury" at the Transition planning for clients with Spinal Cord Injury webinar.
- o "Preparing a patient with SCI for rehab" at the *Centerpointe Trauma Conference* in Independence, MO.
- o "Intimacy, Sexuality, and Disability" with **Brooke Murtaugh** at the *Nebraska Occupational*

- Therapy Association State Conference in Omaha, NE.
- o "Injury prevention and spinal cord injury" at the ThinkFirst Injury Prevention at *Southeast High School* in Lincoln, NE.
- o "Teamwork makes your patient's dream work" for the Health Careers Ambassador Program awards luncheon at *Creighton University*.
- o "Neurogenic bowel and bladder" at the Neurogenic bowel and bladder event in Lincoln and Omaha, NE.
- o "Preparing patients for rehab after a catastrophic injury" at *Overland Park Regional Medical Center*.
- o "Madonna's Continuum of Care" at the Avera Lunch and Learn in Sioux Falls, SD.
- o "Spinal Cord Injury Rehab" for a Methodist College Lecture at Methodist College.
- o "Preparing a patient with SCI for Rehab" at the *North Kansas City Summer Trauma Topics* in Kansas City.
- "The Madonna difference from LTAC moving through the continuum of core program patients" for the Avera McKennan Hospital - Case management Presentation for case managers and social workers.
- o "Overview of Madonna Rehabilitation Hospitals" for the National AgrAbility preconference at *Madonna* for tour; conference at *Embassy suites*.
- o "Neurogenic bowel and bladder" for a Neurogenic bowel and bladder course at *Madonna Rehabilitation Hospital* in Lincoln, NE.
- o "Intimacy, Sexuality and Disability" at the *Nebraska Occupational Therapy Association Conference* in Omaha, NE.
- **Jessica Virgil** made the following presentations:
  - o "Neurological Vision Rehabilitation" for the *University of Nebraska* Speech department in Lincoln, NE.
  - "Interdisciplinary Neurological Vision Treatment Approaches: Understanding Vision, Perception, and Cognition" for the *University of Nebraska* Speech Language Pathology Class in Lincoln, NE.
- Cheryl Wagoner made the following presentations:
  - o "Assessment and Treatment for Dysphagia" as a guest lecture for *SLPA 2540 Speech Disorders* in Laramie Wyoming over Zoom.
  - o "Life on LTACH" for a UNL Graduate Class for UNL over Zoom.
  - o "Assessment & Treatment for Dysphagia" for the *Laramie County Community College* SLPA Program in Laramie, WY.
  - o "Life on a LTACH" for the UNL Medical Issues Graduate Class in Lincoln, NE.
  - "Therapy???? These people are sick!!!! The SLP's role for assessment and treatment with ventilated patients" as a guest lecture for UNL Motor Speech Graduate Class in Lincoln, NE.
  - o "Code of Ethics" at the *Nebraska Speech Language Hearing Association Annual Conference* in Omaha, NE.
  - o "Therapy???? These people are sick!!!! The SLP's role for assessment and treatment with ventilated patients" for the SLPA 968 section 001 Motor Speech Disorders in Lincoln, NE.
  - o "Life on a LTACH" for the *UNL* Graduate Class, Advanced Practicum in SLP 897B in Lincoln, NE.
  - "Trachs, Vents and Everything in Between What an SLP Needs to Know About the 'In Between'" at the Nebraska Speech Language Hearing Association Annual Conference in Kearney, NE.
- **Kaylee Wallace** presented "Physical Agent Modalities" for a lecture for resident teaching session at *Madonna Rehabilitation Hospital* in Omaha, NE.
- Madison Walton presented "Are They Even Awake? Evidence Based Management of Disorders of

Consciousness after Severe Brain Injury" at the *APTA Combined Sections Meeting* in San Diego, CA.

- **Stephani Wesely** presented "Adult Neurogenic Communication and Swallowing Disorders" at the Adult Neurogenic Communication and Swallowing Disorders event at *Madonna Rehabilitation Hospital* in Omaha, NE.
- **Michelle Wiggins** made the following presentations:
  - o "Pediatric Assistive Technology Lab" with **Tabatha Sorenson** for the OT Student Lab--Assistive Technology at *Creighton University* in Omaha, NE.
  - o "Assistive Technology in pediatrics" for the *Creighton University* Occupational Therapy Program in Omaha, NE.
- Margaret Williams presented "Recreation Therapy Adaptive Equipment and Techniques" with Linda
   Ohnoutka for the Midwest Therapeutic Recreation Symposium in Kansas City, MO (two times).

#### **APPENDIX D**

### **STAFF PUBLICATIONS**

- **Antonellis, P., Mohammadzadeh Gonabadi, A., & Malcolm, P.** (2022). Metabolically efficient walking assistance using optimized timed forces at the waist. *Science Robotics, 7*(64). https://doi.org/10.1126/scirobotics.abh1925
- Barker Ladd, S., Williams, N. A., Villachan-Lyra, P., Chaves, E., Hollist, C., Gomes, R., & Barbosa, L. (2023). Translation and preliminary validation of the Brazilian Family Resources Scale among parents of children with Congenital Zika Virus Syndrome. *Journal of Pediatric Rehabilitation Medicine*, *16*(2), 337–350. https://doi.org/10.3233/PRM-220025
- Bearss, B., Martin, A., Dorsey Vinton, S., Chaidez, V., Palmer-Wackerly, A. L., Mollard, E., Edison-Soe, L., Chan, N., Estrada Gonzalez, E., Carter, M., Coburn, K., Xia, Y., & Tippens, J. A. (2023). "Too many jobs and not enough hands": Immigrant and refugee community health workers at the frontlines of the COVID-19 pandemic. *Qualitative Health Research*, *34*(1–2), 86–100. https://doi.org/10.1177/10497323231204741
- Bedo, B. L. S., Cesar, G. M., Andrade, V. L., Moura, F. A., Vieira, L. H. P., Aquino, R., Domingos, M. B., & Santiago, P. R. P. (2022). Landing mechanics of basketball and volleyball athletes: A kinematic approach. *Human Movement*, 23(1), 80–88. https://doi.org/10.5114/hm.2021.104189
- Bedo, B. L. S., Cesar, G. M., Moraes, R., Mariano, F. P., Vieira, L. H. P., Andrade, V. L., & Santiago, P. R. P. (2021). Influence of side uncertainty on knee kinematics of female handball athletes during sidestep cutting maneuvers. *Journal of Applied Biomechanics*, *37*(3), 188–195. https://doi.org/10.1123/jab.2020-0141
- **Cesar, G. M., Buster, T. W., & Burnfield, J. M.** (2024). Lower extremity muscle activity during reactive balance differs between adults with chronic traumatic brain injury and controls. *Frontiers in Neurology,* 15, Article 1432293. https://doi.org/10.3389/fneur.2024.1432293
- **Cesar, G. M., Giebler, M., Buster, T. W., & Burnfield, J. M.** (2024). Balance assessment with decreased base of support for children with disabilities. *Clinical and Experimental Pediatrics*, *67*(12), 718–724. https://doi.org/10.3345/cep.2024.00780
- **Dzewaltowski, A., Antonellis, P., Mohammadzadeh Gonabadi, A., Song, S., & Malcolm, P.** (2024). Perturbation-based estimation of within-stride metabolic cost. *Journal of NeuroEngineering and Rehabilitation*. [Manuscript in review]
- **Fager, S. K., Burnfield, J. M., & Sorenson, T.** (2023). Participatory design approach to creating an accessible nurse call/hospital room control system for individuals with severe physical impairments. *Assistive Technology Outcomes and Benefits, 17,* 96–109. https://www.atia.org/atob-volume-17/
- Fager, S. K., Sorenson, T., Jakobs, E., Koester, H., Jakobs, T., & Beukelman, D. R. (2022). Multi-modal access method (eye-tracking + switch-scanning) for individuals with severe motor impairment: A preliminary investigation. *Assistive Technology*. https://doi.org/10.1080/10400435.2022.2053895
- Farahnaz, F., Bruijn, S. M., Mohammadzadeh Gonabadi, A., Sangtarashan, M., Boron, J., Curtze, C., Siu, K.-C., Myers, S. A., & Yentes, J. (2023). Trunk velocity changes in response to physical perturbations are potential indicators of gait stability. *Sensors*, *23*(5). https://doi.org/10.3390/s23052833

- **Hao, J., Buster, T. W., Cesar, G. M., & Burnfield, J. M.** (2022). Virtual reality augments effectiveness of treadmill walking training in patients with walking and balance impairments: A systematic review and meta-analysis of randomized controlled trials. *Clinical Rehabilitation, 37*(5), 603–619. https://doi.org/10.1177/02692155221138309
- **Huang, C. K., Buster, T. W., Siu, K.-C., & Burnfield, J. M.** (2022). Combining virtual reality gaming with motor-assisted elliptical exercise increases engagement and physiologic effort in children. *Frontiers in Virtual Reality, 3*, Article 1063187. https://doi.org/10.3389/frvir.2022.1063187
- Makam, A. N., Burnfield, J. M., Prettyman, E., Nguyen, O. K., Wu, N., Espejo, E., Blat, C., Boscardin, W. J., Ely, E. W., Jackson, J. C., Covinsky, K. E., & Votto, J. (2024). One-year recovery among survivors of prolonged severe COVID-19: A national multicenter cohort. *Critical Care Medicine*, *52*. https://doi.org/10.1097/CCM.0000000000006258
- McCrory, B., Ma, J., Irons, S. L., & Burnfield, J. M. (2022). Occupational injuries and patient lift usage among physical rehabilitation therapists. *Journal of Back and Musculoskeletal Rehabilitation*, 35, 195–205. https://doi.org/10.3233/BMR-200354
- Mitchell, C. L., Cler, G., Fager, S. K., Contessa, P., Roy, S. H., De Luca, G., Kline, J., & Vojtech, J. (2022). Ability-based keyboards for augmentative and alternative communication: Understanding how individuals' movement patterns translate to more efficient keyboards. *Human-Computer Interaction*, 412, 1–7. https://doi.org/10.1145/3491101.3519845
- Mohammadzadeh Gonabadi, A., Antonellis, P., Dzewaltowski, A. C., Myers, S. A., Pipinos, I. I., & Malcolm, P. (2024). Design and evaluation of a bilateral semi-rigid exoskeleton to assist hip motion. *Biomimetics*, 9, Article 211. https://doi.org/10.3390/biomimetics9040211
- **Mohammadzadeh Gonabadi, A., Buster, T. W., Cesar, G. M., & Burnfield, J. M.** (2024). Effect of data and gap characteristics on the nonlinear calculation of motion during locomotor activities. *Journal of Applied Biomechanics, 40*(4), 278–286. https://doi.org/10.1123/jab.2023-0283
- Mohammadzadeh Gonabadi, A., Cesar, G. M., Buster, T. W., & Burnfield, J. M. (2022). Effect of gap-filling technique and gap location on linear and nonlinear calculations of motion during locomotor activities. *Gait & Posture*, *94*, 85–92. https://doi.org/10.1016/j.gaitpost.2022.02.025
- **Mohammadzadeh Gonabadi, A., Fallahtafti, F., & Burnfield, J. M.** (2024). How gait nonlinearities in individuals without known pathology describe metabolic cost during walking using artificial neural network and multiple linear regression. *Applied Sciences, 14*, Article 11026. https://doi.org/10.3390/app142311026
- Murtaugh, B., Morrissey, A. M., Fager, S., Knight, H. E., Rushing, J., & Weaver, J. (2024). Music, occupational, physical, and speech therapy interventions for patients in disorders of consciousness: An umbrella review. *NeuroRehabilitation*, *54*(1), 109–127. https://doi.org/10.3233/NRE-230149
- Osborne, R., Bailey, D., Dinsmore, D., Lyter, E., Burnfield, J., Medearis, H., & Roura, A. (2023). Structural equation modeling: Effects of master adaptive learner and clinical learning environment attributes on individual and organizational outcomes. *Physical Therapy, Online ahead of print*, Article pzad152. https://doi.org/10.1093/ptj/pzad152
- Osborne, R., Bailey, D., Dinsmore, D., Lyter, E., Burnfield, J., Medearis, H., & Roura, A. (2024). Structural equation modeling: Effects of master adaptive learner and clinical learning environment attributes on individual and organizational outcomes. *Physical Therapy, 104*(1), Article pzad152. https://doi.org/10.1093/ptj/pzad152

Russell, M. E., Hammond, F. M., & Murtaugh, B. (2024). Prognosis and enhancement of recovery in disorders of consciousness. *NeuroRehabilitation*, *54*(1), 43–59. https://doi.org/10.3233/NRE-230148

### **BOOK CHAPTERS**

**Burnfield, J. M., Cesar, G., & Norkin, C. C.** (2024). Examination of gait. In G. D. Fulk & K. K. Chui (Eds.), O'Sullivan & Schmitz's Physical Rehabilitation (8th ed.). F.A. Davis.

**Burnfield, J. M., & Powers, C. M.** (2024). Normal and pathological gait. In J. D. Placzek & D. A. Boyce (Eds.), *Orthopaedic Physical Therapy Secrets* (4th ed.). Elsevier.

**Fager, S., & Karantounis, R.** (2022). AAC assessment and intervention. In K. Hux (Ed.), *Assisting Survivors of Traumatic Brain Injury* (3rd ed., pp. 263–285). Pro-Ed.



# **COMMUNITY HEALTH NEEDS ASSESSMENT 2024 - 2025**

# **IMPLEMENTATION STRATEGY**

## **PURPOSE**

This Implementation Strategy ("Strategy") is a written plan that addresses the prioritized community health care needs identified in the Community Health Needs Assessment (CHNA) conducted for the 2024 fiscal year and approved by the Boards of Directors of Madonna Rehabilitation Hospitals on June 11, 2025.

The Strategy meets the requirements for community benefit planning as outlined in Section 501(r) of the Internal Revenue Code as part of the Affordable Care Act. The CHNA for Madonna Rehabilitation Hospitals can be reviewed in its entirety at www.madonna.org.

## **AREAS OF FOCUS**

As a result of the analysis, four areas were identified as the priorities that Madonna will focus on for the next three years. These needs are:

**PRIORITY #1:** Expand the resources available to support world-class rehabilitation and the advancement of evidence-based treatment and scientific research through public-private partnerships.

**Strategy:** Formalize a public-private partnership strategy and establish a governmental relations function to support public funding at all levels of government.

**Strategy**: Pursue TBI Model System Designation in partnership with Level I and II Trauma Centers and Academic Institutions to contribute to the available knowledge of best practices for persons with brain injury.

**PRIORITY #2:** Facilitate efficient throughput of the community healthcare system maintaining a comprehensive post-acute care rehabilitation continuum and formalizing collaborative partnerships with acute hospitals to ensure patient placement at the appropriate level of care.

**Strategy:** Establish strategic affiliations for shared clinical service agreements and joint venture agreements with community healthcare partners, to support the community's health care continuum.

**Strategy:** Renovate the nursing facility at the Lincoln Campus to ensure continued program operations. Renovations will include replacement of the heating/ventilation system and resident room upgrades.

**PRIORITY #3:** Ensure a strong and stable health care workforce.

**Strategy:** Build the nursing pipeline by creating programs and partnerships to engage and develop nursing students and support nursing school capacity.

**Strategy**: Provide and promote robust employee training programs and development opportunities, creating a clear path to advancement to encourage longevity in the healthcare environment.

**PRIORITY #4:** Modernize the information technology infrastructure in order to ensure health care data security and health care information access.

**Strategy:** Mitigate cyber security risks by implementing advanced security monitoring and threat detection systems.

**Strategy:** Implement a comprehensive, integrated clinical record and financial reporting system.

## **NEXT STEPS**

This Implementation Strategy will be executed over the next three years. Periodic evaluation of objectives for each identified priority will be conducted to assure that Madonna is on track to complete the plan as described. At the end of the 2027 fiscal year, Madonna Rehabilitation Hospitals will review the Implementation Strategy and report on the success experienced through the collaborative efforts of improving the health needs of the community.