

FALL 2021

Message from the President.....	2
Message from Medical Director, Mel Glenn.....	2
Rare Syndrome Causes Patrick to Need Cognitive Rehabilitation Therapy After Spinal Cord Injury.....	3
A Mother-Daughter Duo: Jacqueline and Daughter Sarah Both Passionate about Helping Others with TBI/SPI.....	3
NeuroRestorative's Spinal Cord Injury Supports and Services.....	4 & 5
NeuroRestorative's Vocational Program Helps Estasia Find a New Purpose Following a Spinal Cord Injury.....	6
NeuroRestorative Academy Helps Armando Be His Best Self.....	6
Neuro Institute.....	7
NeuroRestorative Heroes.....	7

Make a Referral

Let our caring professionals help you find the right services and resources for your patient or loved one.

 **Call**
800-743-6802

Beating all Odds: Rafael's Inspiring Recovery after COVID-19

Rafael Chavez went to his doctor on April 5, 2021, due to tiredness and a high fever. That is when he tested positive for COVID-19. His doctor suggested he go to the ER, but Rafael thought it was nothing rest couldn't solve. A week later, Rafael was rushed to the hospital due to not being able to breathe. His family was told to prepare for the worst.

Rafael was in the ICU, fighting for his life. His lungs were shutting down and had no oxygen flowing throughout his body, and his kidneys were also starting to shut down. Finally, he was approved and transferred to Saint John's Medical hospital in Santa Monica, CA, to have ECMO surgery. He was taken off intubation after a week, and his journey to recovery began. He was now in a wheelchair, unable to walk or use daily living skills, such as feeding himself.

His family began to research rehab facilities that would give their dad the attention he desperately needed. Karen Sauls, Regional Director of Business Development of Southern California, had heard of Rafael's story and visited him in person. She knew right then and there that our program was right for him. "After meeting him, my whole plans changed. I knew he would thrive at our NeuroRestorative Artesia, CA, program," said Karen. "So, the family toured the program and they were in tears after the tour. They said, "we want him here."

Rafael joined our Artesia, CA, inpatient subacute program in June 2021 and was ready to go home in just a few months. Our care team worked with Rafael on occupational, physical and speech therapy. When asked why the family chose NeuroRestorative, Cristal Archiniega, Daughter of Rafael, replied, **"All of the staff were approachable and welcoming, and the location felt like home. Sometimes we'd call 3-4 times a day to check on him, and every time, you could feel that the nurse/staff would answer with a smile on their face."**

After being told by previous doctors that he may never walk again, Rafael took steps after only a few days working with his physical therapists. All the staff knew that a big motivator for Rafael was his family and how much he enjoyed spending time with his grandkids, eating ice cream with them. So when it was his last day before returning home, our staff put together a surprise ice cream party for him and his family. It was the first time he was able to see his ten grandkids in over three months. It was an emotional, happy celebration.

Today, Rafael is home and making improvements every day. He is working hard to get back to doing what he loves, such as driving his truck, playing with his grandkids and walking for more extended periods. "I know he will get there and it's all with time," said Cristal. "But, overall, we loved the treatment and attention that everyone at NeuroRestorative gave him and our family. We highly recommend NeuroRestorative to anyone."



Message from the President

Friends and Colleagues,

At NeuroRestorative, we are continually honored to support individuals of all ages with complex medical, brain and spinal cord injuries and to serve people who face neurodevelopmental and neurological challenges, including stroke. Our specialized health and rehabilitation programs provide a growing array of services representing a full continuum of supports in 26 states, including programs tailored to the needs of infants, children, adolescents, injured workers, military service members and Veterans.

We continue to do our part to put an end to the COVID-19 pandemic, which includes mask-on policy, extensive cleaning and supplies, and supporting our staff and program individuals to receive the vaccine. I hope we see a decline in cases in our communities this fall, so we are able to get back to doing what we love and seeing those important to us.

I am happy to share with you that we have expanded our pediatric clinic and home-based therapy services. With the acquisition of Advanced Therapy Solutions (ATS) in Gilbert, AZ, we have partnered with skilled therapists and business leaders to fulfill our commitment to meeting people where they are, providing pediatric services in a variety of settings, including at clinics, schools, and homes.

In this quarter's newsletter edition, we have highlighted our NeuroRestorative spinal cord injury supports and services. You will get the chance to read some remarkable stories from program participants we have been fortunate to serve. Of course, we also highlight our staff, who are the heart and soul of what we do and I am very lucky to have such dedicated and caring colleagues.

Regards,



Bill Duffy

President, NeuroRestorative



Hello Friends and Colleagues,

This month, more than 30 NeuroRestorative Medical Directors from across the country met to hear updates about NeuroRestorative growing supports and services and our dynamic and accessible Electronic Medical Record system *Point Click Care™*. Colleagues presented on the *New Guidelines for Patients with Disorders of Consciousness, Endocrine Disorders Following Traumatic Brain Injury and Chronic TBI/Aging with TBI*. It was terrific to get to see so many NeuroRestorative medical leaders from so many states participate in this learning event.

I am continually delighted to hear the many stories of people we serve at NeuroRestorative. In this quarter's newsletter, you will read about the journeys of our program individuals and, more specifically, our spinal cord injury supports and services. Here, we believe recovery is a process, and we have the right programs and teams to get an individual to reach their fullest potential. As our NeuroRestorative family grows to serve more and more people in the communities where they live, we continue to focus on quality, outcomes and removing barriers to access to care.

Sincerely,

Mel Glenn, MD

National Medical Director

Attack on His Nervous System: Rare Syndrome Causes Patrick to Need Cognitive Rehabilitation Therapy After Spinal Cord Injury

In 2015, Patrick Sullivan woke up to having what he thought was the common flu. Little did he know, his life was about to change. Patrick got up for work and was attempting his daily routine. Feeling dehydrated, tingling in legs and feet, and not having much of an appetite, he knew something was wrong. After deciding to go into the hospital, he had a gut feeling that it was the right thing to do. Patrick drove himself to the Emergency Room and only after a few tests, the doctor told him he needed to be taken to the hospital immediately to see a specialist due to extreme dehydration and weakness in the feet and legs. At this point, Patrick was unable to move his neck or walk.



When he got to the hospital, the doctors and nurses did a series of tests and concluded doing a spinal tap. Soon after, Patrick was told that he is a rare condition called Guillain-Barre Syndrome, a rare disorder in which your body's immune system attacks your nerves. This condition can come from an acute bacterial or viral infection and is very rare as there are fewer than 20,000 cases per year and is not curable, but treatment and therapies can help. After being in the hospital for 75 days, Patrick headed home.

After struggling with memory loss from conversations, missed appointments and forgetting to take medication on time, he and his family knew he needed a care team to support Patrick in his experiences with cognitive deficits with attention and short-term memory. In January of 2017, Patrick got in contact with Heather Smith, BS, CBIS, and Clinical Coordinator, who assisted in getting Patrick into our Exton, PA, program, and worked with him on his Cognitive Rehabilitation Therapy (CRT) services. "I needed assistance with the daily tasks such as understanding and managing my medical records, budgeting, organizing, cooking, baking, and managing my feelings," said Patrick. "Thanks to Heather, I now have a better understanding and control of my memory and thoughts."

When Patrick first started his therapies with Heather, he was experiencing issues with pain, fatigue, balance, left foot drop, lower body weakness, and inability to identify temperatures from the neck down and was in a wheelchair. "Our staff created personalized strategies to improve his short-term memory and attention skills such as setting alarms, creating wall calendars, organizing and attention strategies, planning worksheets for doctor appointments, and journaling," said Heather.

Today, Patrick can walk with support from a cane and rarely forgets to take his medication. He is very involved in his community and is enjoying getting back into baking and woodworking. He is currently working on crafting an entertainment center for his living room for him and his wife. When asked if he had any advice for someone going through something similar, Patrick replied, "Give it time. This is not a marathon. This is a journey. Breathe and find the right therapies for you. You will get through it."

A Mother-Daughter Duo: Jacqueline and Daughter Sarah Both Passionate about Helping Others with Brain and Spinal Cord Injury



Jacqueline Anderson BA, CBIS, Senior Case Manager, Cognitive Retraining Specialist (CRS), for our NeuroRestorative, Delran and Galloway, NJ, programs, has been in the field for over 30 years. In her role, she helps individuals work on physical, emotional, and psychological goals. **"To me, nothing is more rewarding than an individual becoming excited about learning something new. I've found that as a therapist if you fully believe in a person's capabilities, they will often trust that and in time believe in their abilities,"** said Jacqueline.

Her daughter Sarah Anderson is following in her footsteps, who currently works part-time at our NeuroRestorative New Jersey program as a Cognitive Retraining Specialist. "I, myself, sustained a mild TBI from a car accident a few years ago, and now not only can I help those we serve grow, but I can also help myself in the process," said Sarah. **"I've consistently been passionate about being a part of people's journeys to living their optimal lives, and watching the creativity and dedication that my mom has in this field has inspired me to put my passion to good use by entering this profession. I couldn't be happier doing so!"**

NeuroRestorative's Spinal Cord Injury Supports and Services

At NeuroRestorative, we believe that recovery from a spinal cord injury is a process, and we have developed an effective and flexible continuum of rehabilitation programs and support services that helps guide individuals through their personalized health journey. Our continuum of care ensures ongoing focus on the individuals' well-being and persistent advancement toward the goal of community integration and a return to day-to-day living.

Programs, Supports & Services:

- Subacute rehabilitation
- Long-term rehabilitation
- Transitional living
- Day treatment
- Vocational rehabilitation
- Mobility skills
- Respiratory care
- Communication & socialization skills
- Self care & daily living activities
- Counseling, family support & education
- Pain management
- Physical therapy
- Occupational therapy
- Speech therapy
- Psychological therapy

Our Rehabilitation Team:

- Medical Director
- Nurse
- Physical Therapist
- Occupational Therapist
- Speech Therapist
- Neuropsychologist
- Counselor
- Case Manager
- Behavior Analyst
- Rehabilitation Specialists
- Life Skills Trainer
- Vocational Rehabilitation Counselor
- Education Specialists
- Recreation Specialist
- Respiratory Therapist

Proven Track Record of Delivering Successful Outcomes

Demographic Information: Individuals with Spinal Cord Injury

The charts below indicate the demographics, diagnosis and chronicity of injury for those currently being served in the spinal cord programs (N = 72). Of those served, 27% of those with spinal cord injury also demonstrated neurobehavioral impairment. Behavioral impairment negatively impacts outcomes. Of those in residential services, 47% are able to return home when transitioning to the outpatient programs; 7% of those in residential services had to return to the hospital for acute medical management.

Demographics	SCI Persons Served
Sample Size	N = 72
Length of Stay (Average)	340.13 Days
Average Age	45.6 years
Male/Female	71% / 29%
Chronicity	SCI Persons Served
Injury Length (0-12 months) [ALOS = 192 days]	67%
Injury Length (12-24 months) [ALOS = 121 days]	8.3%
Injury Length (24-48 months) [ALOS = 149 days]	1.4%
Injury Length (48+ months) [ALOS = 436 days]	9.5%
Injury Length (unknown duration recorded) [ALOS = 1,115 days]	13.8%

Chronicity Impact:

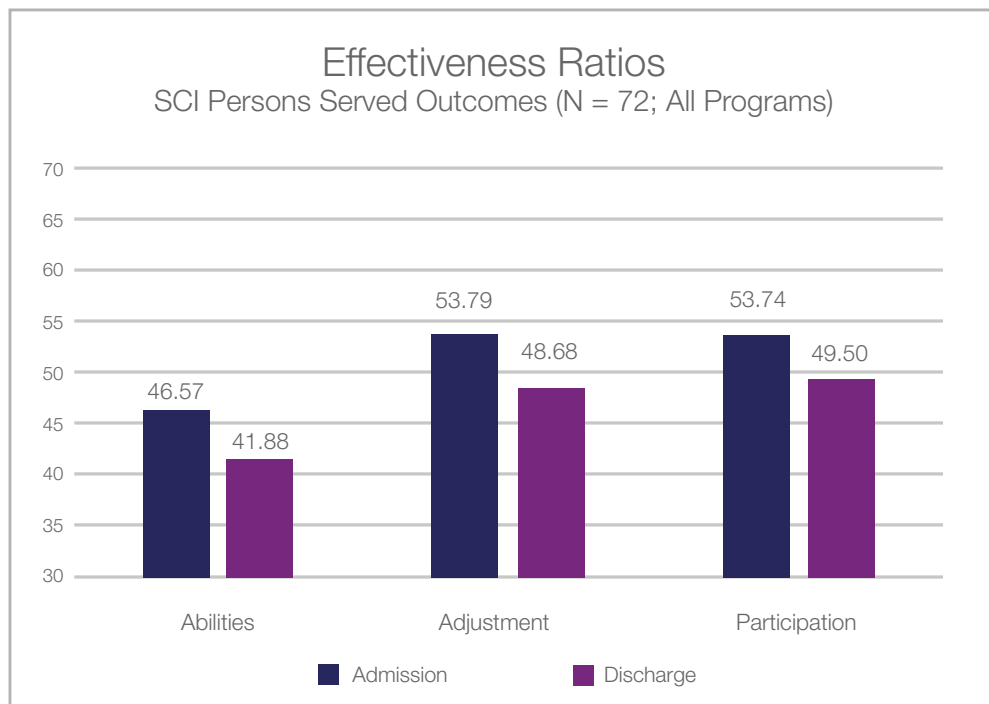
Outcomes are significantly influenced by chronicity (Lewis, Horn & Russell, 2017). As such, when persons are able to access neurological rehabilitation care sooner, the individual has the highest chance of achieving successful outcome to live in the community and resume a productive lifestyle. Lengthier time since injury slows the process of improvement and emphasizes greater use of compensatory strategy development with continuous skills reinforcement.

Residential vs. Non-Residential Care:

In addition, residential services help to progress a person from needing 24-hour care to no longer needing constant supervision. At the non-residential level, continued behavioral adjustment is noted. The application of skills is the focus of non-residential care.

Efficacy of Treatment

The results demonstrate a significant and meaningful change from admission to discharge with post-hospital care. This level of change is sufficient to produce reduced disability leading to successful community discharge.



Abilities = 0.40
(Medium Effect)

Adjustment = 0.38
(Medium Effect)

Instrumental ADLs = 0.45
(Medium Effect)
95% confidence interval

MPAI Index Averages	Admission Scores	Discharge Scores	Mean Difference (-)
Ability	46.57	41.88	4.69 *
Adjustment	53.79	48.68	5.11 *
Participation	53.74	49.50	4.24 *

Do you know someone who may benefit from our spinal cord injury supports and services?
Please give us at 800-743-6802.

DID YOU KNOW?

The weight of the spinal cord is around **35 grams.** (1.23 ounces)

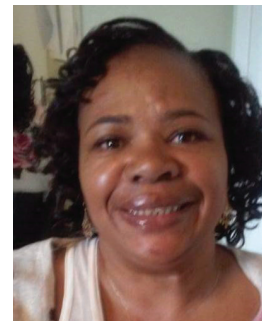
The spine has over **120 muscles** in it.

Humans and giraffes have the **same amount of vertebrae** in their neck.

NeuroRestorative's Vocational Program Helps Estasia Find a New Purpose Following a Spinal Cord Injury

In July of 2007, Estasia Sweat, 45, was hit by a moving vehicle, which caused her to experience multiple psychological and physical injuries, including a spinal cord injury. After spending time in the hospital, Estasia went home and was referred to our Ann Arbor, MI, program in 2015.

Estasia's care team put together an individualized care plan to work on physical, occupational and psychological therapy after suffering depression for many years. One of her main goals was self-development and peace, which she has found while working at our vocational program in Novi, MI, four days a week. Estasia helps write newsletters, assemble projects, do research/computer work and make blankets for sick children.



NeuroRestorative offers a safe and supportive environment for individuals who wish to develop or regain vocational skills in some communities. Our caring and specially trained staff help address the behavioral, cognitive, emotional, physical and social challenges following an injury. Using work as a therapy treatment opportunity, we have created a unique therapeutic work setting to ensure that individuals have the support necessary for success. Each work assignment varies in cognitive and physical complexity. This variety allows us to customize work to each individual's ability level and provide an appropriate progression of challenges while accommodating physical needs and creating an ergonomically supportive work environment. Individuals earn a competitive hourly wage as they complete a variety of assignments throughout the day.

By exposing individuals to many different types of work, they master new skills, boosting their confidence. Estasia went back to school to get her master's in general studies. She is passionate about telling her story and plans to write a book on her story one day. Her family, especially her granddaughter, is a big motivator for her growth. When asked how NeuroRestorative has helped her overall, Estasia replied, **"NeuroRestorative has the best program, hands down. You need to find your true self. In time, your mind and body will catch up."**

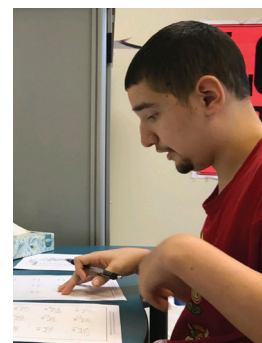
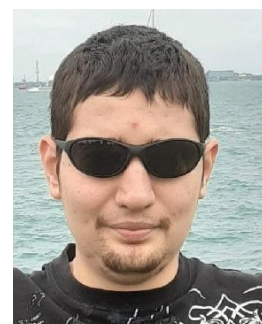
NeuroRestorative Academy Helps Armando Be His Best Self

Armando Cahue came to our NeuroRestorative Illinois Academy in 2018 due to having behavioral problems at home and in school. His family had tried to place Armando in other surrounding schools, but his family knew it was not a good fit. After refusing to attend school, medical appointments, and being hospitalized, Armando's mother Olga turned to NeuroRestorative. "Camelia Botez, Program Director, worked patiently with our family to get him to come to the program, and since then, has been doing amazing. She always makes herself available to talk to us, bringing me and our family confidence, support, and hope," said Olga.

With his personal staff support, NeuroRestorative provided a dynamic learning opportunity for Armando to become more independent and confident in a supported, fun, and innovative environment. He is currently attending all his appointments, therapies, social groups and enjoys being around those who are similar to him. "It has been a pleasure to work on art therapy with Armando. It is reassuring to see his progress and how eager he is to learn, said Mollie Morris, Art Therapist. "Students request working with him because he is so complimentary and always wanting to make artwork for peers and staff. We all enjoy receiving his art and being around him."

"Thanks to NeuroRestorative, I feel happy and peaceful knowing that Armando learned so many skills to be as independent as possible," said Olga. "When he graduates from his program, he will be able to leave home and be able to work at the place specialized in people with Autism."

Do you know someone who may benefit from a more individualized academic environment? Please give us at 800-743-6802 to discuss goals, services, supports and more.





NEURO INSTITUTE

Continuing Education for Rehabilitation Professionals

Neuro Institute offers monthly, one hour online CEU opportunities spanning a variety of topics related to rehabilitation services for individuals with brain, spinal cord and medically complex injuries and other challenges. Below is a schedule of upcoming events.

Past presentations are available to view for credit by visiting: neurorestorative.com/institute.

CE credit for Case Managers (CCMC), Social Workers (NASW), and Florida RN which provides National Nursing Continuing Education Courses Certification in every state with the exceptions of New Hampshire, Ohio, and Georgia. All other attendees will receive a general certificate of attendance.

FRIDAY, OCTOBER 29, 2021, 12-1 PM (EST)



Topic: Mayo Portland Adaptability Inventory-4

Speaker: La'Darius Belcher, Data Systems Manager, NeuroRestorative

Learning Objectives

- Participants will understand the differences between the use of the Functional Independence Measure (FIM) and the MPAL-4.
- Participants will learn about the Mayo Portland Adaptability Inventory – 4.
- Participants will understand the use of the MPAL-4 items, and how to transition from assessment to treatment.
- Participants will review some of the recent research of the MPAL-4 regarding reliability, validity, patient groups, program groups, aging, and chronicity effects on outcomes.

To register or learn more, visit neurorestorative.com/institute

NeuroRestorative Heroes

NeuroRestorative Heroes celebrates team members whose actions make them a hero to those we serve or their colleagues. This quarter, we celebrate six outstanding employees for their dedication to the individuals we serve.

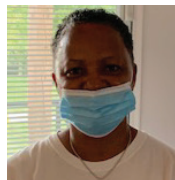
At NeuroRestorative, we are proud to have an amazing team of employees dedicated to making a difference in the lives of people with brain, spinal cord or medically complex injury, illnesses and other challenges. From clinicians to direct care workers to administrative support staff, everyone in the NeuroRestorative family plays an important part in ensuring the delivery of services that enhance quality of life. "On behalf of everyone at NeuroRestorative," said Bill Duffy, President of NeuroRestorative, "I want to thank all of our passionate and dedicated employees and congratulate all our Heroes."

FY21 Q4 Heroes



Luz Ayroso

Director of Nursing & Administration
NeuroRestorative California



Regina Malone

Life Skills Trainer
NeuroRestorative Tennessee



Terri Kuhnert

Certified Occupational Therapist Assistant
NeuroRestorative Illinois



Nicolas Dos Santos, LSC

Medication Technician
NeuroRestorative Florida



Sherry Loving, CNA

Certified Nursing Assistant
NeuroRestorative Nevada



Johnnie Webb

Life Skills Trainer
NeuroRestorative New Jersey

NOW OPEN!

NeuroRestorative expands services in Clearwater, FL.

At our NeuroRestorative Academy Clearwater, FL, program, we serve children and adolescents ages 8-18 from all over the United States. Our program focuses on psychiatric residential treatment. Individualized treatment plans begin with assessments from our skilled therapy team and evolve based on progress or needs. We offer students an array of personalized supports and services designed to promote their academic and rehabilitative success, including:

- OT, PT, SLP
- Counseling
- Recreational activities
- Therapeutic environment
- Interactive Telehealth Services
- Behavior intervention development
- Vocational training
- Family inclusive rehabilitation services

Please call today to discuss our Academy supports, services and outcomes.

For more information or to make a referral:

☎ 800-743-6802

✉ neuroinfo@neurorestorative.com

🖱 neurorestorative.com



980 Washington St., Suite 306
Dedham, MA 02026

