



REHABILITATION SERVICES

Florida Alliance for Assistive Services & Technology (FAAST) Improves Quality of Life for Patients with Disabilities

Nestled on the second floor of the Tampa General main campus is a wealth of resources for anyone with anyone with a disability. The Florida Alliance for Assistive Services & Technology (FAAST), Inc. is a non-profit, state-funded organization, with office space provided by Tampa General since 1994. It will celebrate its 30th anniversary at TGH next year and serves Hillsborough, Pinellas and Manatee counties.

Open weekdays from 8:30 a.m. to 5 p.m., the main resources FAAST provides include assistive technology that empowers individuals with disabilities and supports their family members. FAAST also works closely with TGH rehabilitation professionals who offer both inpatient

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Ergonomics team and offers services to Tampa General team members as well. The services are free.

Assistive technology includes any device, tools, hardware, or software to increase, maintain or improve functional capabilities for people of all ages. The center provides resources and training on how to use the equipment so individuals can empower themselves with fewer challenges. The goal is to improve personal function and

and outpatient therapy with the devices that FAAST provides so patients can live with greater independence. Working with this equipment can speed up recovery. FAAST also collaborates with the TGH



lead to independence.

At FAAST, there's a variety of devices, from interactive adapted toys to help the development of a child to magnifying aids and audio prescription medicine reminders for individuals with vision loss. There are hearing devices, amplified phones, aids for mobility, adapted utensils, and more. Patients often need to learn from scratch about how to care for themselves again after a serious accident or stroke, for example. These tools can make that happen.

An uppermost priority for FAAST is to listen and empathize with every consumer no matter what their disability is and to devise individual plans.

The staff of FAAST, led by Emily Wilson, Assistive Technology Coordinator and a Certified Assistive Technology Professional, works to enhance the capacity of their clients to live independently and perform everyday living tasks. Wilson started as a FAAST Program Specialist nine years ago and was promoted to the coordinator position last year. She is a current member of LEAD TGH, which helps team members prepare for future hospital executive management. In her time with FAAST, she has seen many patients progress in tasks such as communicating, cooking, environmental control and even managing medication. Among the many

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tools and offerings are resources for vehicle modifications like driving hand controls or products that enable people to access computers easier. “We have something for every type of disability to make life easier,” said Wilson.

FAAST offers a large range of assistive technology devices that can be borrowed at no cost to the patient. The equipment is loaned for the short term, so individuals can decide which device is best for them to purchase later on their own. At the state level, FAAST can also offer limited financing through low-interest financial loans so clients can purchase their own equipment for longer-term use — if they need to. More than \$1 million has been loaned statewide since the loan program began in 2015.

There are 12 demonstration centers throughout the state like the one at Tampa General. No prescription is needed for services provided at the center.

Multiple devices can be shown at one appointment. Requests for a



ADA Coordinator Justin Stark and FAAST Assistive Technology Coordinator Emily Wilson demonstrate the adaptive utensils

device loan through FAAST can be completed online at www.faastrg.org and applicants can borrow the device for up to 30 days. Extensions can be granted if needed. Devices can be shipped directly to homes for free or can be picked up from the office.

“If we can help eliminate barriers and make life easier for our patients, we have fulfilled our mission to serve the community,” said Wilson.

And as a Level I Trauma Center and Commission on Accreditation of Rehabilitation Facilities (CARF)-accredited rehabilitation hospital, having FAAST within our arsenal of services greatly enhances our world-class care so patients can regain their quality of life.



The FAAST Office on the Tampa General Campus

FAAST FACTS

FAAST deliverable stats for total number of individuals served per year:

- 2022 – 2394 individuals served
- 2021 – 2603 individuals served
- 2020 – 2190 individuals served

FAAST Central Regional Demonstration Center (RDC) core services:

- Information & Assistance
- Device Demonstrations
- Device Loans
- Trainings

Examples of Assistive Technology (AT) categories:

- Aids for Daily Living
- Communication
- Computer Access
- Environmental Control Systems
- Hearing
- Medication Management
- Mobility/Physical
- Recreation
- Reminders & Cueing
- Vision



Assistive Technology Coordinator Emily Wilson holds a sample of one of the many adapted toys to help with the development of a child

FAAST office contact information:

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Some Facts About The Pediatric Inpatient Rehabilitation Program – A 2022 Summary



All patients receive 24/7 physician and nursing care. Therapy services are provided at a minimum of 15 hours per week (900 minutes) over a 7 day period of time.

39 patients participated in this specialized program.

AVERAGE AGE: 11 years old

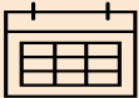
The program admits patients up to 17 years old. (Kids above 17 are evaluated on an individual basis.)



Patients are referred from within Tampa General Hospital, and from other hospitals as well.

The two primary funding sources were Medicaid and Private Insurance.

LENGTH OF STAY



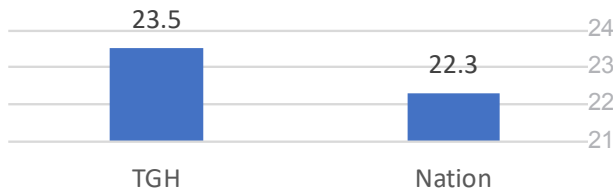
TGH average was 20.6 days
National Average was 22.3 days

MEASURING IMPROVEMENT



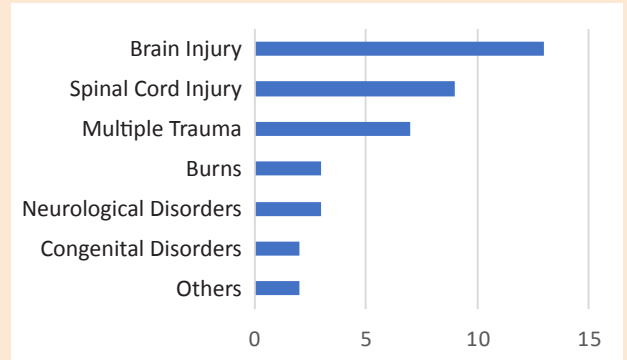
The program collects information on the results achieved by our patients. This allows us to assess improvement in function and compare ourselves to other similar programs in the country. One tool used is the nationally recognized Functional Independence Measure (also known as WeeFIM). It measures change in areas of self care, mobility, and cognition. The higher the score the better.

Total Change in Score- Admission to Discharge



DIAGNOSES OF PATIENTS SEEN IN THE PROGRAM

These were the major diagnostic categories of patients seen in 2022.



Other diagnoses admitted to the program can include: stroke, cerebral palsy, Guillain-Barre, amputations, disabling impairments and debility.

SATISFACTION AND PATIENT EXPERIENCE

Satisfaction and a positive patient experience are important to the program. Feedback from the patient and family is collected prior to discharge.

100% of patients/caregivers surveyed prior to discharge

- rated the care provided “good” or “excellent”, the two highest categories
- stated they would be willing to return to the program for further needs
- reported their education and training needs were met in order for the patient to be cared for at home

DISCHARGED TO HOME/COMMUNITY



87.2% of patients were discharged to their home. The other 12.8% required additional medical care and were sent to an acute facility prior to being discharged home.

FOLLOW UP



Patients are contacted approximately three months after their discharge. This follow-up assessment looks at function (WeeFIM score). One purpose of this assessment is to assure the child has been able to maintain the improvements they made while in the program. This is sometimes referred to as Durability of Outcomes.

97% of patients reported higher functional score at the time of follow up.

Cynthia Wells King School Helps Young Patients Stay in School as They Heal

Imagine you are a teenager, and you plan to graduate high school next year to pursue your college dreams. But a serious car accident quickly begins to shatter those plans. Or you are an 8-year-old who has been diagnosed with a neuromuscular disease, and the school year has just begun. Not only is your life turned upside down, but you are unable to attend classes. These are some of the scenarios that are typical at the region's only Level I Pediatric Trauma Center at the TGH Children's Hospital.

Since the 1990s, the Cynthia Wells King School at Tampa General Hospital has helped pediatric patients stay on track with their studies. Named after a popular, inspirational teacher who died of cancer, the classroom offers a range of services, with sessions of three to five hours per week. The schoolroom time is in addition to three hours a day of combined physical therapy, occupational therapy, and speech therapy. Doctors or licensed medical professionals assess the patient's eligibility. The patients qualify for the program if it's projected that they will miss at least 15 days of school to recover. "We can't replicate a school day, but our goal is to maintain educational continuity," said Hospital Homebound Teacher Rachel Castillo, who is the designated instructor for the school.

The computers, hydraulic desk and schoolroom space within the hospital are supplied by TGH, with supplemental materials such as a smart board, iPads and manipulatives that offer hands-on learning were donated by the Tampa General Hospital Foundation. The curriculum is like what students would receive at their schools. The textbooks are provided by Hillsborough County Public Schools (HCPS), as well as the teacher, who is employed as part of the HCPS Hospitalized/Homebound Program.



Rachel Castillo, hospital homebound teacher works closely with Dr. Jennifer McCain, pediatric neuro psychologist

"The goal is to maintain educational continuity and to stay caught up. It's meant to provide a sense of normalcy," said Castillo, who has been at Tampa General for eight years. "When it's time to be discharged from the hospital, we develop a plan and they can qualify for homebound lessons at their residence if they need it."

Castillo has worked diligently alongside the school's first teacher, Gary Lundgren, who worked at the school for 33 years until his retirement last year. Castillo said the best part of the job is to see her students overcome so much adversity.

It's not unusual to see a student who was wheelchair-bound on a Friday, then begin walking on a Monday. So many patients must not only learn to walk again, but they must learn to talk and perform academic tasks, like writing. Castillo works with the whole family to achieve these goals.

"Most patients come in with such a great attitude and really want to complete school and continue what was part of their life before they were hospitalized," Castillo said proudly.

The Cynthia Wells King School has helped countless young lives achieve their educational goals through the years and the school's impact is felt daily. In the past, it assisted a former patient who is currently in the process of becoming a doctor. This is just one of the many inspiring examples of this impactful program.



Rachel Castillo, Hospital Homebound Teacher for the Cynthia Wells King School at Tampa General



Neonatal Massage Comforts and Relaxes Babies and Parents

Pediatric occupational therapists typically provide rehabilitative care to enhance a child's ability to perform daily activities such as walking or eating. But the patients Occupational Therapist Taylor Wagner cares for might surprise you. They're pretty young – some just hours old.

"A major role of occupational therapy is taking a holistic approach to delivering patient care to premature and medically complex infants," Wagner said. "I provide a more sensory approach to care that helps to maintain autonomic stability for the infant so they can thrive and grow."

Wagner, a member of the Tampa General Hospital Rehabilitation team, uses infant massage to care for the very youngest of patients in the hospital's Jennifer Leigh Muma Neonatal Intensive Care Unit (NICU). She uses a soft but firm touch to deliver a healing sensation.

"It's kind of like Goldilocks and the Three Bears – massage strokes shouldn't be too firm or too soft. NICU massage should be just the right touch to help calm baby and make them comfortable and relaxed so that they can focus on brain development and conserving energy as opposed to being in a fight or flight state," Wagner said.

During their stay at Tampa General, a NICU newborn will receive about 10-15 minutes of specialized

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Healing Our Tiniest Patients With Gentle Touch and Skin-to-Skin Contact

When a baby is born prematurely, has health problems or has had a difficult birth, the newborn often receives care in a hospital's Neonatal Intensive Care Unit (NICU).

The Jennifer Leigh Muma NICU at Tampa General Hospital has a strong commitment to providing the highest quality of care where neonatologists from the USF Health Morsani College of Medicine and trained neonatal critical care nurses care for infants in an 82-bed unit. Working alongside NICU physicians and nurses are Tampa General are 10 rehabilitation therapists specializing in speech, occupational and physical therapy. Four of the team members are Certified Neonatal Therapists. All are integral to the care of NICU infants in many ways, but among them is encouraging, training and supporting skin-to-skin contact, often called kangaroo care.

"We consider skin-to-skin to be part of our neuroprotective care toolbox in the NICU," said Tampa General Certified Neonatal and Pediatric Rehabilitation Therapist Suzanne Schneider. "Skin-to-skin has many benefits. It provides positive sensory stimulation and recreates the protection of the womb."

Skin-to-skin care involves a family member of a NICU newborn holding their baby against their bare chest to provide extra warmth and promote bonding. This method helps a newborn feel safe, secure and adjusted to their new environment outside the womb. One of the roles of rehabilitation therapists in the Tampa General NICU is to facilitate skin-to-skin care as well as educate new parents about its immediate and long-term benefits.

"Extended use of skin-to-skin contact can benefit newborns and their caregivers through the entire postpartum period, up to 6 months of age for the infant," Schneider said. "Skin-to-skin helps increase breast milk production, transferring friendly/good bacteria from mom to baby to prevent infection and support longer periods of quiet, calm sleep. The practice of skin-to-skin care calms and relaxes both mother and baby and regulates the baby's heart rate and breathing, helping them to better adapt to life outside the womb."

Skin-to-skin is just one of many therapeutic interventions used by rehabilitation therapists in the NICU to reinforce neuroprotective, developmentally supportive care that's calming and soothing and creates a healing environment that manages an infant's stress and pain. Other methods of neuroprotective care provided by NICU therapists include:

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massage per visit from Wagner. Each area of the baby's body, from the abdomen to the back and down the arms and legs all the way to the toes, is massaged. Babies spend nearly all their time on their backs, so back massage helps to relax muscles and improve breathing. A NICU newborn's feet may experience tenderness from heel sticks often used to test the infant's blood sugar. A foot massage from Wagner can help send a signal to baby that not all touch is bad. Massaging the arms and hands helps an infant find their midline so eventually they're able to reach across their body from right to left and vice versa. "It's just reorienting a baby's body against gravity so they can find their center and helping to open up their hands so they're not forming fists, which can be a sign that an infant is tense," Wagner said.

The primary massage Wagner incorporates into NICU care is called I-L-U. Each letter represents a massage stroke that she traces on a baby's abdomen. "Medications given to NICU infants, along with premature babies' bellies, can cause constipation and other gastrointestinal issues," Wagner said.



Offering supportive hand hugs. Cupping the head and bottom of an infant during a diaper change to put the infant in a flexed position which imitates their position in the womb.

Providing swaddled baths. Bathing the newborn while they are loosely swaddled in a blanket. Each limb is then individually un-swaddled, washed, rinsed and reswaddled.

Modifying the NICU Environment. A NICU is a busy place, and too much environmental noise and light can result in negative physiological responses in a newborn, such as increased heart and respiratory rates and decreased oxygen saturation. Rehabilitation therapists help to create a neuroprotective, healing environment by adjusting an infant's exposure to light and sound.

Supporting suckling of hands. Bringing a newborn's hands up to its face and use of pacifiers can establish prefeeding pathways for successful feeding.

Identifying infant cues. Newborns communicate through body language, such as changes in breathing, skin color and movement patterns. Newborns can give visual cues of distress such as outstretched fingers. Rehabilitation therapists teach parents about visual cues and how to respond to them.

"Infants are highly sensitive," Schneider said. "A simple eyebrow raise can indicate they're experiencing stress."

Reinforcing gentle touch and calming voices in a hospital NICU is essential to a newborn's growth and development, Schneider said. The role of Tampa General's NICU rehabilitation therapists is to help assess and address each NICU baby's needs and pass on knowledge about skin-to-skin contact and other neuroprotective therapies to parents so that when it's time for a newborn to leave NICU care, parents have the skills and confidence to care for their baby.

"I-L-U massage helps to relax abdominal muscles."

Another important component of NICU massage is educating parents.

"We try to always have family present during the treatment session when they are able. Having parents included in their baby's care and helping with the massage is a good way for them to be more hands-on, plus it creates a physical bond with their baby, which in turn can help a parent and baby relax a bit more," Wagner said.

Studies show that massage can shorten a NICU infant's hospital stay and improve their transition to home life. Wagner has been supporting NICU infants with massage for about four years at Tampa General. "It's rewarding to care for these delicate infants and to see how parents react. Sometimes the massage is the first time a parent has held their baby and it just makes me feel good knowing that I'm making a difference with that baby and their family," Wagner said.

Pediatric Rehabilitation That's Personalized and Fun: How it Helped a Child Walk and Speak Again

Seeing 8-year-old Skylar Jones now, playing and full of energy and wearing a bright, wonderful smile, you'd never know that just a few months ago she was diagnosed with a traumatic brain injury.

Skylar and her mother, Dominique Jones, were seriously injured in a motor vehicle accident just a week before Christmas 2022. Both were taken to Tampa General Hospital, where they were cared for by the academic health system's world-class teams in the Emergency Department, Intensive Care and, for Skylar, Pediatric Rehabilitation.

"I had a collapsed lung and was still recovering from my injuries when Skylar began pediatric rehabilitation at TGH Children's Hospital," mom Dominique Jones said. "We didn't know if Skylar would walk or talk again. But once I met the Pediatric Rehabilitation team, I could feel the good energy from them. I knew Skylar would be in good hands and I didn't have to worry."

For four weeks Skylar received pediatric occupational, physical and speech therapies. At first, Dominique wasn't sure how her young daughter would respond to the daily therapies.

"A hospital can be a scary place for a child, but the Pediatric Rehabilitation team made Skylar's therapy sessions fun, Dominique said. "Every day when they came in, she was like, 'I'm ready to go,'" she said.

Dominique says Skylar began to enjoy the personalized one-on-one sessions. Having rehabilitation therapists by her daughter's side showing care and compassion made the difference. Only one week into therapy, Skylar regained her ability to walk. It was Christmas Day.

"It was amazing care from start to finish," Dominique said. "The Pediatric Rehabilitation team treated us like family, and no matter how many questions I asked, the team was understanding and supported me."

Skylar also received support from the Hillsborough County Public Schools Hospital Homebound and Homebased Program, which partners with Tampa General Hospital to provide children who are hospitalized and unable to attend school with a quality education. Two months after the accident, Skylar was well enough to return to school.

"She's back to her old self. Sometimes it takes her a while to process some things, but in terms of her mobility and speech, she's the same exact Skylar as before," Dominique said.

Dominique and Skylar hope to reunite with the Tampa General Pediatric Rehabilitation team soon – not for therapy, but for lunch. Both want to thank the team for all that they did and see how the extraordinary rehabilitative care that Skylar received meant the world to her and her mom.



Just two months after being diagnosed with a traumatic brain injury, 8-year-old Skylar Jones is walking, talking and back home with her mom, Dominique Jones, thanks to care she received from the Tampa General Pediatric Rehabilitation team

About Tampa General Hospital Rehabilitation Services

Rehabilitation Services at Tampa General Hospital is accredited by the Commission on Accreditation of Rehabilitation Facilities (CARF) for the following:

- Comprehensive Integrated Inpatient Rehabilitation – Pediatric Rehabilitation Patients
- Rehabilitation Services is also designated by the Florida Department of Health as a provider of services to pediatric Brain and Spinal Cord Injury Program (BSCIP) patients. Our services are accredited by The Joint Commission, and TGH is proud to be a Magnet Hospital.



In addition to pediatric rehabilitation inpatient programs, the continuum of care includes services provided by hospital-based rehabilitation therapists and outpatient rehabilitation services.

RehabMatters

Rehab Matters

is published by Tampa General Rehabilitation Services for its patients and other stakeholders.

Michael Daniels
Director of TGH Rehabilitation Services

For more information about rehabilitation programs, please go to our website www.tgh.org and look us up under Rehabilitation Services