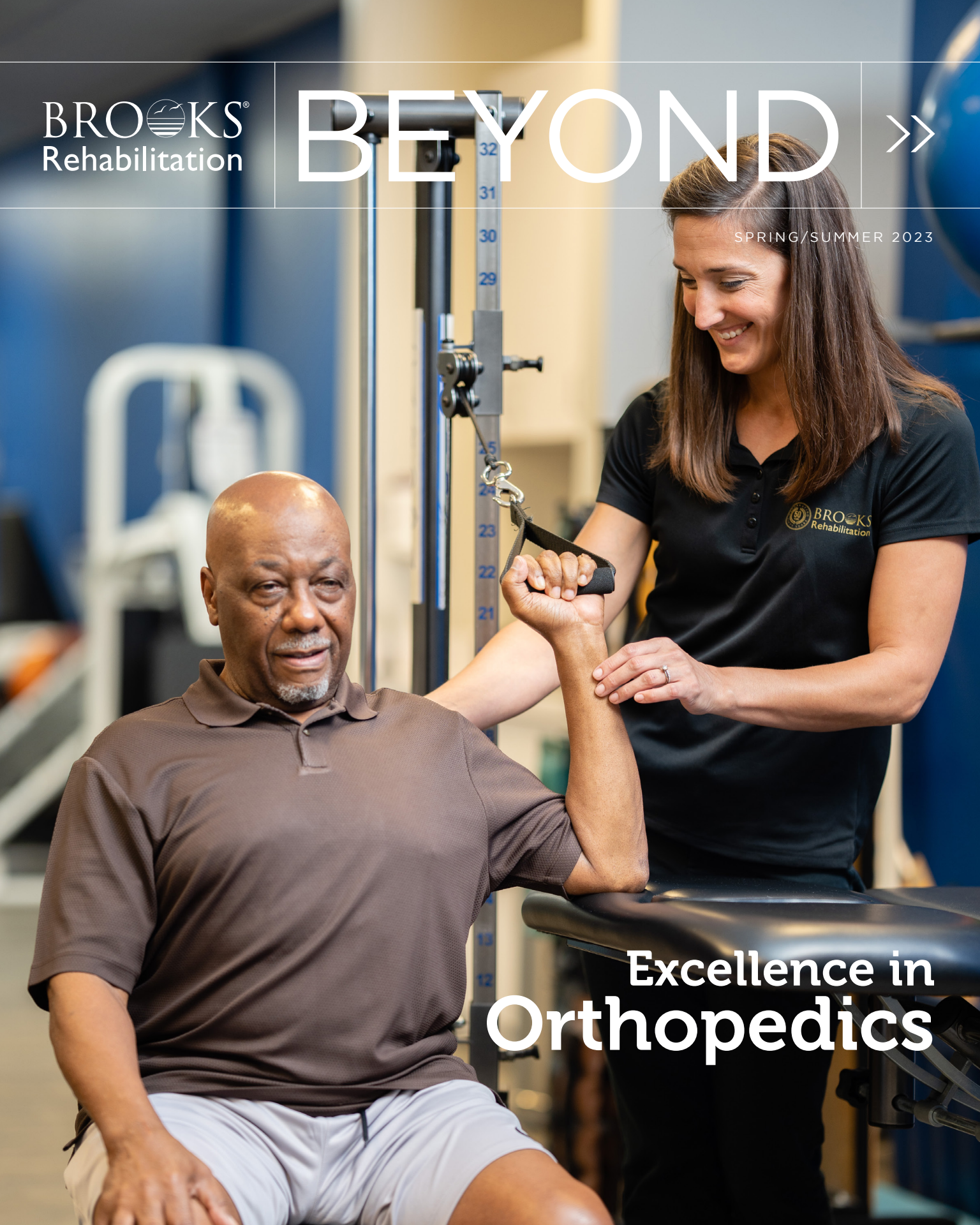
BROOKS® Rehabilitation

BEYOND »

SPRING/SUMMER 2023



Excellence in Orthopedics

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BROOKS® Rehabilitation

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BrooksRehab.org
#WeAreBrooks

Doug Baer

The Brooks Acute Care at Home Team was recognized for their innovation and excellence during our annual celebration.

This issue of Beyond highlights some of our specialty rehabilitation programs in our comprehensive system of care. Our focus on innovation, technology, research and education all contribute to our vision to be the leader in providing a system of world class rehabilitation solutions for those we serve.

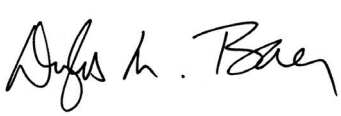
All of these wonderful and unique resources have been developed with one aim - to assist our patients and their families achieve the best outcome possible. Therefore, it was only appropriate to share a couple of the amazing patient stories that we experience here at Brooks.

As important as innovation, physical facilities and equipment are for successful outcomes, the real differentiator is our team. Our staff are the most dedicated, talented and passionate group of people anywhere in the country. They pour their heart and soul into their work, striving to go beyond expectations for our patients. I thank all of them for their tireless efforts.

I would also like to thank our partners - hospitals, physicians and other healthcare organizations - who have confidence in our services and work closely with us in this important work.

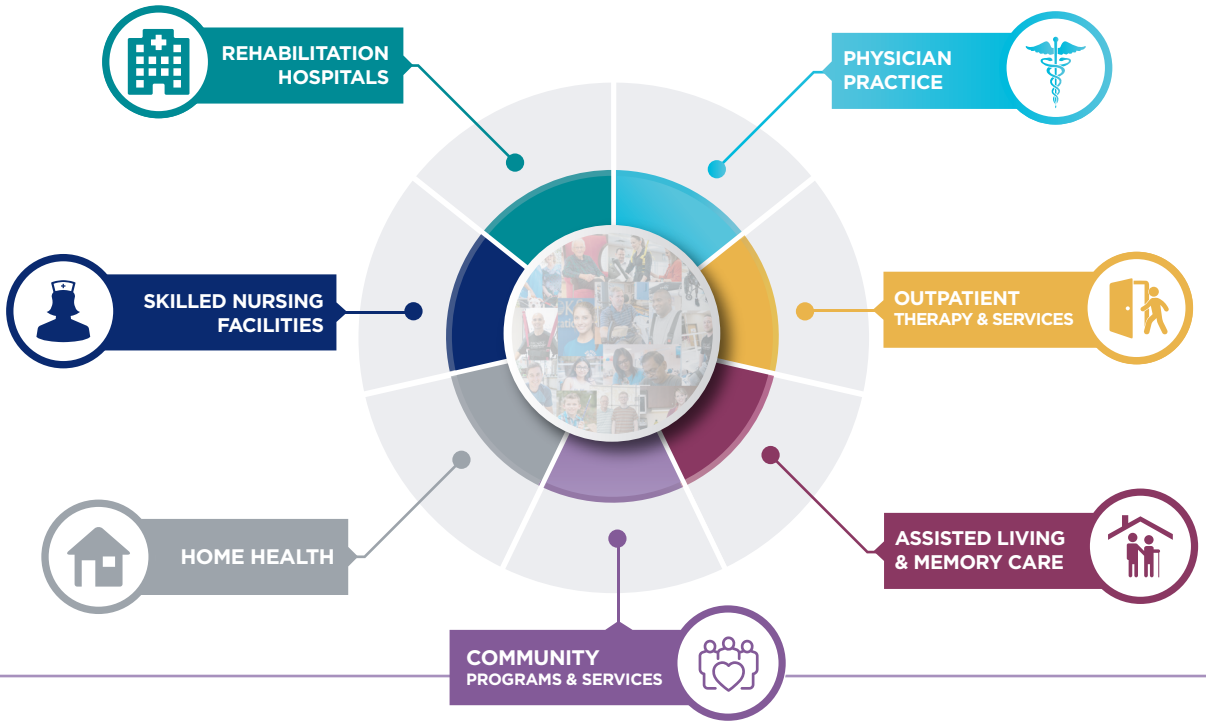
Our founder, J. Brooks Brown, MD, created a culture of excellence in rehabilitation to make the lives of those living with a differing ability better. We continue to promote and advance this culture each day for those we serve.

I hope you enjoy this issue of Beyond!



BROOKS REHABILITATION

SYSTEM OF CARE



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SCHOOL RE-ENTRY PROGRAM • SPINAL CORD INJURY DAY TREATMENT PROGRAM • SUPPORT GROUPS • WELLNESS

"Patients are at the center of all we do at Brooks Rehabilitation. Through our coordinated system of care, not only can we provide seamless transitions for our patients between levels of care, we can also effectively treat patients in the right setting for their individual needs resulting in the best possible outcomes."

- Doug Baer, President & CEO

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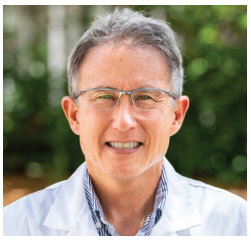

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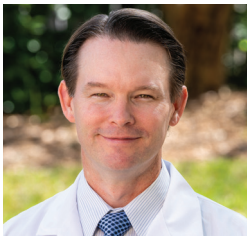

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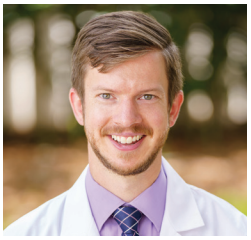

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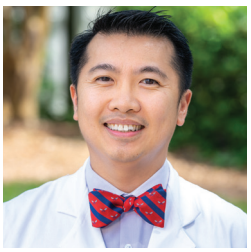

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Trevor Paris, MD
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Rehabilitation Hospitals · Skilled Nursing Facilities · Home Health · Physician Practice · Outpatient Therapy & Services · Assisted Living & Memory Care

Q&A

Pierre Galea, MD

Pierre Galea, MD, joined Brooks in October 2021 and currently serves as an attending physiatrist at the Brooks Rehabilitation Hospital – Bartram Campus. He began his career at Brooks with a focus on the stroke and brain injury patient population at our University Campus. Dr. Galea earned his MD degree from the Larner College of Medicine at the University of Vermont. He completed his Physical Medicine and Rehabilitation (PM&R) residency at the University of Alabama, where he served as the chief resident. Dr. Galea has an undergraduate degree in electrical/computer engineering from the University of Malta and a master's degree in Information, Networks and Computer Security from the New York Institute of Technology. He is a Fellow of the American Academy of Physical Medicine and Rehabilitation (FAAPMR).

YOUR ORIGINAL EDUCATION IS IN COMPUTERS AND CYBERSECURITY. WHAT FIRST CAUGHT YOUR INTEREST THERE, AND THEN HOW DID YOU END UP A PHYSICIAN?

I was always interested in problem solving in technology and engineering. But, as I worked with computers, I thought, "What is my role, what's my purpose, and how am I helping people this way?" It was intellectually fulfilling but not completely fulfilling. I wanted to help people directly, and working with computer technology could only help indirectly. So, I went back, got my prerequisites, went to medical school and residency and here I am.

YOU WANTED TO HELP PEOPLE DIRECTLY – IS THAT WHY YOU CHOOSE PHYSIATRY?

Yes, absolutely. Physiatry has both the technology component, for example, exoskeletons, or neural networks used in prosthetics, and that human component, where patients really expressed how valuable it was to have a physiatrist in their life and the impact that it had. So, to me, it was both – it's technology that's helping human lives.

HOW DID YOU LEARN ABOUT BROOKS?

I was in residency and interviewing at a lot of places and I couldn't find one where I thought, "Yes, this really is a great place." I was talking to my attending and they said, "You mentioned having family living close to Florida. Have you considered Brooks?" I came here, I saw the facilities, I met with everyone here. I saw how everything was run, the culture and how the care was beyond anything else I'd seen. That was really the deciding factor.

YOU WERE AT THE UNIVERSITY CAMPUS WHEN YOU FIRST CAME TO BROOKS. WHAT TYPES OF PATIENTS DID YOU TREAT?

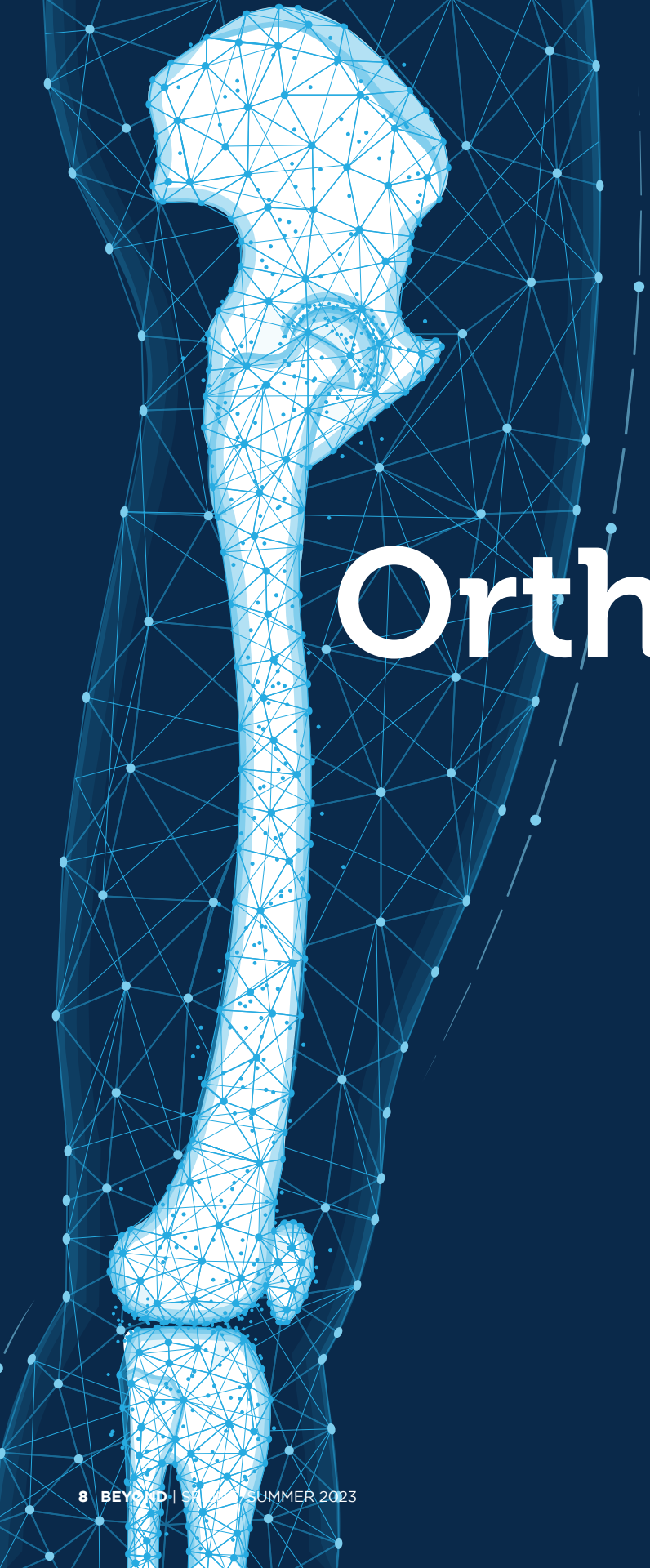
I would consider myself more of a generalist, but a lot of the patient population I treated at University Campus consisted of strokes and brain injury. Working with Kenneth Ngo, MD, and Cassandra List, MD, was fantastic. They know exactly what they're doing, and there was great mentorship from the beginning.

YOU'RE NOW AT THE BARTRAM CAMPUS, WHICH CONTINUES TO EXPAND THE BROOKS TRANSPLANT REHABILITATION PROGRAM. WHAT'S DIFFERENT ABOUT TRANSPLANT REHABILITATION?

Transplant rehabilitation is specialized and unique. Things that apply toward a general rehab population may not always apply in a transplant population. They need a certain level of monitoring; they need labs and a certain treatment that is unique and specific. It requires a lot of coordination, not only with the rehab team, but with the transplant team. A great thing about our transplant service led by Parag Shah, MD, is this ongoing communication with the patient's primary transplant team. We know what the process is, we have clear information on what labs they need, when they need them by, what is concerning and what labs may prompt a more rapid response or a more rapid intervention.

YOU MENTIONED CULTURE EARLIER. WHAT DO YOU SEE AT BROOKS?

What I see is that everyone goes above and beyond, every day, with every patient, to ensure the best outcome for the patient. And I see that throughout, not just in one discipline, but in all disciplines. There are always opportunities for growth, but this culture is not one that you commonly see. Everyone is on board; everyone acts as a team. We communicate constantly. We come down to the bottom of the problem and see how we can best assist every patient.



Orthopedic Rehabilitation

Brooks Rehabilitation is recognized nationally for providing care to patients with the most complex injuries and conditions, such as spinal cord injuries, traumatic brain injuries, stroke, neurological conditions and transplants. Yet, the majority of patients come to Brooks for orthopedic conditions. Brooks cared more than 32,000 patients with a variety of orthopedic diagnoses last year. With specialization and residency/fellowship training in orthopedics, patients are getting the highest level of care possible throughout the Brooks system of care.

INPATIENT CARE TRULY CUSTOMIZED FOR EACH PATIENT

Prior to the early 2000s, Brooks treated a significant number of patients after total joint replacement surgery in Brooks Rehabilitation Hospital – University Campus. Patients who would typically spend a few days in Brooks' hospital after surgery are now going straight home. The Centers for Medicare and Medicaid (CMS), along with insurance changes, transformed the landscape for orthopedics in the inpatient setting.

While the type of orthopedic conditions may have changed, Brooks Rehabilitation Hospitals still treat more than 700 patients each year after motor vehicle accidents, amputations, fractures, spine surgeries or fusions and more. The main goal for the patient remains the same as well…get home safely with as much independence as possible.

That is where the similarities end. Every patient that enters the Brooks system of care is unique, and their plan of care is tailored to their particular needs. "A typical inpatient length of stay for an orthopedic injury is about 1 – 2 weeks. However, bones can take 6 – 8 weeks to heal so we have to be really creative," said Nicole O'Brien, PT, DPT, physical therapist at Brooks Rehabilitation Hospital – Bartram Campus. "Most of our patients were independent before their accident or injury and are frustrated having to wait while they're healing. We try to make treatment fun while working on strengthening, balance, safe transfers to and from a wheelchair and daily activities like showering and getting dressed with the occupational therapy team." Patients are also often limited by pain. Physicians, nurses and therapists work together to make sure the patient is properly medicated.

From there, care is truly patient-centered. "We find out what goals they want to achieve and if they have any special interests and adapt therapy sessions accordingly," said O'Brien. "Physical therapists work with recreational therapists to have patients playing video games where they are distracted so they don't realize they're putting weight on an injured leg. We've played softball with patients. We've played fetch with therapy dogs. Whatever the patient is interested in, we try to bring that into the hospital environment."

While parallel bars are still a staple in the therapy gyms, clinicians also use specialized technology. When appropriate, therapists use the ZeroG, passive harness system and the Bioness Integrated Therapy System (BITS). "We had a patient here recently who hurt his arm skateboarding. We allowed him to skateboard in the hall using the ZeroG for safety. We use BITS for balance and to promote weight-bearing. Our speech-language pathologists use it for cognitive tasks."

The care team also provides abundant motivation and coaching to patients. "It can be scary getting out of bed that first day. We aren't just treating an injury but a whole patient – both their physical and mental well-being. I feel empowered when I can find ways to get them better and back to what they enjoy," said O'Brien.

THE SAME LEVEL OF BROOKS CARE IN SKILLED NURSING

When Brooks opened Bartram Crossing (BC) and University Crossing (UC), two skilled nursing facilities in the Brooks system of care, a decision was made to focus on what Brooks does best – rehabilitation. Similar to the inpatient hospital because of length of stay and acuity levels, UC and BC treat predominately more short-term than long-term patients. Orthopedic patients typically spend 7-10 days in this care setting.

Patients are admitted to BC or UC from an acute care hospital or their home with an array of orthopedic diagnoses – fractures, falls, motor vehicle accidents, elective joint replacement, spinal fusion and amputation, to name a few. Lashia Hicks, PT, DPT, GCS, Director of Rehabilitation at UC, helped develop the orthopedic rehabilitation program. A geriatric clinical specialist herself, Hicks established orthopedic core competencies therapists would have to master to ensure excellent patient care.

“We treat more than 100 patients per month in this program so our specialized team of orthopedic clinicians are familiar with various surgical and non-surgical precautions and know how to progress a patient through different weight bearing restrictions,” said Hicks.

With the majority of patients over age 60, Hicks and team are also treating higher acuity patients. Not only are they treating the orthopedic dysfunction, they also have to consider age-related changes like bowel and bladder function, frequent falling and low vision, along with other medical issues like dementia, Parkinson’s and chronic heart failure. “If you’ve ever done therapy with a patient who is 85 with hip precautions and dementia, your session is completely different,” said Hicks. “There is a lot of redirection required. You learn how to give simple cues and be creative when working with older adults.”

While we have to treat older adults differently, they are still receiving the same level of Brooks care. “People think skilled nursing is older people sitting in a chair doing three sets of 10 ankle weights, and that is not what we do here. We have technology that most others don’t have,” said Hicks. Caregiver training and family education is also an important part of the skilled nursing stay. If patients are discharging

after 7-10 days, their caregivers need to understand how to assist with wheelchair mobility, transfers, caring for a new amputation site or learning how to don a new prosthetic.

That shorter length of stay doesn't translate into less progress, however. In fact, it's just the opposite. UC exceeded their goals last year for improvement in function – seeing gains in transfers, walking and walking or rolling a wheelchair on the unit. These stellar outcomes earned both UC and BC a spot on the U.S. News & World Report's 2022-2023 "Best Nursing Homes" list. They were both among the elite 16 percent in the country that earned a "High Performing" rating, the highest possible achievement.

"Being in the patient's home gives us a unique opportunity to teach them how to safely function and improve in their own environment."

SAFETY AND PROBLEM SOLVING IN HOME HEALTH

An orthopedic patient in the Brooks home health division likely has a chronic disease going on at the same time as the acute orthopedic injury or episode that just happened. These individuals are not able to transition straight to outpatient therapy, but the goal is to get them there as quickly as possible.

"We treat all types of orthopedic conditions - from joint replacements, fractures, spinal fusions, laminectomies - any orthopedic condition you can name, I've treated it in home care," said Chandler Rice, OTR/L. "However, our goal is to stabilize the patient, assess their safety and transition them to the next care setting as soon as they no longer meet the homebound status."

Melissa L. Cooper, RN, BSN, MBA, Vice President - Home Health, explains this is a differentiator for Brooks. "We have a system of care so when a patient is referred from one of our inpatient settings, we pick up right where they left off. We're all on the same page and building on the progress the patients already made so they recover faster."

A typical orthopedic patient is referred for 2-3 weeks of home health care. "Our goal is to progress their functional ability to transition them to outpatient therapy as soon as possible," Rice said. We're committed to doing everything possible to get them well enough for the most beneficial care setting."

However, the home environment does provide a unique opportunity for customized care. In addition to medication management and therapies, nurses and therapists also assess home safety, fall risks, adaptations and equipment needs. It's important to ensure the home environment is as safe as possible because that's where they spend the majority of their time.

"Being in the patient's home gives us a unique opportunity to teach them how to safely function and improve in their own environment. Patients receive training in the hospital, but until you are there watching the patient get in and out of bed, getting something out of their closet or trying to use their bathroom, you aren't able to recommend the best solutions," said Susan Chapman, RN, BSN, Director of Nursing.

"From an OT perspective, one of my favorite things is helping introduce a tub transfer bench and work on showering with a patient who has been afraid to shower. Some have no idea they can still shower and they cry when they find out they can. It makes a huge difference," said Rice.

"We do all kinds of problem solving. Since we don't have the same technology available to us as other settings, we have to be extremely creative," said Rice. "It's more than just clinical judgement. You have to put all the pieces together in every room of the house based on their precautions."

TECHNOLOGY AND TRUST IN OUTPATIENT ORTHOPEDIC REHABILITATION

Mallory Behenna, PT, DPT, is an orthopedic physical therapist at Brooks and also serves as the outpatient orthopedic program coordinator for approximately 170 therapists throughout the Brooks system.

"A lot of people think of 'ortho' as just putting a patient on a mat and having them do three sets of 10 of an exercise. Because so many people think this way, often orthopedic rehabilitation doesn't get the full appreciation that it deserves. It is so much more than that," said Behenna. "What we do is really an art. I could have an entire day of people who have low back pain, and every case is different. We're like detectives. What works for one person doesn't necessarily work for another. We have to use our clinical reasoning, expertise and training to help people move and live their lives better."

Behenna has worked for different rehabilitation organizations and points out some differences she feels makes Brooks more customer-centric than the previous companies.

"We see patients one-on-one for evaluations for a full hour," said Behenna. "It's huge to give your undivided attention to just this one person to figure out what's going on and tailor their plan of care. Then, we're never expected to treat more than two patients an hour, which in orthopedics is a really good thing. Not every organization makes that limitation, because obviously the more people they see, the more they can bill. But Brooks cares about our patients' results, and allows us as providers to schedule in a way that maximizes those results. That's what sets Brooks apart for me."

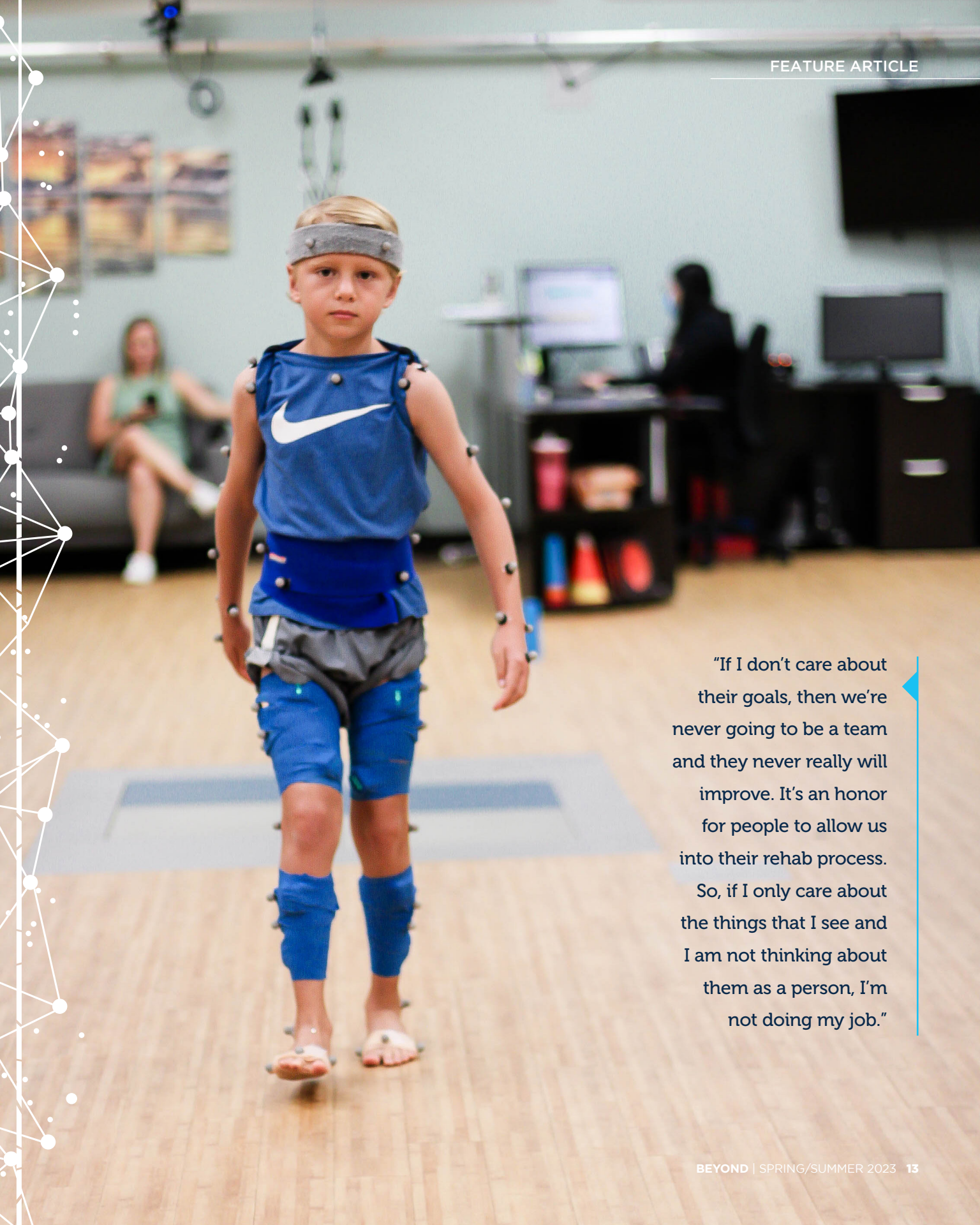
All treatment is directed and provided by therapists who are among the most highly trained in their fields. Technology also plays a large role in orthopedic rehabilitation, including two specialized outpatient centers for Brooks patients:

The Brooks Center for Sports Therapy (CST) provides specialized athletic rehabilitation for athletes ranging from "weekend warriors" to the highly competitive and elite. The CST is staffed by clinicians who are board-certified in orthopedics and sports therapy. CST clinicians provide care for athletes throughout the continuum of care, from the field to the clinic, and are experts in return-to-sport procedures. In addition to treating the athletic population, CST clinicians have the experience and expertise to treat a wide range of musculoskeletal conditions.

The Brooks Motion Analysis Center (MAC) is a specialized clinical and research assessment facility focused on gait and movement impairments. Motion analysis quantifies muscle activity, joint motions and forces during movement. The MAC uses cutting-edge technology, expert clinical examination and biomechanical analysis to provide detailed, quantifiable information to improve the recovery and performance in individuals with orthopedic (and neurological) impairments. The MAC can assess athletes before injury to help improve performance and after injury to determine when it is safe to return.

Yet, even with all the evaluations, treatments, education and technology, for Behenna and the orthopedic therapists it all first comes down to earning a patient's trust.

"From the very beginning, from the first time that I meet someone, I know I can't make them better until I earn their trust," said Behenna. "If I don't care about their goals, then we're never going to be a team and they never really will improve. It's an honor for people to allow us into their rehab process. So, if I only care about the things that I see and I am not thinking about them as a person, I'm not doing my job."



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Mark Bowden, PT, PhD, Named New Vice President of Clinical Integration and Research

In January 2023, Mark Bowden, PT, PhD, joined Brooks Rehabilitation as the new Vice President of Clinical Integration and Research. This new role will help to foster the growing collaboration between our research, clinical and education sections of the system. Dr. Bowden oversees the Institute of Higher Learning and the Brooks Clinical Research Center (CRC), which aims to advance rehabilitation science, technology, and care through research and developing the most effective therapies for patients. His overall goal is to further integrate research and the latest evidence into clinical practice at Brooks.

Dr. Bowden comes to Brooks from the Medical University of South Carolina (MUSC), where he served as Professor and then Director of the Division of Physical Therapy and the Department of Health Science and Research. He was also the College of Health Professions Strategic Lead for the development of the MUSC Health Neurologic Rehabilitation Institute. Dr. Bowden was part of the University of Florida Gainesville research and education community from 2002-2010, serving as a research physical therapist for the Brain Rehabilitation Research Center (BRRC) and an adjunct faculty member with the University of Florida Department of Physical Therapy. He was also an instructor for the Brooks Neurologic Residency Program from 2008-2018.

"During my 20-plus years of involvement in rehabilitation research, I have realized that the biggest need is to translate effective research protocols into clinical practice in order to improve the functional- and performance-based outcomes of rehabilitation patients," said Dr. Bowden. "Due to its established excellence, the Brooks enterprise presents as an amazing opportunity to not only optimize current outcomes, but use those data to influence future clinical decision-making. My vision for Brooks is to be a national leader in utilizing both best evidence and practice-driven data to assist individuals in achieving their highest level of recovery and participation in life."

Dr. Bowden's professional accomplishments include an extensive research portfolio, numerous peer-reviewed publications, being a recognized national lecturer in the field of neurologic rehabilitation as well as receiving several awards for teaching excellence. He holds a PhD in Rehabilitation Science from the University of Florida with an emphasis in Movement Science. He also holds an MS degree in Physical Therapy and a BS degree in Psychology – both from Duke University.

"We are delighted that Dr. Bowden is now officially part of the Brooks team and can help us continue to develop the learning and research health system that we all believe is crucial in order to advance the field of rehabilitation, enhance our clinical care delivery, patient outcomes and develop a post-acute system that is beyond expectations," said Trevor H. Paris, MD, FAAPMR, System Chief Medical Officer, Brooks Rehabilitation.

Established in 2010, Brooks Clinical Research is devoted to conducting innovative research studies that are focused on recovery. By leveraging strong relationships with academic, clinical, and industry partners, Brooks Clinical Research conducts high-impact research that focuses on solving real-world problems that patients and healthcare professionals experience in rehabilitation. To date, Brooks researchers have garnered multi-million-dollar grants, several national awards and hundreds of peer-reviewed publications. As the caliber of research expands at Brooks, so does the focus to become a national leader in advancing rehabilitation and clinical research.

Beyond the Treadmill – The C-Mill Provides Improved Outcomes

Brooks Rehabilitation is the only system in the Southeast with the C-Mill, a leading-edge training and evaluation treadmill from medical technology company DIH. Located in our Neuro Recovery Center (NCR) at Brooks Rehabilitation Hospital – University Campus, the C-Mill speeds recovery and improves outcomes through advanced training for gait and balance. It offers gaming scenarios and everyday life simulations through augmented and virtual reality and provides both fall safety and bodyweight support systems as needed.

Gait and balance issues can come from injuries, surgeries, neurological conditions, or compensating for pain or weakness. Gait and balance are more complex than one might think – together they involve lower extremity strength, the ability for repetitive leg motions, and foot and walking patterns like lifting and landing on a single foot or rolling over one foot.

Heather Cummings, PT, DPT is Lead Physical Therapist at the NRC. “We use C-Mill for a variety of patient diagnoses. The great thing about the C-Mill is that it allows you to work on a variety of issues that are involved with gait adaptability. You can seamlessly transition to different tasks without time-consuming set-ups or taking up extra space in the gym. It gives the patient opportunities for more repetitions.”

As Cummings notes, a C-Mill differentiator is its use of augmented and virtual reality for gaming and simulations. The patient gets more accomplished when these activities are brought into therapy.

“One of the benefits of the C-Mill is that you make exercises more entertaining and more fun,” said Cummings. “Often, a patient has a difficult time walking around a track or on a regular treadmill. They get focused on their own physical difficulties or how it’s just plain boring. But the C-Mill really helps make it something exciting. A patient’s competitiveness kicks in with games and simulations. They don’t realize how much farther they’re walking, how much longer they’re standing, how much more effort they’re giving because they’re focused on a fun activity. You can see, in real time, somebody who would have only walked for maybe a few minutes now make it through 10 minutes of activity without stopping.”

The C-Mill provides immediate, direct feedback, as well as short-term and long-term progress reports. This means the

therapist can effectively tailor each session to the patient and their outcomes.

“We have a C-Mill patient profile, and it records each session and each activity. It’s recording information about their gait and balance, things like if they have a preference of putting weight on their right leg or left. We can use that information to see changes over time,” said Cummings. “We can go back and see how successful they were with each activity, too. So, this time with the same activity we can see how they’ve improved, how their ability to adapt to an environment is getting better. As a therapist, I don’t need to rely on notes or memory – the C-Mill records it all.”

The C-Mill is the preferred piece of equipment for many of Cummings’ patients. It’s very versatile and a patient will still get benefits despite how often they use it.

“I can customize it no matter what to my patient’s needs, which is extremely useful,” said Cummings. “We never get to a point where it’s too easy for a patient and they need to move on to different equipment. We can continue to challenge a patient and progress regardless of the patient’s level at any one time.”

Brooks Partners with Mayo Clinic to Provide Innovative Acute Hospital Care at Home

Alex Broner, RN, BSN, is a clinical team manager for Brooks Home Care and the Brooks Advanced Care at Home program. Under the Advanced Care at Home program, Brooks provides advanced acute nursing care for patients with conditions such as congestive heart failure, chronic obstructive pulmonary disease, diabetes, hypertension, hematology/oncology and complex wounds in a patient's own home.

This national initiative started as a response to the COVID-19 pandemic. By November 2020, the United States saw more than 13 million confirmed cases of COVID-19, and over 250,000 deaths. Hospitals and healthcare personnel were overwhelmed. In response, the Centers for Medicare & Medicaid Services (CMS) rolled out the Acute Hospital Care at Home initiative, a waiver-based program allowing approved hospitals to expand their capacity by providing inpatient-level care in an individual's home. One of these approved facilities is the Mayo Clinic in Jacksonville, Fla.

Mayo reached out to Brooks, and others, to be community-partners, providing an option for patients with conditions previously managed in a hospital to transition to a home setting and receive compassionate, high-quality virtual and in-person care and recovery services. Under the program, some patients are able to defer from the hospital completely and go straight home for care. Others spend time at Mayo but then have a reduced length of stay. For example, instead of being in the hospital for seven days with sepsis, a patient stays for the first three, and then can continue treatment at home.

Broner said, "'Hospital at home' programs were around before COVID was known. When we started the program in 2020, we were one of a handful in the country. COVID was a catalyst to jumpstart this across the nation. In general, these programs are born out of trying to reduce the cost and strain on hospitals and to look at alternate pathways that could provide the same care, more cost-effectively, with better patient outcomes. We're honored to partner with Mayo and provide groundbreaking care."

Broner also manages a team for Brooks' "traditional" Home Health services – providing medically necessary, physician-ordered, skilled care in the home for individuals who qualify as homebound. These services include skilled nursing, physical therapy, occupational therapy, speech therapy and social services. Broner explains that for the Mayo program, Brooks assembled a completely different team.

"We hired four nurses who were right out of acute settings," said Broner. "What they're doing now is literally what they would be doing in hospitals."

Yet, similar to the experiences of new nurses in Brooks' Home Health services, an acute care nurse going into someone's house, finds that it's a very different job. Broner said, "You're walking into this person's home. In addition to being a great acute care nurse, your personality and ability to fit into a home healthcare culture is absolutely vital. You have to develop rapport and trust with the patient and their family. And even though you have support via technology, you have to work independently and be innovative."

The program has been a success so far. Admissions into the program have grown steadily since its inception. Studies suggest at-home care provides better outcomes for patients and costs less to provide than traditional inpatient care. Outcomes in the Mayo-Brooks program are following that trend. Patient mortality, readmissions, cost and length of stay are all tracked and are all lower than a brick-and-mortar comparison. Patients are also more likely to recommend acute care at home than an inpatient hospital stay.

"Brooks is known for being innovative. We really believe that hospital at home is a future avenue for health care, and we wanted to be involved from the start," said Broner.

The Brooks Acute Care at Home Team

Getting Back in the Race After Knee Surgery

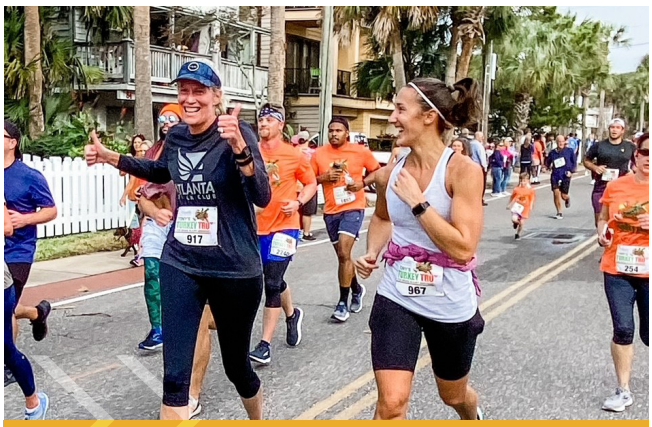
Suzanne Krueger was a competitive distance runner for decades, ran multiple marathons and was working with a running coach 2-3 days a week. When she moved to Jacksonville, Fla., from Atlanta, Ga., in 2021, she came to the Brooks Rehabilitation – San Pablo outpatient clinic because she was having increasing left knee pain that was making it difficult to continue training. "I was the lucky one assigned to her case, and we would eventually go on to work together three times for her left knee over the course of two years," said Mallory Behenna, PT, DPT.

When Suzanne first started physical therapy, she worked on knee and hip strengthening, as well as soft tissue mobility, joint mobility and mechanics. "While working with her in this case, I completed the coursework for trigger point dry needling. I was able to be part of the first cohort at Brooks to get our dry needling certification through Brooks' Institute of Higher Learning," said Behenna. "Suzanne had dry needling as part of her therapy in Georgia and it had helped her tremendously, so she was willing to be one of my first patients for dry needling."

Suzanne's second and third cases were both post-operative, as she and her surgeon determined she needed to proceed with surgical management to get her desired results. Her first surgery was not as successful as she and her physician had hoped, so they proceeded with a subsequent surgery about a year later. "In this second post-operative case, we battled with managing her pain early on, which really limited her participation. She could only bend her knee about 28 degrees at her evaluation, with at least 140 degrees of bend being normal, and her pain levels really prevented us from moving forward," said Behenna. However, by this point, Suzanne had a tremendous amount of trust in her therapist, and was an incredibly hard worker. "She did everything I asked of her and then some, and eventually did exceptionally well, going on to regain all of her range of motion in that knee and equal strength with the right knee."

After an over two-year hiatus, Suzanne was able to return to doing one of the things she is most passionate about: running. "In November of 2022, almost three years after I first met Suzanne, I had the incredibly high honor of joining her in her first race," said Behenna. Suzanne chose the annual Tony's Turkey Trot 5K for Brain Injury Awareness, which was coincidentally named in honor of another Brooks patient. "In September, she shared her goal with me and asked if I thought she would be ready for the November race. I told her we would make sure that she was," said Behenna.

In October, Suzanne asked her physical therapist if she would join her. "We ran every step of those 3.1 miles together, and crossing the finish line with her was one of the highlights of my career to date," said Behenna. "Not only that she would trust me with her rehab time and time again, but the fact that she would trust me enough to invite me into something so personal and meaningful to her, it meant more to me than she could ever know."



"We ran every step of those 3.1 miles together, and crossing the finish line with her was one of the highlights of my career to date."

Alese Hairston's Miraculous Recover from Brain Injury

Alese Hairston has been through a series of second chances in life. She got a second chance at love when she and her husband Fred reconnected on Facebook 30 years after meeting in high school. And now she has a second chance at life after a series of complications left her unresponsive and on the verge of hospice care.

Alese's remarkable story started on April 1, 2022, when she went to the emergency room at her local Mississippi hospital for dehydration, dizziness and nausea. While in the ER, she fell from a stretcher and hit her head causing a subarachnoid hemorrhage (bleeding in the space around her brain) and hydrocephalus (a build-up of fluid in the cavities within the brain). She was airlifted to University of Mississippi Medical Center (UMMC) where she was put into a medically-induced coma, put on a ventilator and had a ventriculoperitoneal (VP) shunt placed to drain the fluid.

Alese was discharged home Memorial Day weekend and was "almost walking" her husband said. Her shunt then failed and from there "it was one setback after another," said Fred. Over the next five months, Alese and Fred truly lived through a nightmare.

Alese had multiple surgeries due to complications with her VP shunt. She developed sepsis, a sacral wound with osteomyelitis, multiple infections and was on a ventilator. She was transferred back and forth from the ICU at UMMC to a Long Term Acute Care Hospital (LTACH) and was now "basically unresponsive," said Fred. He was told there wasn't much hope and plans were underway to transition Alese home with hospice services…until fate intervened.

"I needed dog food and randomly stopped at a Walmart in Tillman's Corner, Ala., with our Yorkie. A couple stopped to

pet the dog and we struck up a conversation," said Fred. "We talked awhile and I eventually shared Alese's story. They asked me if I ever heard of Brooks Rehabilitation in Jacksonville, Fla. I never got their names, but I'm not sure they were real. I honestly believe they were angels sent to help us."

"I received a referral from an LTACH in Mobile, Ala., in October," said Wendy Morris, MSN, RN, Brooks Regional Liaison. "As I read and reviewed Alese's medical records, I thought this couldn't possibly have all happened to one person."

Fred wanted to make sure he gave Alese every opportunity to recover. His gut was telling him that she was "in there" and trying to get out. He wanted her to have the ability to start to respond to others, to express feelings, to begin to follow commands and have quality of life.

"After talking with Fred, I spoke with our medical team at Brooks. It was decided that we would admit Alese to our Disorders of Consciousness (DoC) program to see if our team of brain injury experts could make a difference and help Alese emerge," said Morris. "What did we have to lose? Fred already agreed to hospice. If we brought her to Brooks and she made no gains, we could at least provide education to Fred and emotional support through our neuropsychology team to help make the transition home with hospice easier and more bearable. And Fred would at least have the satisfaction of knowing he had given Alese every opportunity."

But Fred truly believed that Alese would recover. "Why would God allow me to meet a random stranger in Walmart in Tillman's Corner, tell me about Brooks Rehabilitation Hospital in Jacksonville, Fla., and not provide the miracle?"

Miracle or clinical expertise can be debated, but Kenneth Ngo, MD, Medical Director of Brooks Rehabilitation Hospital – University Campus, Medical Director of the Brain Injury Program & Brain Injury Day Treatment Program, claims Alese "made a remarkable recovery, like top five in my entire career for someone with such severe debility and injury. "

Alese was admitted on Oct. 31 to the DoC program. On the morning after her admission, she received a DoC team evaluation, with all members of her rehabilitation therapy team, led by Clinical Neuropsychologist, Angela Colaiezzi, Psy.D., in order to provide Fred with an accurate picture of where Alese was at in her recovery. As Amela Trako, Brain Injury COTA/L, CBIS, BSH, shared "She needed 100 percent help for all self-care and often even a second person to assist, extensive wound care requiring a wound VAC, tube feeing for all nutrition and trach care. She truly had all disciplines working together throughout her recovery."

"Once we arrived at Brooks, there was never a plateau, just a steady incline in her abilities. I truly believe it was divine intervention that led us to Brooks. Obviously, HE has bigger plans for my beautiful wife!"

The team soon learned that Alese was indeed "in there." She first began to track with her eyes, then started moving and responding on command. She emerged from a DoC state a short time after that. Her clinical team began working on strength building and swallowing. Alese started to mouth words with no sound and then progressed to a whisper before starting to talk again. They consulted with the Brooks Low Vision Center to help with her visual challenges.

When Alese was discharged home right before Christmas, she just started taking steps using a specialized Arjo walker to support her. She was also stating meal trials and intake with her speech-language pathologist. Hannah Sabourin, MSOT, OTR/L, said "Alese is a warrior! She manually propelled her wheelchair 15 feet with only 25 percent assistance. She was able to feed herself with supervision, wash her face, comb her hair, wash her hands and brush her teeth with less than 25% assistance."

"Once we arrived at Brooks, there was never a plateau, just a steady incline in her abilities," said Fred. I truly believe it was divine intervention that led us to Brooks. Obviously, HE has bigger plans for my beautiful wife!"

Orthopaedic Residency and Fellowship

Educating for Excellence in Orthopedics

The Brooks Rehabilitation Institute of Higher Learning (IHL) provides world-class educational opportunities focused on advancing providers' skill in the area of medical rehabilitation. Educational opportunities include continuing education courses, accredited residencies and fellowships, clinical student internships and other unique modes of post-professional development. The IHL offers both an Orthopaedic Residency program and a Fellowship in Orthopaedic Manual Physical Therapy (OMPT).

Residency and fellowships are not required for physical and occupational therapists in the way they are for physicians. When a physical and occupational therapist graduates from school, they are a generalist. The programs that the IHL and its highly skilled faculty offer allow Brooks to help therapists specialize – thereby becoming more efficient and more effective.

ORTHOPAEDIC RESIDENCY

The residency program curriculum covers everything from advanced orthopaedic practice and clinical problem solving to practice management and educational theory. The program is one year in length and consists of three components that include didactic/psychomotor classes, clinical mentoring and unique learning experiences, including the opportunity to practice in Brooks' state-of-the art outpatient facilities alongside experts in multiple disciplines

and specialty populations. The Orthopaedic Residency Program will prepare physical therapists with the knowledge and skills needed to sit for the American Board of Physical Therapy Specialties (ABPTS) board certification exam in orthopaedics (OCS). In addition, the development of case presentations and written reports prepare the resident for participation in professional conferences and potential submission for publication.

Currently, Brooks offers two Orthopaedic Residencies, one located in Jacksonville, Fla., and the other located in Orlando, Fla. Both programs include the same high quality curriculum with a dedicated team of faculty members. The program in Jacksonville has been accredited with the American Board of Physical Therapy Residency and Fellowship Education (ABPTRFE) since 2007. ABPTRFE has granted the Brooks Rehabilitation Orthopaedic Residency – Orlando candidacy status. Candidacy status signifies satisfactory progress toward accreditation.

ORTHOPAEDIC MANUAL PHYSICAL THERAPY (OMPT) FELLOWSHIP

In collaboration with the University of North Florida, Brooks IHL offers an ABPTRFE and Accreditation Council on Orthopaedic Manual Physical Therapy Education (ACOMPTE) credentialed Fellowship in Orthopaedic Manual Physical Therapy (OMPT). The program provides an eclectic; evidence-based educational experience for individuals interested in attaining highly specialized skills in the practice

area of Orthopaedic Manual Physical Therapy. A fellowship is the highest level of clinical training available for physical therapists. Fellows are frequently post-residency prepared or board-certified specialists.

The focus of this two-year program is on developing expert practitioners who are fluent with clinical reasoning algorithms and highly skilled with performing advanced psychomotor techniques. This program is a full time "immersion" into the professional practice of OMPT, so the individuals enrolled will be practicing within Brooks Rehabilitation during the course of the program. The primary training offered within the program consists of in-person classes for didactic and psychomotor coursework, clinical mentoring and supervision, and directed learning activities. Additionally the program focuses on developing skills beyond excellent patient management to enhance the practioners leadership within education, scholarly activities, advocacy, practice management and professional service.

"Going through an OMPT Fellowship is not just about 'what' you learn, but about 'who with' and 'how' you learn. You are a part of a strong community with your classmates and past fellows. You are surrounding yourself with people just wanting to get better, and willing to ask questions and discuss their ideas openly," said Trent Harrison, PT, DPT, OCS, FAAOMPT, Program Coordinator.

Other physical therapy residency programs offered by Brooks include: Women's Health, Geriatrics, Neurology (Jacksonville and Daytona), Pediatric and Sports, as well as a Neurologic OT Fellowship, Speech Therapy Clinical Fellowship and a Transition to Practice Nursing Residency.

A HIGHER RATE OF ACHIEVEMENT

NATIONAL VS. BROOKS

PTs Graduated from a Residency

3% | 41%

Completed a Fellowship

1% | 7%

Earned a Board Certification

15% | 30% +

The **Graduation Rate** for both the **Orthopaedic Residency** and **Orthopaedic Manual Physical Therapy (OMPT) Fellowship is 100%**

BROOKS® Rehabilitation
INSTITUTE OF HIGHER LEARNING

Pediatric Day Treatment Program

Supporting the Unique Needs of Children and Teens

As Brooks Rehabilitation has done in creating many of its programs and services, they sought to fulfil an unmet need for patients when developing the Pediatric Day Treatment (PDT) Program.

Similarly to the Brooks Brain Injury Day Treatment Program or the Spinal Cord Injury and Related Disorders Day Treatment Program, the PDT program provides individualized multi-disciplinary therapy for children and teens (ages 5-18) who:

- are living with a lifelong disability (acquired or congenital)
- would benefit from intensive rehab services to maximize their recovery outcomes
- would benefit from intensive rehab services to increase their participation in activities outside of the home.

"We know that kids have a variety of different needs, whether it's based on their age, their diagnosis or just their preferences. We designed this program to meet a specific need and fill a gap in the community, and it's done exactly what we hoped it would do," said Steve Walczak, PT, DPT, PCS, Pediatric Program Manager. "We wanted to make sure that we're working with patients as they're transitioning either from acute care or some sort of transition or change in status, and we're able to help them reintegrate back into the community.

Participants must be able to tolerate three hours of therapy and require treatment from at least two therapy disciplines to be an eligible candidate for the program. The program offers two separate half-day sessions, mornings and afternoons, every weekday. Each three-hour session consists of:

- One-on-one individualized therapy services (physical, occupational or speech therapy)
- Group participation-based activities
- Community outings
- Functional skills training
- School Re-entry Program
- Caregiver empowerment
- Recreational Therapy
- Music Therapy
- Connection to Brooks Community Programs

The team also focuses on recovery with intensive programming and state-of-the-art technology. There are age-appropriate activities and equipment available for both young children and youth along with access to advanced technology in the Brooks Neuro Recovery Center (NRC). Additionally, the program will have physician and nursing support available as needed along with case management services.

However, the main goal of the program is participation. For a child or teen, a big part of their life is how they are interacting with their peers, integrating into school, work or college. "We're really happy with what we're seeing when it comes to patient outcomes. Outcomes like their recovery from the physical rehabilitation side of things but also, when we're looking at long-term outcomes, what's going be most meaningful is that they have a community," said Walczak. "So we're pulling in our resources from our School Re-Entry specialists, our Pediatric Recreation and Adaptive Sports & Recreation programs to come in and work with the patients. The kids and teens get to meet the coaches so that ideally, once they leave the program, the patient and the family can show up on a Thursday night to practice and they're already plugged in."

Patients have been able to go through their primary insurance but also use a hybrid payment model. Insurance or payment has not been a barrier for anyone. If they are appropriate for the program, they've been able to participate. Patients are coming from as far away as Tallahassee, Fla., because they feel the services provided hold that high a value to them.

"It offers a little bit more than what you typically see in traditional outpatient therapy because you get some of that magic from kids and teens working together. It makes it a little bit more fun, a little bit more high energy, and we've already seen a lot of benefit from that occurring," said Walczak.

Recently, two patients with the same injury, the same challenges and about the same age got to meet each other while one was in inpatient and the other was in PDT. They were able to encourage each other and talk about their recoveries. It's unique that the program is located in the same place as the inpatient rehab so patients can have that peer-to-peer interaction and connect to the whole Brooks system of care. And it's not just about the patients, but also the caregivers and families. Parents may be sitting together on the sideline, and they start to talk and form their own support system.

"The number I'm most excited about is the 43 percent conversion rate for patients that go to our inpatient rehabilitation hospital and have been able to continue that intensive rehab with resources from the hospital and case management as they move into that next step at home," said Walczak. "We've see many patients throughout the years struggle with that transition. We want to be a solution. Every patient has unique needs and we want to make sure that no one is missing out. We're really trying to help families have a soft landing as they are moving on to the next step in their recovery."

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