

IMPACT OF THE ZEROG GAIT AND BALANCE SYSTEM



Community Hospital in Munster, Indiana highlights the immediate impact Aretech's ZeroG[®] Gait and Balance System made with their patients, physical therapists and occupational therapists.



Quick Adoption of the ZeroG Gait and Balance System

Community Hospital in Munster, Indiana recently acquired Aretech's ZeroG® Gait and Balance System. Within their second month of owning ZeroG, and after logging 90+ hours of use across 170 sessions, they have prevented 600 falls and the therapists, patients, and administrators are already convinced that ZeroG is the way of the future.

Amy Castillo, Director of Therapy Services remarked, "I envision that there will be more ZeroGs within our hospital system because of the great value. It really changes the way you can treat and I think we can empower those patients with the most difficult deficits to overcome[...]Those that were never able to attempt walking, or attempt stairs, now not only are they attempting them, but they are moving to independence. I envision it will be the way of the future for some of these patients."

Amy wasn't just speaking in hyperbole; she has already seen some of their more complex patients achieve milestones that seemed nearly impossible a few months earlier.

"Elizabeth" who suffered a dense stroke, never wanted to try stairs in therapy and would choose to go home instead of attempting stairs while out in the community. However, once her Physical Therapist got her harnessed into ZeroG she felt much more confident to tackle her biggest fear. After only a few sessions she was able to do stairs "20 times in a session", said Samantha Paige, PT, DPT. "She leaves exhausted but feeling more confident in herself." Then one day she triumphantly walked into the gym and shared that she had climbed a set of stairs outside of therapy for the first time!

Amy credits the immediate impact ZeroG has had to the simplicity of its operation and the creativity of her staff. Jake Virgo, PT, DPT, NCS, one of the ZeroG Super Users, believes ZeroG can help all of his patients and stated, "I can't think of a patient that wouldn't benefit from some sort of treatment. I can take any patient and find a beneficial way of using it with them." Jake also added "It's pretty fast too, to get in, get going and get everything set up its really quick so it doesn't take up a lot of your session which is helpful."



Beyond Just Gait and Balance

Jake's favorite exercise to do in ZeroG with his SCI patients with poor trunk control is supine to long sitting, with the patient's legs hanging off the mat table for core activation. Jake is able to modulate the level of dynamic body-weight support as the patient moves through the movement which allows him to provide assistance (i.e. increase BWS) or make it more challenging (i.e. decrease BWS).

Jake isn't the only one on staff finding creative uses for ZeroG. Samantha has turned to ZeroG for one of her shoulder patients suffering from weakness and instability, which at first, sounds counterintuitive. However, Samantha immediately saw an opportunity and got her patient into ZeroG doing modified pushups with dynamic BWS and planks to strengthen his upper body.

Thanks to ZeroG, therapists have been able to do things with patients they simply weren't able to do before. Samantha remarked "I have a spinal cord patient and there is no way I would ever put him on the floor without ZeroG because it would take at least three or four of us to get him up."

Amy added, "From a risk management standpoint the hospital was pretty excited because employees do get injured while trying to mobilize patients. Now we can manage a patient independently without 2 or 3 support staff while also being much safer." Hermelinda Hernandez, DPT, smiled and stated, "My back is feeling so much better!"



An OT's Perspective

A patient's ability to take care of themselves is a critical component to their return to the community and regain independence. Occupational Therapist Michelle Walker has been treating a dense stroke patient together with Jake. The patient's goal is to regain enough independence in order to allow her primary caregiver, her sister, to go on a vacation by the end of the year. Achieving this goal hinges almost entirely on this patient's ability to take care of herself in the bathroom, which is the only place where she won't let anyone else help her but her sister. With ZeroG, Michelle and Jake feel this goal is finally achievable.

Jake commented that "This woman was someone who was definitely limited due to neurological impairments, but she was greatly limited by fear." To eliminate the fear of falling, Jake and Michelle got her in ZeroG where she felt safe just standing. From there, they were able to emphasize the whole clothing management portion of lower extremity dressing.

The idea was that if she could get used to the feel of pulling her pants up and down and reaching across her body while safe in ZeroG, they could slowly transition her out of ZeroG after she has mastered the skills.

Occupational Therapists at Community have also noticed when patients are coming to them after physical therapy using ZeroG, is that they have greater confidence and improved endurance and stamina. The patients are tolerating much more simply because they are doing more gross movements in ZeroG as compared to smaller more confined movements in parallel bars.

Not Enough Sessions

The therapy staff at Community all agreed that they are seeing patients who normally could only be up moving for 10 minutes before needing a rest who now can be up and moving for 30 minutes before even realizing that much time has passed. Jake added "It is because they feel more comfortable and safer in ZeroG."



ZeroG has caught on so quickly at Community Hospital that the therapists found themselves fighting over who gets to use it with their patients and a solution needed to be drawn up. That solution has been dubbed "ZeroG Draft Day" by Jake which means every Friday afternoon, before departing for the weekend, the clinicians gather around the ZeroG schedule and take turns selecting time slots for the following week until they are all gone.



The more ZeroG gets used in the clinic the more the demand for it increases. Samantha commented, "I've had patients see other patients in it and have said they think that ZeroG might be good for them too." Amy Castillo added, "We haven't even marketed it yet and we are already getting a healthy volume of patients for this modality". Due to this demand Amy has had to limit their Acute Rehab Unit, which is located three floors above the outpatient gym, to only accessing ZeroG on the weekend when the Outpatient staff and patients are not around. In the meantime, they are exploring adding a second ZeroG robot to their track or another entirely separate system on the ARU floor.

The word has begun spreading throughout their health system and Amy recalled a conversation she had with a physiatrist who asked her what they could do for their partial weight bearing orthopedic patients. Amy smiled and said, "This is just the tip of the iceberg."

Even outside of their health system, PTs are recognizing the impact ZeroG has on certain patient populations. Samantha added, "My sister is a PT as well and when she gets a neuro patient she has begun thinking to send them over to us because she knows we have the equipment here." In addition, she is having more fun now that ZeroG has been installed and directed others deciding whether or not to get a ZeroG, to simply, "Get it!"

About Community Hospital

Community Hospital, one of four premier healthcare facilities in the Community Healthcare System, is nationally recognized for its outstanding quality of care through a full range of inpatient and outpatient programs and specialty service lines.

For more information on Community Hospital, a 458-bed, not-for-profit, non-sectarian, acute care facility recognized for meeting this nation's highest health care standards, visit: <https://www.comhs.org/about-us/community-hospital>

For more information about the ZeroG Gait and Balance System and other advanced rehabilitation technologies, visit: www.aretchllc.com