

Biodex Technology helps enhance rehabilitation of diverse acute-care and assisted living residents

The Suffield House







Progress is easily tracked on the Biodex BioStep through increasing degrees of difficulty. Patients challenge themselves each day to reach new plateaus.

The Suffield House

The Suffield House is a 128 bed Skilled Nursing Facility located in Suffield CT, surrounded by country roads and acres of farmland. It was built in 1991 by its owner, Harold J. Moffie with a vision of providing the highest quality of nursing care for the elderly and for those in need of rehabilitation services. The family owned and operated facility offers long term skilled nursing care, short term rehabilitation, respite care, palliative care and assisted living.

Biodex had the opportunity to speak with Kathleen Mack, Director of Admissions, and Anthony J. Zukowski, Director of Physical Therapy about the facility and how they incorporated the Biodex Balance System and BioStepTM into their rehabilitation protocol.

Q: What percentage of your 128 skilled nursing beds are occupied by long-term care verses short-term rehab?

Kathleen Mack, Director of Admissions: About 70% of the population is long-term care, and 30% short-term rehab patients.

Q: Where do most of your short-term rehab patients come from?

Mack: We're right on the border of Massachusetts and Connecticut, so we work with Bay State and Mercy Hospital in Massachusetts, as well as Johnson Memorial Hospital, Hartford Hospital, Saint Francis Hospital, and Rockville in Connecticut.

Q: Is there significant competition for short-term rehab patients?

Mack: Yes, because there are quite a few facilities around us that provide short term rehab in addition to palliative as well as long-term care, so we're all competing for those same individuals.

Q: What mix of clinical diagnoses do you typically see?

Mack: We have a strong orthopedic component. As a result, we have orthopedic surgeons who directly refer patients to us from both Hartford Hospital and Saint Francis. Our relationship with those surgeons is so strong that my business cards and Suffield House packets of information are at the doctors' offices. And so, when one of these surgeons is getting a patient ready for the procedure, they're informed that they're going to have a very short stay at the hospital, followed by a period of rehabilitation at Suffield House, until it's safe for them to return home. As a result, we have "pre-books" – so we know in advance that, for example, a particular surgeon's patient will undergo a knee procedure on Monday, and that they'll be here Thursday. So we're able to keep the momentum going and hopefully not have a lot of beds down.

Q: Are all Medicare patients, or are some privately insured?

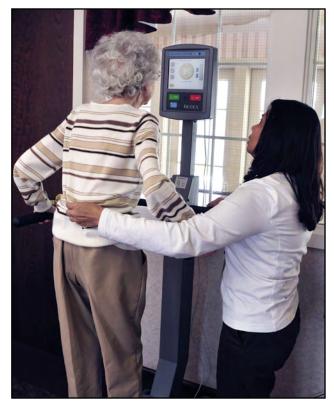
Mack: The majority are Medicare. We have just become providers to several private insurers, such as HealthNet. Up until now, we have worked with Medicare as the primary insurer, with the secondary insurers being Blue Cross, AARP, Cigna, Aetna, U.S. Healthcare etc. We also work with Workers' comp.

Q: How do you staff your physical therapy department here?

Anthony J. Zukowski, Director of Physical Therapy: Here at Suffield House, we have three physical therapists, one physical therapy assistant and one rehab aide here throughout the week. We also have two occupational therapists and two contract speech therapists. Both PT and nursing students from Central Connecticut State University and University of Connecticut rotate through the department. We have a varied patient mix. Beyond our orthopedic patients, we see patients with strokes, recent amputees, and cardiac recovery patients who need to build endurance. We see patients with neuromotor diseases such as Parkinson's, COPD, and post-op complications patients, too.

Q: At the current time, how are you using the Biodex Balance System?

Zukowski: We're working with a lot of orthopedic patients, as well as our general population of residents who are having gait and balance disturbances. The Balance System is being used as an adjunct to our standard physical therapy. We enjoy using it to stimulate patients to do work harder than they might otherwise wish to do. First of all, it gives them a visual feedback on how they're doing at normalizing their balance. And from a somewhat competitive standpoint, they can see their improvement, either on the Balance System printout or visually on the screen.



The Biodex Balance System is used to stimulate patients to work harder than they would normally choose. Visual and printed feedback allows them to see improvement.

Q: The Balance System has both static and dynamic modes. Are your residents capable of operating on the dynamic mode or mainly static mode?

Zukowski: For most of our patients we're using it static, but, again, depending upon the patient and their progress some certainly have been able to go to dynamic. Because the Balance System is still fairly new to this facility, we move very carefully in challenging our residents and patients. Our first task in rehabilitating post-arthroplasty patients is to get them weight bearing. The nice thing about the Balance System is that it's a closed-connect chain where you're actually putting them into weight-bearing situations and then you're challenging different parts of their balance. The objective of our rehabilitation is to get

them back to their living environment, safely. If that means getting them up and down stairs, then we take them up and down stairs. We've integrated the Balance System into our complete program of range of motion and strengthening protocol, parts of which are closed chain, and parts open chain. We spend time teaching them how to safely transfer. Oftentimes our patients are in rehab here when it's time for their first doctor's appointment. We like to get family members here on that occasion, and have them work on doing car transfers. In our department we try hard to recreate a normal living environment. For example, the occupational therapists have a kitchen environment where they can challenge patient balance by reaching into a refrigerator, reaching into a oven, and getting a glass of water and carrying it over to a table. We try to build their confidence in performing everyday tasks here, so they're able to go home with family and be confident that they can continue to progress. When we discharge them home, a staff member will accompany them, to determine if there are barriers in the home that need to be addressed, the recommendations are made by the rehab staff.

Q: What is the typical duration of stay for an orthopedic patient?

Zukowski: You know I am glad you asked. It seems it has been on everybody's mind of late, because they're told by some discharge planners that they might be here only three or four days after they are discharged. We tell them, "If you need to go upstairs in your home, and you can do that safely after a week, fabulous, and you'll be our poster child." The nice thing about the Balance System is that you're actually putting them into weight-bearing situations and then you're challenging different parts of their balance mode. But we're looking at 10 to 14 days for most elective surgical patients. For some trauma patients, like those who've been seriously injured in a fall, it can be much longer. One surgeon encourages patients to stay here for at least two weeks. He doesn't want to see people in his office with range of motion issues, particularly with knees.

Q: Do you typically receive weight-bearing direction from surgeons?

Zukowski: Yes. Most elective surgical patients are directed to start weight bearing early, because studies have shown that it actually aids in bone healing. In the patient with a fracture, the prescription may start with only partial weight bearing, or occasionally, non weight bearing. We can use the Balance System to help patients understand how much weight they're putting on a limb, and give them a little bit better understanding of the concept of increasing weight bearing.

Q: What can balance rehab do for those with Parkinson's disease?

Zukowski: Obviously, medication is playing a primary role in these patients. In physical therapy, our primary objective is to help them get stronger, to get on their feet, and to be able to do transfers more smoothly. Getting initiation is a big problem with Parkinson's patients.

There is a balance component that's incorporated into improving their ability to do transfers. Before we started using the Balance System, we used big balls that they would sit on while performing exercises like throwing and catching. Now we use the Balance System to prepare Parkinson's patients for occupational therapy, where they stand at the kitchen sink and have to reach for things, where they'd otherwise be losing and regaining their balance.

"Now we use the Balance System to prepare Parkinson's patients for occupational therapy, where they stand at the kitchen sink and have to reach for things..."

Q: How does exercise on the BioStep™ Semi-Recumbent Elliptical trainer help Parkinson's patients?

Zukowski: Parkinson's patients get on the BioStep and they're able to loosen up their tight muscles — not only in the upper extremities but also the lower extremities. When they come off the BioStep, they're able to ambulate easier and freer without tiring themselves out. All our patients like the BioStep. Its offer of increasing degrees of difficulty shows they're making progress. One patient recovering from aortic aneurysm surgery loves the BioStep because he can see the progress he's making. Perhaps yesterday he went four minutes and he was pooped, but today he was able to go five minutes, and tomorrow, he wants to go six.



Parkinson's patients may loosen up tight muscles in both upper and lower extremities through exercise on the BioStep.

Biodex is always advancing our technology to serve you better.

Balance System[™] SD www.biodex.com/balance

BioStep[™] 2 www.biodex.com/biostep

For more information on Biodex Physical Medicine & Rehabilitation devices:

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