

CASESTUDY

## Biodex Balance System SD Inspires Patient Confidence

Beth Abraham Health Services



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Biodex Medical Systems, Inc.

20 Ramsey Road, Shirley, New York, 11967-4704, Tel: 800-224-6339 (Int'l 631-924-9000), Fax: 631-924-9241, Email: [info@biodex.com](mailto:info@biodex.com), [www.biodex.com](http://www.biodex.com)

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## Beth Abraham Health Services

For more than 90 years, Beth Abraham Family of Health Services (BAFHS), a not-for-profit organization, has been working to improve quality of life for New Yorkers in need – from all backgrounds and all walks of life – and currently ranks among the nation’s leading resources for long-term residential and community-based healthcare. Founded as a home-like alternative to institutional living, Beth Abraham has evolved into a leader in serving the elderly, chronically ill and disabled. Today, Beth Abraham ranks among the largest longterm care providers in New York State, serving all of New York City as well as Westchester, Nassau and Suffolk Counties.

Aja Stallings broke out of her game face with a great big grin, heaved a sigh of relief and allowed her eyes to linger proudly on the Biodex Balance System SD™ interactive display. “It’s amazing how much better she’s gotten at this,” announced Darryl Cruz, PTA, to the small gathering of patients and therapists in the Balance and Fitness room at Beth Abraham Health Services on Allerton Avenue in Bronx, NY.” After just a few sessions she’s really made tremendous improvement.”

“This is great,” said Aja as she stepped clear of the now stable foot platform and gracefully accepted a round of congratulations. “I feel so steady now, much more stable than just a few weeks ago. I really love this machine. It’s challenging and it’s fun.” That, according to staff members in both the physical and occupational therapy departments at this expansive facility is a common reaction from patients that have the Biodex Balance System SD™ incorporated into their rehabilitation program. It’s also the kind of reaction therapists here expect to see more of as they grow increasingly familiar with the capabilities of this unique device and identify more and more patients that should benefit from its usage.

## Confidence Leads to Better Balance

“I’ve been working at this facility for nearly 40 years,” said Jaime Franco, PTA in an interview following Stalling’s training session, and the Biodex Balance System SD™ is one of the most helpful pieces of equipment I’ve seen come into our rehabilitation area. Many therapists already recognize this device as a means of improving balance, ambulation and standing endurance through muscle strengthening and proprioceptive exercise, but just as important is its ability to improve patient confidence. For many people here, the simple fear of falling is what really hinders stability. The Balance System SD™ clearly helps patients overcome this concern.”

Franco noted “huge successes” using the Biodex Balance System SD™ with two recent patients that had severe fear issues impeding their ability to walk. He described one

patient as having especially strong anxiety in terms of moving while standing. This patient initially was “very stiff” on the parallel bars and at one point refused to move due to fear of falling. On the Balance System SD™, however, the patient immediately showed vast improvement.

“As soon as I got him on the platform and focused on the interactive screen,” explained Franco, “he forgot about his fears and began trying to answer the prompts from the display. Because he was so consumed by the balancing tasks required, he wasn’t thinking about falling. In my opinion, the machine actually took away his fear as he concentrated on giving the right answers by shifting his body weight as prompted. We put this patient on the Balance System SD™ twice a week for three weeks during which time his balance and general conditioning, with the aid of additional exercise in our rehabilitation room, improved enough that he was able to go home. That is the kind of outcome for which we all strive here.”



Jamie Franco, PTA with patient, Geronimo Lopez, who trains on the Biodex Balance System SD.

Another of Franco’s recent patients presented with poor balance and less than ten seconds of standing endurance between the parallel bars, but when he stepped onto the Balance System SD™ he was immediately able to stand for nearly three full minutes.

“During this patient’s very first session,” recalled Franco, “I got his wheelchair ready after a minute or two but he didn’t need it yet. When he saw I had the chair in position, he told me he hadn’t realized he was standing for so long. It was a big improvement right from the start and really showed how being focused on the interactive display and trying to ‘compete’ with the machine can have a very positive effect. As patients realize they can stand with greater stability for longer periods of time on the Balance System SD™ they gain the confidence to be more steady and to try harder. This extra effort is evident not only when patients are on the foot platform, but also later as they stand between the parallel bars or even attempt to walk unaided. It’s wonderful to watch such fast and steady improvement.”



Jamie Franco, PTA, Darryl Cruz, PTA, and Connie Tejada, VP Marketing/ Public Affairs from Beth Abraham Health Services.

### **A Big Team Effort**

There are, of course, many additional elements that go into generating positive patient outcomes at Beth Abraham. Aside from a highly qualified staff, there is an atmosphere of support between clinicians, therapists, patients and every level of department management. That combination helps keep staff members feeling comfortable and secure as they assess, evaluate, rehab and determine the ultimate best course of action for each individual that comes through the doors of this 430-bed facility.

“What we are trying to do here,” explained Suzanne Velez-Perez, OTR, the Director of Rehabilitation at Beth Abraham, “is create a home-like environment where everyone who enters our rehab services will reap the benefits of state-of-the-art equipment and the competent field expertise of our licensed and credentialed therapists.”

“We are like a big family here,” continued Velez-Perez, “That’s something really special about this place. Many of our therapists have been here for years so there is great continuity and a feeling of community within these walls. We also have a long history here. The Beth Abraham Family of Health Services was established over 90 years ago and has grown into a mainstay of the community in

this northeast section of The Bronx. Our goal, of course, is to serve our area as best as we can by returning as many patients as possible to the community with positive, functional and successful outcomes.”

That’s no small task when you consider Beth Abraham is a skilled nursing facility located in a densely populated urban setting. Every patient seen has been deemed in need of special care with visits ranging from short-term stays lasting several days to long-term care that can last indefinitely. Typically, the rehabilitation department staff of ten therapists, plus a speech pathologist, treats 70 to 80 patients per day.

“We do everything we can to make this facility easily accessible and to provide our patients with what they need during their stay here,” continued Velez-Perez. “We welcome people in wheel chairs and even have our own fleet of motorized chairs for those who need them. We want prospective patients to know that we will do everything we can to maximize their potential so they can return to their homes with as much independence as possible and, if they need to remain for an extended time, that we will provide the services they’ll need throughout their stay.”

### **Little Things Mean A Lot**

It is easy to get the big picture at Beth Abraham, but the choice to treat patients with great respect and dignity for which this facility is known is also reflected in smaller, everyday decisions that go into making the programs here a success. The staff is courteous, responsive and communicative.

The positioning of rehab equipment is set in a logical order to facilitate easy access and make moving from one exercise station to another a simple task even for those with limited mobility. The main physical and occupational therapy rooms are spacious and well-maintained. There is a ramp leading up to the Biodex Balance System SD™ to make it wheelchair accessible and easy to address for patients that aren’t ready to negotiate steps. On the wall next to the system, a chart allows patients to compare their own balance scores against a normative value index.

Interestingly, the Biodex Balance System SD™ is located in a separate room called the Balance and Fitness room. “That,” explained Velez-Perez, “is because both our physical therapy and occupational therapy rooms are quite spacious and busy, so patients in those areas have the potential to be easily distracted. In the smaller and separate Balance and Fitness Room, however, patients are better able stay focused while also gaining a special intimacy with their therapists that helps develop a feeling of trust. This, we believe, is important if they are going to try to stand or work on improving stability. Just going into the separate room makes patients feel special while also serving as a cue that it is time to concentrate.”



Both Velez-Perez and Franco also believe that to get the most out of the Balance System SD sessions, it is important that therapists take time to explain to each patient how progress is measured, charted and compared. To that end, they are both quite pleased that the system can store test and training results, print out reports and compare a patient's progress to established norms.

“When you show patients these real numbers and graphs, and take the time to explain them in detail,” commented Franco, “they get a better sense of how they are doing and where they are headed.

Those quantifiable results can be a very important piece of the confidence puzzle while also helping to communicate need, progress and outcome to supervisory staff and third party payers.”

### **Looking Ahead**

Moving forward, Cruz, Franco and Velez-Perez expect the Biodex Balance System SD™ will be used on an increasing basis for both short- and long-term rehabilitation programs at Beth Abraham. A fall prevention program initiative is scheduled to begin later this year and the Balance System SD™ will be instrumental in gathering baseline data when patients begin their rehab programs, and in quantifying how much and how quickly their balance and stability improve. The staff also plans to target some of the population they might not have examined for balance-related problems in the past.

“People fall for a variety of reasons,” noted Velez-Perez, “and regardless of what that reason is, there might be a way that rehab can interface to have a positive impact on overall function. We plan to be increasingly aggressive in this regard.” Another growth area for use of the Balance System SD™ will come in the occupational therapy department since occupational therapists also need to address standing balance, standing tolerance and weight shifting activities because each of these are inherent in being able to take a shower, prepare a meal, shop for groceries, do laundry or perform other tasks at home.

“Most of all, we want people to know that Beth Abraham is not a place to go and to die; it's a place to live, be well and flourish. That's a concept a great piece of equipment like the Biodex Balance System SD™ can certainly help us get across.”

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### **Balance System™ SD**

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(800) 224-6339  
[info@biodex.com](mailto:info@biodex.com)

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