

*Employing Virtual Reality to Improve Balance*

## Bertec Balance Advantage™

The Bertec Balance Advantage™ is a computerized dynamic posturography system that treats various balance and mobility tasks and evaluates how well a patient is utilizing his or her sensory and motor systems. This information helps to determine the cause of the balance impairment and guides the clinician in formulating the best treatment plan.

### How does the Bertec Balance Advantage™ Work?

In addition to assessing sensory and motor impairments, the system also provides interactive, functional retraining exercises. The new technology of the Bertec Balance Advantage™ system incorporates immersive virtual reality to simulate real world environments which can be modified to patients' specific needs. Using visual biofeedback combined with sensitive, real-time monitoring of movement, therapists help patients more quickly achieve greater balance control.

### What are the Benefits of the Bertec Balance Advantage™:

This technology helps the clinician to differentiate between specific sensory and motor impairments by providing objective evidence needed for effective clinical decisions. The immersive virtual reality helps train individuals, using specific protocols, to address their impairments and improve clinical outcomes.

Individuals who may benefit from the Bertec Balance Advantage™ include those with:

- Inner-ear infection (labyrinthitis)
- Acute vertigo caused by head trauma or whiplash
- Chronic vertigo resulting from chemical or drug toxicity
- Acoustic neuromas
- Age-related balance dysfunction, or dizziness
- Stroke
- Visual-motor sensitivity



MARIANJOY

Assistive  
Rehabilitation  
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The **Marianjoy Assistive Rehabilitation Technology Institute** offers solutions to everyday problems of daily living encountered by individuals with disabilities. The Institute consists of seven distinct centers which apply advancements in technology to benefit individuals with disabilities through maximizing functional independence, as well as expanding educational, vocational, recreational, and communicative opportunities.

- **Assistive Communication and Daily Living Center**
- **Balance and Vestibular Center**
- **Driver Rehabilitation Center**
- **Gait Analysis and Mobility Center**
- **Prosthetic and Orthotic Center**
- **Swallowing and Voice Center**
- **Wheelchair and Positioning Center**



To make an appointment or  
for more information, call

**630-909-7150**

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