

# Gait

## Orthopedic Patients

### Goal:

Develop symmetrical gait by improving step length, step speed and right to left time distribution.

### Results and Benefits:

- Initiate rehabilitation earlier following joint sprains, surgical repair or replacement.
- Gains in range of motion, gait parameters, strength and endurance.
- Treadmill training effects are readily transferred to improved over ground walking speed and endurance
- Effective, efficient and safe use of clinician time.

### When combined with the Unweighing System:

- Rehabilitation can commence earlier as the Unweighing System provides a safe environment for both the patient and the clinician
- Improved proprioception and acceptance for weight bearing activity.
- Allows concentration on treatment, not physically supporting the patient.

## Spinal Cord Injury

### Goal:

Develop symmetrical gait by improving step length, step speed and right to left time distribution.

### Results and Benefits:

- The Gait Trainer forces the patient to focus on foot placement, which is reinforced through visual cues on the display.
- Sensory input from the rhythmic treadmill belt movement assists with patterning of the central nervous system.

### When combined with the Unweighing System:

- Rehabilitation can commence earlier as the Unweighing System provides a safe environment for both the patient and the clinician.
- Improved right to left time distribution and increased step cycles/sec during ambulation is achieved in an upright and fully supported position through repetitive and rhythmic movements.
- Allows concentration on treatment, not physically supporting the patient.

## Parkinson's Disease

### Goal:

Develop symmetrical gait by improving step length, step speed and right to left time distribution.

### Results and Benefits:

- The Gait Trainer forces the patient to focus on foot placement symmetry, which is reinforced through visual cues on the display.
- Improvement of step length and step time.
- Improvement of muscular strength and endurance and overall cardiovascular tolerance for physical activity.
- Improved step symmetry and increased step time during ambulation is achieved in an upright and fully supported position through repetitive and rhythmic movements.
- Treadmill training effects are readily transferred to improved overground walking speed and endurance.

### When combined with the Unweighing System:

- Rehabilitation can commence earlier as the Unweighing System provides a safe environment for both the patient and the clinician
- Allows concentration on treatment, not physically supporting the patient.

## Older Adult

### Goal:

Develop symmetrical gait by improving step length, step speed and right to left time distribution.

### Results and Benefits:

- Improved patient confidence with associated improvements of strength, balance and endurance.
- Excellent for older adults to perform physical conditioning exercises associated with rehabilitation or fall prevention program.
- Reduction in disuse atrophy
- Effective, efficient and safe use of clinician time.

When combined with the Unweighing System:

- Allows concentration on treatment, not physically supporting the patient.

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