

INVACARE®

# Solara® 3G

## Tilt-in-Space Wheelchair

### Why Choose Recline?

A recline system can provide a change in position by allowing the back to pivot rearward without any change in the position of the seat. Used in combination with a tilt-in-space system, recline systems can provide a variety of functional and clinical benefits to users, including additional pressure redistribution. As a chair is reclined, the surface area of the seating area is actually increased while the amount of force remains constant, providing additional pressure redistribution than the tilt function alone.

However, one of the main challenges of most manual recline systems is that they do not effectively manage shearing forces. Shearing forces, a byproduct of friction, can play a significant role in the development of pressure sores, and can contribute to an individual sliding away from a seating surface, lateral supports or headrest.

The new Invacare Solara 3G Low Shear Recline is the **only** recline system on a manual tilt-in-space wheelchair that effectively manages and minimizes shear forces. The innovative design employs multiple pivot points, allowing the back system to articulate as the chair is reclined. The design of the recline projects a virtual pivot point that is closer to the hip pivot point than in a recline system with a single, fixed pivot point.

### Comparison of Recline Options

#### Solara 3G Wheelchair: Multi-axis pivot recline

- Significantly reduced shear forces
- Headrest displacement virtually eliminated
- Lateral support(s) displacement virtually eliminated

#### Other Manual Recline Systems: Single, fixed pivot recline

- Unmanaged shear forces
- Headrest displacement
- Lateral support(s) displacement

**Advantage: Solara 3G Wheelchair**



## Benefits of Tilt and Recline

Tilt and recline can provide a variety of functional and clinical advantages to users and caregivers. Benefits may include the following:

### Functional Benefits

- Positioning to improve vision (line of sight)
- Positioning for safer/easier swallowing due to relaxed muscle tone in the neck region
- Positioning for feeding
- Improves postural/proximal stability, required for function
- Increases head control through improved postural support/proximal stability



### Clinical Benefits

- Provides additional weight shift/pressure redistribution by increasing the seating surface area, and redistributing pressure away from critical areas under the pelvis
- Reduces respiratory difficulty
- Positioning for feeding
- Facilitates management of lower extremity edema more effectively when combined with elevating legrest

### Caregiver Benefits

- Reduces attendant care required for some through easier management of weight
- Shift/pressure relief, fewer transfers in and out of the chair in the course of a day and overall increased sitting tolerance
- Allows easier positioning for respiratory care for some
- Allows easier positioning for bowel/bladder management for some

## Clinical Benefits of Low Shear Recline

- When utilizing a Tilt/Recline System for a client, the **Low Shear Recline** option can further reduce the effects of shear for optimal pressure redistribution and positioning
- Lateral support(s) displacement virtually eliminated
- Headrest displacement virtually eliminated



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