# Can powered wheelchairs really support 24 hour positioning?

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# Memory Function Examples

#### Working

- Seat level or slight tilt Seat elevated for desk
- Closed back angle
- Legrest at 90°

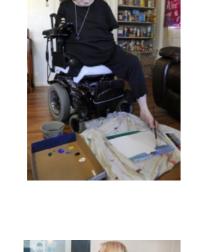


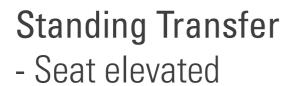
- Closed back angle
- Legrest at 90°
- Footplate to the floor

### Cooking

- Seat elevated to height of worktop
- Footplate 90°
- Backrest recline forward

How?





Watch TV / Relax

comfortable position

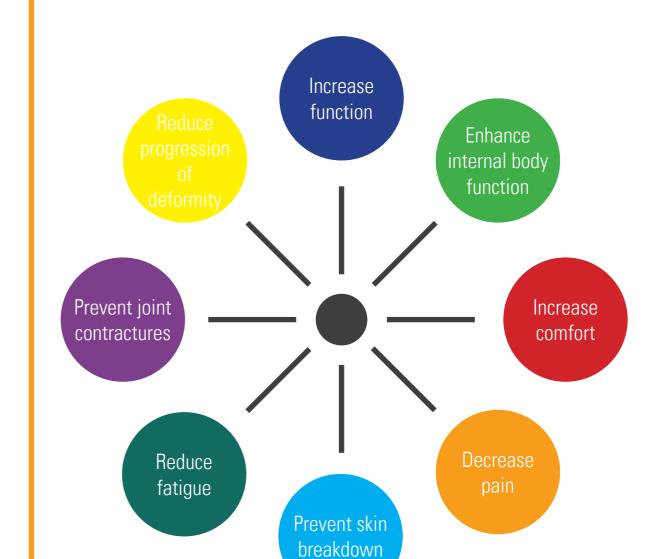
- Seated in most

- Legrest to floor
- Seat tilt flat
- Backrest recline
- forward

## What is 24hr Posture Management?

- "A planned approach encompassing all activities and interventions which impact on an individual's posture and function" (Gericke 2006)
- Involves optimising seated, lying and standing postures throughout day and night
- Encompasses all daily activities and may involve:
  - equipment e.g. Wheelchairs
  - individual therapy
  - active exercise
  - medicine
  - orthotics and splinting
- special surgical equipment

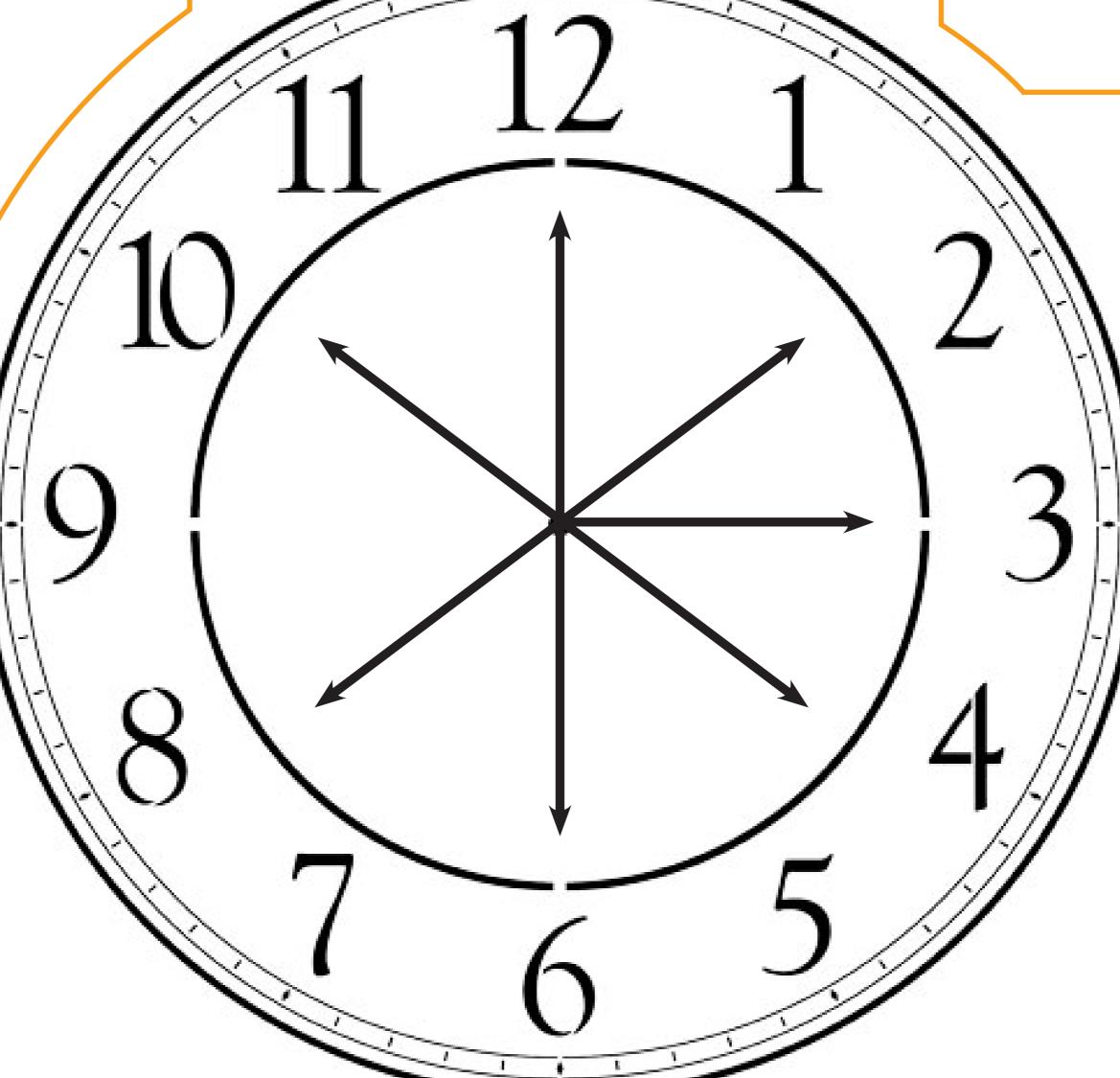
## Why is it important?



Effective PM should promote:

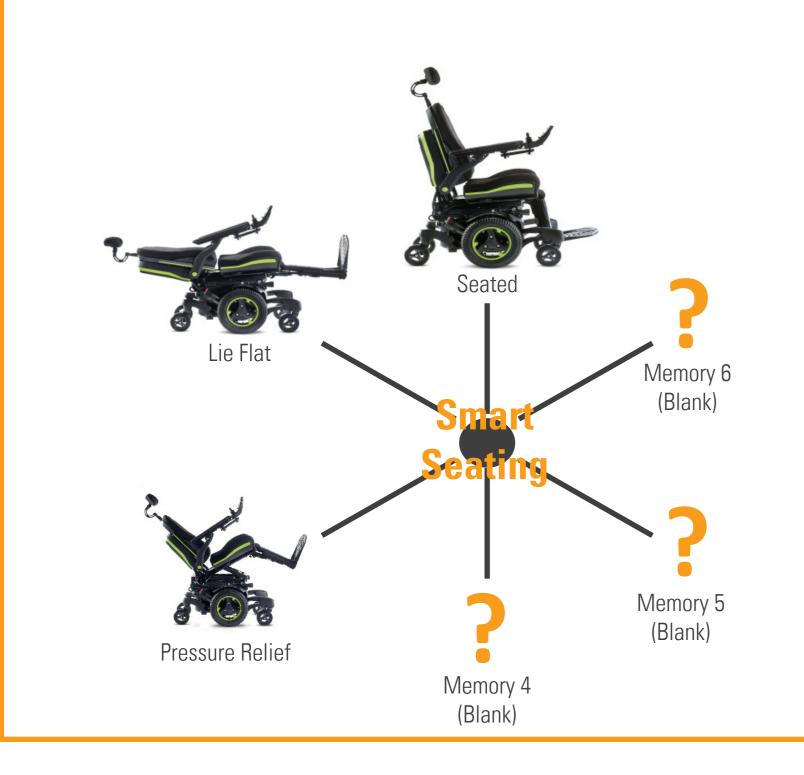
- Symmetrical sitting
- Symmetrical lying
- Symmetrical standing
- Maintain or increase mobility
- Allow regular position change

(Good Practice Guidelines to 24 hour Postural Management 2007)



#### SIX MEMORY POSITIONS:

- 3 default memory positions
- 3 blank memory positions all Customisable to the client
- Quick access to regular positions for daily living functions
- Customise to each client
- One press and move to each function



When is it needed?

For Individuals who:

- Cannot achieve or maintain good posture in order to enable function
- Cannot sit without external support
- Cannot sit or lie comfortably or without pain

- Are at risk of secondary complications:

- Skin damage
- Contractures
- Abnormal postures

#### Clinical Guidelines

# Electrically powered seating can: Enable position change

**RESNA** RESNA Position on the Application of Tilt, Recline, a Elevating Legrests for Wheelchairs Literature Upda ering & Assistive Technology Society 1700 North Moore Street Suite 1540 Arlington, VA 22209-1903 (703) 524-6686 www.resna.org www.pmguk.co.uk

2014

2015

## Benefits:

- Improve posture
- Enhance function
- Improve transfers
- Improve physiological processes
- Enhance visual orientation, speech, alertness
- Redistribute pressure
- Regulate spasticity
- Accommodate/ prevent contractures
- Manage oedema
- Increase seating tolerance and comfort

### What can powered wheelchairs offer?

- ✓ Independent mobility
- ✓ Enhanced postural support
  - various seat systems
- ✓ Altered seat position
  - Assist movement into sit, lie or stand
  - Improve physiological function - Maintain or improve joint range
  - Pain relief
  - Increase functional independence

#### References

- Gericke T (2006). Postural management for children with cerebral palsy: consensus statement. Developmental Medicine & Child Neurology 48 (04), 244.
  - International Best Practice Guidelines BPG4A 'Seat-Elevating Devices for Wheelchair Users' 2014 https://www.pmguk.co.uk/data/page\_files/Best%20Practice/BPG4A%20Seat-elevating%20Devices%20for%20Wheelchair%20 Users.pdf
- 'Good Practice Guidelines to 24 hour Postural Management' (2007). The Northwest Group of Paediatric Physiotherapists & Children's Occupational Therapists http://www.manchester.nhs.uk/document\_uploads/CP%20Network/24\_hour\_postural\_management\_draft\_27.04.pdf
- RESNA 2015 'RESNA Position on the Application of Tilt, Recline, and Elevating Legrests for Wheelchairs Literature Update'. http://www.resna.org/sites/default/files/legacy/resources/position-papers/RESNA%20PP%20on%20Tilt%20Recline\_2015.pdf