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Memory Seat Functions:

What are they and why should they be considered?

When considering power seat functions, it is important to consider all of the functional activities and tasks that a person needs to perform on a regular basis. Power seat functions and the setup of actuators means that we can program the chair to support and enable function in almost any task. "Memory seat functions" allow the client to program the end positions of each power seat function angle – creating a unique "position" or posture for the client that can be achieved by a push of a button and/or the joystick. The best part about this process is that they can be set up or changed quickly and easily by the therapist through the use of a single switch.







EXAMPLES	HOW	WHY
	Standing transfers: Anterior tilt with a forward back angle and the footplates resting on the ground can be programmed for a safe starting position for standing transfers.	The benefits of being able to individualize a person's position when transferring cannot only increase function, but theirs and their caregiver's safety. The position can be set up to maximize stability of the pelvis and/or trunk which will enable a safer and more functional transfer.
TRANSFERS	Sliding transfer: Height and angle of the seat can be programmed to match the height of the surface the client is transferring to during a sliding transfer.	Anterior tilt and elevate can help reduce the load and force to the upper limbs and shoulders enabling better sliding transfers. The chair can be positioned so that gravity is assisting in the transfer – making it easier and safer.
		Individualized and functional setup of transfers could also decrease the need for care givers as safety and independence increases.

Memory Seat Functions: (Continued)

EXAMPLES	HOW	WHY
PRESSURE RELIEF	For an ideal pressure relief to occur, research has shown that the client must be in a position greater than 25° of tilt and 120° recline for more than 1 minute. Some studies even suggest that up to 3 minutes is required every 30 minutes. A clinically guided and individualized setup can help ensure clients are getting a true off-load and pressure relief.	The combination of using both tilt and recline has shown to reduce load and therefore reduce the risk of pressure. Research has however shown, that clients often do not go into enough tilt or recline to offload pressure. A pre-set memory function can ensure power tilt and recline are being utilized to the full extent.
VAN ENTRY	No seat elevation, some tilt and legs in the home position can be programmed for van access to enable either a safe lift transfer or ramp access.	A van entry position can be set to ensure safe transitions in and out of transport vans. The correct height and tilt position can be set to ensure safe and functional van transfers.
TOILETING	A supine position can be achieved without transferring to a bed. - Full recline - Elevated legs	A supine position can be easily achieved to help clients maintain bladder and bowel management plans. The ability to independently reposition themselves into a supine position can increase independence of catheter management, reducing care and other potential negative effects of backflow due to tilt. Recline with shear reduction also contributes to the client maintaining their pelvic and trunk position during the position change.
EDEMA MANAGEMENT	Feet over heart - Elevating legs - Tilt - Recline	The lower limbs of clients who sit for long periods of time are at an increased risk of edema and skin breakdown. Elevating the legs above the heart increases blood flow and arterio-venous pressure.

Memory Seat Functions: (Continued)

EXAMPLES	HOW	WHY
TONE & PAIN MANAGEMENT	Each position can be set up to meet the needs of an individual client.	Individual positions can be set to manage fluctuations in tone and pain management strategies. These can be set through discussions with the client and their treating therapist based on their individual needs.
EATING & DRINKING	Each position would be individually tailored and setup; however, a closed back- to-seat angle with no to some tilt could be set. A supported lower leg position would also assist to provide support for these tasks.	The trunk and head position can be set up as clinically required to ensure clients are in an optimum position for eating and drinking to minimize aspirating and assist with digestion.
DRIVING POSITION	An outdoor driving position may include: - Some tilt - Legs in the home position - Back angle set for an individual's needs	The benefits of setting up an individual drive position ensures that each client is seated in a comfortable and ergonomic position, maximized for their upper limb control, visual field and navigation in and around different environments. Seated positions can significantly differ between indoor and outdoor driving.

References

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- 2. Jan, Y., Liao, F., Jones, M. A., Rice, L. A., & Tisdell, T. (2013). Effects of Durations of Wheelchair Tilt-in-Space and Recline on Skin Perfusion Over the Ischial Tuberosity in People with Spinal Cord Injury. Archives of Physical Medicine and Rehabilitation, 94(4), 667-672.
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