



## Wheelchair considerations: Stroke

All clients should be provided with a safe and durable wheelchair that provides proper fit and postural support and suits their local environment<sup>1</sup>.

This factsheet highlights four key considerations for people who have had a stroke.

### 1. Pressure risk

Some people who have had a stroke have impaired sensation and are at high risk of developing a pressure sore. Therefore:

- Assess the pressure risk for each client carefully considering the person's skin condition, sensation and ability to relieve pressure
- For those at risk, provide a pressure relief cushion and check pressure under the user's seat bones and any other possible pressure areas during the wheelchair fitting
- Provide a spare cushion if incontinence is an issue.

### 2. Wheelchair set up

Many people who have had a stroke are able to stand up to get in and out of their wheelchairs. To make standing transfers easier, **clients often prefer wheelchairs with armrests to push up on, and footplates that can flip up or away.**

People who have had a stroke may be unable to propel with their affected arm; however may be able to propel using one arm and one leg (foot propelling). To foot propel, set up the wheelchair so the:

- Seat height (measured from the top of the cushion) allows the user's foot to sit flat on the ground.
- Seat depth allows the user's foot to reach under the seat to increase pushing efficiency<sup>2</sup>.



- Rear wheels are positioned to allow as active a position as possible, in order to make propelling by user or attendant as easy as possible.

### 3. Postural Support

People who have had a stroke need good postural support from their wheelchair to reduce fatigue and prevent secondary complications. Ensure:

- The backrest, seat, cushion and footrests are correctly fitted.
- Tension on canvas seats and backrests is maintained to avoid sagging.

Also consider:

- Support for the user's affected arm with a cushion or armrest.
- A pelvic belt to keep the pelvis in a good position and prevent the user sliding forward when pushing.



### 4. Client Education

All wheelchair users benefit from learning how to use and look after their wheelchair. Many people who have had a stroke will need assistance from family members, so always involve them in training. Information and skills particularly important for people who have had a stroke include:

#### 4.1 Importance of good posture including how to:

- Maintain good posture
- Re-position within the wheelchair with and without assistance
- Correctly use any additional postural supports that have been provided

#### 4.2 Mobility skills training: Some specific areas to focus on include:

- Most effective self-propelling method
- Helping the user and their family members to feel confident about assisted propelling in different environments
- Transferring safely in different situations, focusing on maximising the user's independence



For more information contact:

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#### References:

- <sup>1</sup> WHO, 2012. WSTP Reference Manual for Participants – Basic level. WHO Press, Geneva  
<sup>2</sup> Zollars, J.A., 2010. Special Seating: An illustrated guide. Prickly Pear Publications, USA.