



NSW State Spinal Cord Injury Service

Spinal Seating Professional Development Project MQ10A.1: Case Study Answers Module 10

## **Case Study Answers: Module 10 – Power Wheelchair**

Instructions: Download the case study on Katherine and then answer the questions below.

## **1.** List the medical status and physical concerns that Katherine has and the possible requirement of the new power wheelchair to address these issues.

- As a C5/6 tetraplegia, Katherine is dependent in power wheelchair with modified joystick and switches for mobility.
- A postural assessment will indicate the cause of neck pain. Possible solutions may include power tilt-in-space to alter neck posture and adequately supports for head and upper limbs.
- Having had a history of a stage 3 pressure ulcer, Katherine should consider a power tilt-in-space seating function for independent weight shift as part of pressure ulcer prevention.

## 2. List the functional task that Katherine performs in her wheelchair. How would these tasks influence on the selection of the wheelchair components and accessories?

- In order for Katherine to empty the catheter bag, she will need an accessible bag hook on the front of the wheelchair and suitable backrest push handle to maintain balance during this process.
- Katherine uses the computer for domestic planning and may take on study in TAFE. Consider controller modules that allow control device to interface with the computer and other electronic device such as PDA. A wheelchair tray will also be useful.
- Katherine travels to the school in her wheelchair daily with her kids. Motor and battery sizes should be sufficient to cover the distance she travels daily.

## 3. What are the social and environmental factors that will influence on the components selection in her power wheelchair?

- Katherine travels to the movies and luncheons in a wheelchair accessible taxi. The new wheelchair dimension in width, length and height should fit inside the wheelchair taxi. Tie down points must be provided.
- Katherine's social activities are manly indoor such as restaurant and shopping centres. Manoeuvrability such as small turning radius, seat to floor height would be a higher priority than travelling in rough terrain.