Complex mobility solutions for clients with neuromuscular degenerative disorders and high level spinal cord Injuries

Speciality input devices such as chin operated joystick and head switches enable those with significant physical limitations to operate assistive devices such as power wheelchairs, augmentative communication devices and environmental controls.

The Rehabilitation Engineering Clinic (REC) has been a pioneer in designing, developing and adapting custom assistive and mobility products for over 35 years in WA. The clinic has prescribed and set up complex mobility solutions for over 100 clients with such diagnoses as high level spinal cord injuries, motor neuron disease, and multiple sclerosis. This session outlines clinical factors requiring consideration when setting up this complex technology and demonstrates some of the systems that the Rehabilitation Engineering Clinic has been instrumental in developing and customising.

Session will include

* Visual presentation overviewing assessment and service provision process of complex mobility solutions (including videos of equipment in use by clients and their feedback regarding changes to their quality of life as a result of the equipment)
* Demonstration of mobility solutions – motorised chin control, head joystick, switch driving options
* Overview of Bluetooth and infrared programming and operation via PWCs
* Three case study presentations outlining processes and challenges of individual custom device fitting and control mechanisms
* Additional custom made devices technology being utilised by REC (eg. Electric leg bag openers, Motorised iPad arm, custom cushion design, 3D printed joysticks, Center of Gravity platform).