

Scientific/Educational Workshop

Workshop title

The FUNctional features hidden inside power wheelchair electronics

Workshop organizer

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Speakers

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Workshop goals

1. Identify what the assistive technology features are, and which are available on 4 major wheelchair manufacturers.
2. Identify the clinical professional's role in the education and application of the power wheelchair electronics to maximize our client's independence.
3. Demonstrate how to set up switch control, Android device access, and computer access through the power wheelchair.
4. Demonstrate how to set up Infrared capabilities through the power wheelchair.

Abstract

With advancement in technology, the power wheelchair is no longer just a means of transportation. Power wheelchair manufacturers are readily incorporating technology that allows clients with limited mobility to control their phones, tablets, computers, and environments via the software incorporated in the wheelchair drive system. Although similar technology has been available for years, the setup and application of the afore mentioned features is rarely employed. This under-utilization is often due to the clinician's lack of education, awareness, and/or comfort with the technology. Attendees will learn that manufacturers have made this technology much more compatible and will demonstrate competency in setting up the appropriate features for clients. This two-part workshop will incorporate a lecture portion and a hands-on experience covering the assistive technology features available on power wheelchairs. Education on how the technology interacts with the accessibility features on mobile devices and with computer operating systems will be provided. Information explaining how systems can be used to control the client's environment will also be presented. Sample clinical processes will be explored, and participants will gain access to a variety of resources, including wheelchair representatives and cheat sheets. Clinical educators from four major wheelchair manufacturers will highlight the unique features of their products. Through experiential learning and the use of case studies, participants will gain practical knowledge of strategies for setting up, utilizing, and troubleshooting wheelchair-based assistive technologies that can be transferred to individual practice settings. Learners will leave with an increased sense of comfort and understanding of how power wheelchair assistive technologies function. Better patient outcomes, increased client independence, optimal occupational performance, and overall patient satisfaction are the expected outcomes.