

PROMOTING INDEPENDENCE THROUGH ASSISTIVE TECHNOLOGY: USE OF ELECTRONIC AIDS TO DAILY LIVING (EADL)

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This interactive workshop will provide an introduction to EADL Services at Bloorview Kids Rehab.

Electronic Aids to Daily Living (EADLs) can enhance the quality of life for many people who have physical disabilities. Those with conditions that result in a lack of active muscle movement, decrease in muscle strength and/or co-ordination, or other movement impairments are often unable to control their environment (e.g. lights, doors, fan, TV, entertainment equipment, etc.) in the traditional way (e.g. using remote controls, light switches, door handles, etc.). This can include clients with a diagnosis of spinal cord injury, neuromuscular conditions, rheumatoid arthritis, acquired brain injury, cerebral palsy (spastic quadriplegia), or multiple sclerosis. An EADL is a device that provides alternative access to controlling the environment. An EADL could be a single-switch device used to operate one appliance, or a more complex integrated system that would control multiple lights, appliances and home entertainment equipment.

In this workshop, learn about who would benefit from EADLs, what kinds of EADLs are available, and what types of EADLs are appropriate for certain clients. An EADL assessment will be described. Different EADL devices will be demonstrated, including an accessible telephone, a scanning device and a computer-based system. We will discuss IR, RF and X-10 technology, switch access, and custom modifications to commercially available devices. Some guidelines for prescription will be presented. Experience in the use of outcome measures, such as Canadian Occupational Performance Measure (COPM) and S.M.A.R.T. goals will be shared. Prescription and funding issues will be explored. Case study videos will be presented to illustrate successful solutions for our clients. There will be time for hands-on trial of some EADL equipment.

What is an EADL?

- An alternative method of accessing telephone, doors, lights, TV, VCR, stereo, etc.
- This can be a single-switch device or a complex unit operated by voice or switch.

Who We See

- **People of all ages**
- Common diagnoses: cerebral palsy, SCI, ABI, MS, DMD, other neuromuscular conditions, arthritis.
- Anyone who is unable to operate household equipment or appliances in the traditional way.

Referral Sources

- Clients themselves/family members/friends
- Staff working with the client
- Outside agency staff (CCAC, group homes, rehabilitation and acute care centres)

EADL Assessment

- Most commonly there is a 1 - 2 visit assessment
 - 1 visit by the client to BMCC, often accompanied by a care giver and person referring them to us
 - 1 visit to the client's house
- If the client is unable to travel, the assessment can be done where they are (home, rehabilitation, long term care or acute care setting)

Assessment

- Client Profile
 - Diagnosis, medical status
 - Living arrangements
 - Self care abilities
- Needs Assessment
- Present Equipment
- Physical Functional Abilities
 - Muscle tone and strength
 - Physical function: head control, trunk control, any upper or lower limb function
 - Hand dominance
 - Vision/hearing
- Cognition
- Communication
- Mobility
 - Power or manual?
 - COM module?
 - Available ECU ports?
- Summary of Equipment Trials
- Outcome Measures
 - Canadian Occupational Performance Measure (COPM)
 - Goal Attainment Scaling (GAS)
 - SMART Goal Setting (Specific, Measurable, Attainable, Relevant, Time Related)
- Analysis
- Recommendations/Plans

Funding

- No ADP funding at this time
- WSIB
- ODSP – 1 case where replacement equipment was funded, sometimes will fund if clients are moving from a chronic care bed.
- Ontario March of Dimes, Home and Vehicle Modification Program
- MS Society
- Insurance Companies
- Service clubs
- President's Choice Children's Charity (18 years and younger)
- Family

Case Studies

1. Telephone accessed by switch
2. Scanning infra-red, X-10 device (Relax II)
3. Multi-Access System (MAS) for Independence at Home and the Office

Types of Equipment

- Telephones (scanning, large button, voice dialing, adapted cell)
 - Switches
 - Scanning infra-red devices (Relax II, Mini Relax)
 - X-10 devices
 - Multi-Access System
- Equipment suggested is portable and can be moved to a different setting.

Speaker Bio

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