

BPGM2

POWER WHEELCHAIRS FOR PAEDIATRIC USERS

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Summary: The Rehabilitation Engineering & Assistive Technology Society of North America (RESNA) Position paper on the Application of Power Wheelchairs for Pediatric Users approved by RESNA Board of Directors April 23, 2008, was reviewed by members of the above working group.

The workshop for the conference addresses the following:

Summary of the RESNA Position Paper

- Early utilization of PM for the appropriate child enhances independence
- Improves psycho-social development
- Enables children to grow to become productive and integrated members of society
- Prevents learned helplessness and resultant delay in both physical and cognitive domains
- Mobility should be effortless
- Mobility should provide the child with the opportunity to attend and fulfil all daily tasks (same as typically developing children)
- Limiting factors for provision should not be on the basis of: age; limited vision or cognition; difficulty accessing controls; parental concerns or the ability to utilize other means of mobility for very short distances.

Overview of the literature on powered mobility for children

Pointing out areas of omission within the RESNA document and referring to early literature/practice and current literature. In this we Address following myths:

1. Young children are not ready to use this expensive type of equipment
2. Using a power chair will prevent a child from walking
3. A child who has any potential to propel a manual chair or to walk should be encouraged to do so as much as possible
4. Children need to demonstrate understanding of cause-effect with toys and computers before being introduced to powered mobility

5. Only children with higher IQ's are able to use powered wheelchairs successfully
6. Children with multiple and complex disabilities are not able to use power wheelchairs
7. Children with sensory disabilities can't use power mobility
8. There is no point in asking the children what they think – they wouldn't be able to tell us anything different

Omissions from the current RESNA document

- Training protocols
- Outcome measures
- Augmentative technology
- Use of virtual reality
- Consultation with children and young people

Presentation of areas of controversy within the RESNA document and conclusions of the working group's review

- Strong emphasis on the physiological demands
- Lack of emphasis on emotional and social development
- The Pediatric Powered Wheelchair Screening Test (PPWST) – don't think this can be used to determine cognitive developmental age in more complex populations
- Lack of clarity about what is meant re child is "appropriate" or not for power mobility.
- Readiness for prescription of a powered wheelchair or ready for a power mobility experience

Presentations of current international evidence-based practice in the field

Level of Tool Use Assessment for Powered Mobility (Lisbeth Nilsson and Josephine Durkin)

The importance of knowing the learning continuum for powered mobility experience – what have we learnt from studying typically developing children
Does an electronic mobility guidance system hinder or help the child during their learning process?

Clinical Training Protocols: Galloway, Kermonain and Kangas (Ginny Paleg)

What is Mobility for Children – The Users Views – analysis of 30 interviews with children and young people (Anne Harris)

Self determination

Preparing for adult life

Case Study

Amendments proposed to the current RESNA document for adoption or rejection by the Posture and Wheeled Mobility Conference delegates

Section I - Rewrite of end of first paragraph (Roslyn)

Section II – O.K.

Section III – Relationship between mobility and child development

- to be evidenced by research statements (all)

Section IV – Determining readiness (rename this section as The Learning Continuum and the Use of Training Strategies)? (all)

Case studies – to include more complex populations and children who took long period of learning to develop powered mobility skills (all)

Discussion: As part of the overall process for developing a clinical position on early powered mobility for children, which is grounded in evidence and is practical for clinical implementation, this workshop has been constructed to enable conference participants to discuss and contribute to a ratification process of adoption or rejection of an amended RESNA position paper. Results of the discussion and feedback from conference participants will be incorporated into the document. Future work may need to be carried out before final ratification can be achieved.

References:

- 1. RESNA Position on the Application of Power Wheelchairs for Pediatric Users, April 23, 2008**