

Leading the Way in Continuing Care Conference

Childhood Disability An International Update

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Southern Health

Victorian Paediatric Rehabilitation Service (VPRS)

- Services commenced at RCH in 2005/2006
- VPRS in 2008
 - MMC and RCH have inpatient and ambulatory services
 - Other sites that provide ambulatory services only:
 - Eastern Health
 - Barwon health
 - Bendigo Health
 - Austin Health – Chronic Fatigue Program

Victorian Paediatric Rehabilitation Service (VPRS)

- Services commenced at Monash Medical Centre in 2007.
 - 3 inpatient beds
 - Physical Rehabilitation Clinic – multidisciplinary
 - Botulinum toxin-A (Botox) injection lists
 - Specialist medical clinics
 - Allied Health Services
 - Outreach clinic (Sale)

Victorian Paediatric Rehabilitation Service

- Annually, VPRS Southern provides services to 350 children with cerebral palsy.
- VPRS is an international leader in research and the provision of services for children with cerebral palsy.
- VPRS is involved in a range of high quality, multi-centre trials evaluating treatment of children with cerebral palsy.



Pathways Home Scholarship

- Attendance at the European Academy of Childhood Disability (EACD) Congress, Zagreb, Croatia
- Poster presentations:
 - “Botulinum toxin-A in the Management of the Upper Limb in Children with Cerebral Palsy: A Cochrane Review Update”
 - “Retest and Alternate Forms Reliability of the Assisting Hand Assessment”

What is the EACD?

- The EACD is an academic association of professionals working with children with disabilities throughout Europe.
- Over 40 countries are represented.
- Recognized as a non-governmental organization by the European Disability Forum of the EU.



European Academy of Childhood Disability



20th Annual Meeting
June 2008
Zagreb, Croatia

“Early Diagnosis Implies Early Intervention”



Aim of Presentation

- Present key knowledge gained from conference attendance
- Outcomes for VPRS

Establishing Research Priorities in Cerebral Palsy



CEREBRAL PALSY | INSTITUTE

Poster Presentation



The Cerebral Palsy Institute

- dedicated to prevention research, education and information that targets optimal interventions and services for people with disabilities.
- aims to bring together and disseminate the best the world has to offer to prevent, treat, resource and to pursue a cure for cerebral palsy.



Establishing CP Research Priorities

- Australian Cerebral Palsy Institute
- Funding limitations
- Need to focus on questions that are high priority for aetiology and prevention of cerebral palsy

Methodology

- Literature review to identify international experts.
- Delphi technique to survey researchers worldwide to identify research questions that are in agreed high priority.
- 3 rounds of surveys to establish common themes and filter priority areas.



Cerebral Palsy Institute Research Priorities

Five highest priorities for knowledge development were to discover what interventions produce effective gains in:

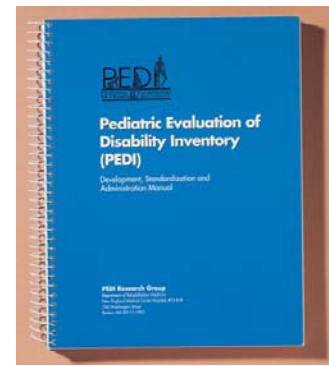
- 1) participation and quality of life
- 2) function
- 3) relationship development
- 4) long-term outcomes, and
- 5) coping.

- need to understand what interventions enable a person with a disability to participate in everyday life.

Outcome for VPRS

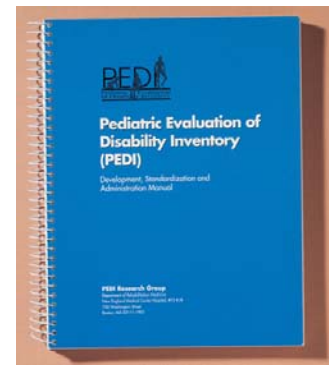
- Resource that provides a detailed plan for direction of CP research.
- Establishes priorities for future CP research.
- Provides scope for cross campus and multi-centre trials.

www.cpinstitute.com.au



Pediatric Evaluation of Disability Inventory

Lena Krumlinde-Sundholm
Occupational Therapist
Workshop



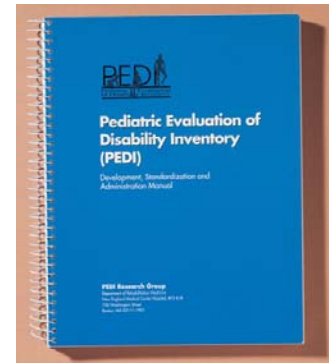
Purpose of the PEDI

In children aged 6 months to 7 years:



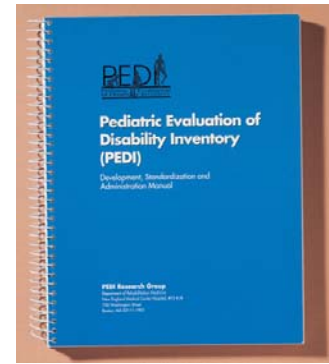
- to detect the extent and nature of a functional deficit or delay
- to monitor individual or group progress
- to measure outcome for program evaluation

What does PEDI measure?



- capability and performance in functional activities
 - self care
 - mobility
 - social function
- capability – mastered skills
- performance – level of assistance required
- modification/equipment used

PEDI in clinical practice

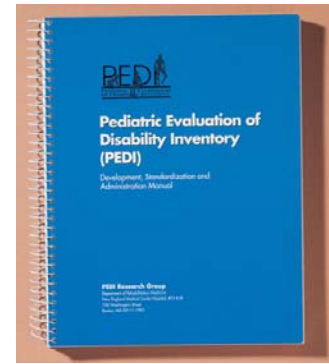


- provides useful basic knowledge for the whole team – identifies the main problems
- can be used to monitor development
- can be used to evaluate treatment programs
- is a tool when treatment planning

45 - 60 minutes for administration

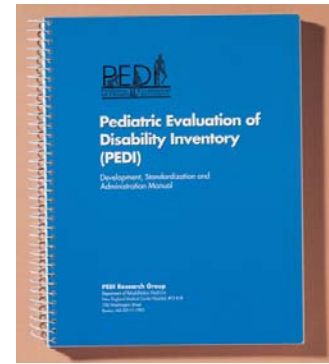
Is it worth it?

Ongoing development



- Computer Adaptive Testing (CAT) provides:
 - the ability to reduce number of items assessed.
 - easier and quicker clinical application
- Computer Adaptive Testing (CAT) does not:
 - lead to significant loss of precision or sensitivity to change.

Outcome



- Contact with Wendy Coster (principle author) regarding next phase of PEDI-CAT
 - Funding grant obtained
 - Expansion of age range to 21 years.
 - Re-design of scales and items to enable parent to complete independently (without interviewer or manual).
 - Revised version to be completed 2010.

Outcome for VPRS

- VPRS Southern requested to participate and provide feedback in the initial item pool for the revised PEDI-CAT version (2008).
- Potential to adopt use of PEDI-CAT across VPRS sites as a measure of functional outcomes for inpatient services (2010).
- Use of the PEDI-CAT to evaluate functional outcomes in children with CP following Intrathecal Baclofen (ITB) pump insertion.

Manual Ability Classification System (MACS)

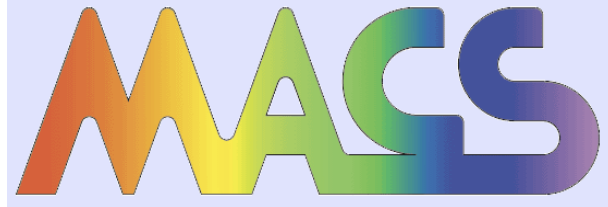


Lena Krumlinde- Sundholm &
Ann-Christin Eliasson
Workshop



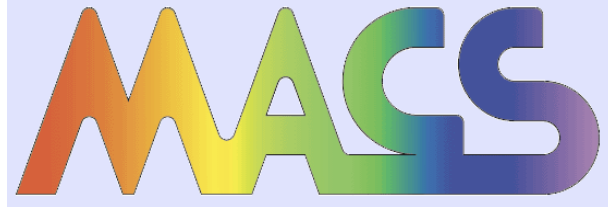
Manual Ability Classification System

- Introduction to the development of MACS
- Traditional Classification
 - Mild
 - Moderate
 - Severe
- Practice of scoring from demonstration videos.



Manual Ability Classification System

- I. Handles objects easily and successfully. At most, instead of handling objects with both hands.**
- II. Handles most objects but with somewhat reduced quality and/or speed of achievement.**
- III. Handles objects with difficulty; needs help to prepare and/or modify activities.**
- IV. Handles a limited selection of easily managed objects in adapted situations.**
- V. Does not handle objects and has severely limited ability to perform even simple actions.**



Manual Ability Classification System

- **classifies how children with CP use their hands when handling objects in daily activities.**
- **reflects a child's typical manual performance, not the child's maximal capacity.**
- **4-18 years**

Outcome for VPRS

- MACS now used as the upper limb classification system for all children attending the Physical Rehabilitation Clinic, Monash Medical Centre.
- Longitudinal data currently being. This will form a central component of any upper limb population based studies conducted with children attending the clinic.

