Move it to improve it

• Developed by Helene Elsass Center and the University of Copenhagen
• Log into Mitii website (Cloud technology)
• Home and web-based
• Multimodal training: upper limb, visual perceptual, physical capacity with a cognitive challenge.
• Active, child driven training
• Virtual therapists
Neuroplasticity

Why Mitii compared to video games?

Upper-limb training

Cognitive training

Physical activity

Visual perception

Uses internet

Delivered by therapists

Individualised and tailored program

Mitii

The University of Queensland

Queensland cerebral palsy & rehabilitation research
Mitii™ in action…

http://www.youtube.com/watch?v=EYLkhjURLbw&list=PLD4AF93A38F715113&index=7&feature=plpp_video
Example of the Games

• 1. Figure Ground: Match the puzzle piece onto the screen

• 2. Visual discrimination: which image does not match with the other images
Rainman: Balance / Precision
“keep the umbrella over the man”

Figurebuilder: Precision with impaired hand,
“Speed/cognitive challenge”
Get up Get Down: Balance / Physical capacity
“Put the bomb on the boat”

Matching: Precision with impaired hand, working memory
“Reaching /cognitive challenge”
Families all around east coast  n=102
Conclusions: Mitii for UCP

- Mitii™ offers a home-based alternative to standard face-to-face therapy that can provide benefits for children with unilateral CP.

- Qualitative evaluation of facilitators and barriers to engagement.

- Neuroplasticity, participation, QOL being analysed.

- Retention of effect at 20 weeks post training.

- Multimodal training: the sum greater than the parts.
Optimising Neuroplasticity

• ‘ability of the brain to change and develop in response to input from the environment’

• Training requirements:
  ✓ Intensive
  ✓ Repetitive
  ✓ Incremental challenge
  ✓ Concentration
  ✓ Specificity
  ✓ Salience

• Multi-modal
Acknowledgements:

The children and their families

Helene Elsass Center, University of Copenhagen, and Mitii Development A/S for the Mitii program

Project funding support from Queensland Smart Futures Coinvestment Fund and Foundation for Children

CP Alliance and the NSW CP Register

Team Mitii Australia