

Pediatric rehabilitation workshop

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1st of June 2026



Hôpitaux Paris est Val de Marne

Public hospital with several units :

- Psychiatry and child psychiatry,
- Medical rehabilitation and follow-up care,
- Pediatric rehabilitation,
- Maternity and neonatology,
- And dialysis care for patients with chronic kidney disease.





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Rehabilitation of congenital/perinatal neurological pathologies

Rehabilitation of pathologies of the musculoskeletal system and the spine

Rehabilitation of acquired neurological pathologies

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Age

Up to 15 years old



Team

- Doctors
- Rehabilitation professionals: occupational therapists, physiotherapists, speech therapists, psychomotor therapists and dieticians.
- EAPAS
- Neuropsychologists
- A social service assistant
- Caregivers and educators
- Specialized teachers

Disorders

- strokes
- brain injuries
- brain tumors
- spinal cord injuries
- infections or other neurological disorders

Hospitalization

- full hospitalization
- day hospitalization

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Hand-Arm Bimanual
Intensive Therapy



IVS 3

Intensive visual simulation 3 : a rehabilitation device based on the fundamental principles of mental imagery techniques. It replaces the image of the paralyzed arm with a positive movement image created from the healthy arm

How does it work ?

1. The patient places their healthy arm on the table, underneath the screen.
2. The system first records movements performed by the patient with their healthy arm.
3. The patient then removes the healthy arm and positions the affected arm underneath the screen.
4. The recorded movement images are mirrored on the screen so that they correspond to the paralyzed side.

IVS 3

Objectifs :

- Rehabilitation goals
- Improve motor recovery
- Reduce central pain
- Reduce spasticity
- Manage hemispatial neglect

Protocol :

- 1 or 2 sessions per day
- 5 days per week (frequency depends on the rehabilitation goal)
- Between 4 and 6 weeks
- 5 to 20 minutes per session (depending on fatigue and associated disorders)
- 4 to 10 different movements per session, with 6 to 10 repetitions per movement
- 1 to 2 loops

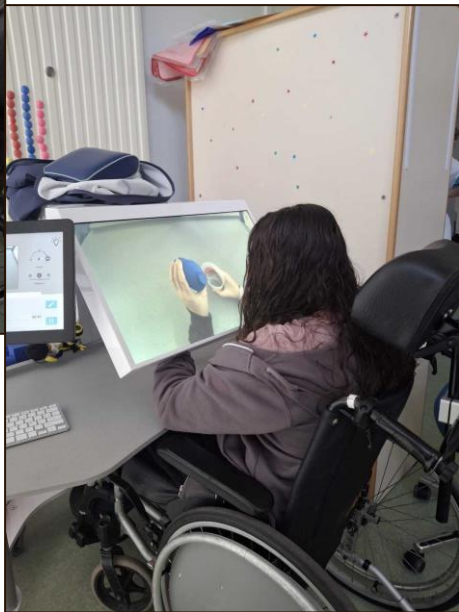
IVS 3 in St Maurice

- Delivery scheduled for early January 2025
- Used in a multidisciplinary setting (physiotherapists / occupational therapists)
- Over a total period of 18 months, it was used with 14 patients.



Patients	Age	Disorders
P1 (abreu)	14	Rasmussen encephalitis
P2 (Elena)	12	Tumor
P3 (Titouan)	14	TBI
P4 (Aliah)	7	Stroke
P5 (Harvey)	7	Rasmussen encephalitis
P6 (Abdallah)	15	Tumor
P7 (Emy)	12	Rasmussen encephalitis
P8 (Taïna)	15	Rasmussen encephalitis
P9 (Hugo)	14	AVM Rupture
P10 (Alexandra)	15	Rasmussen encephalitis
P11 (Lucas)	14	AVM Rupture
P12 (Yann)	8	TBI
P13 (Logan)	4	Tumor
P14 (Diaminatonou)	15	Medullary ischemia

Elena



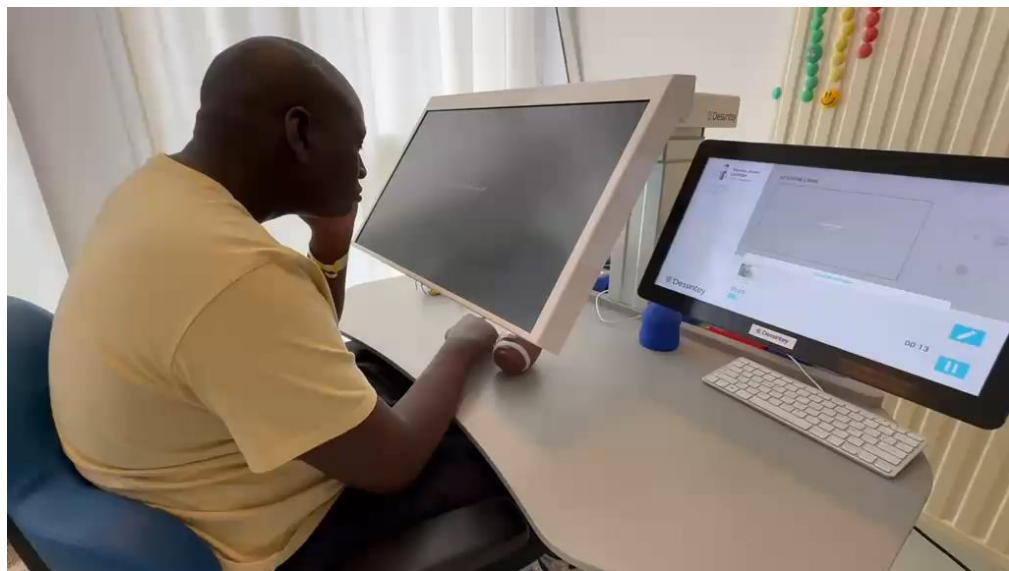
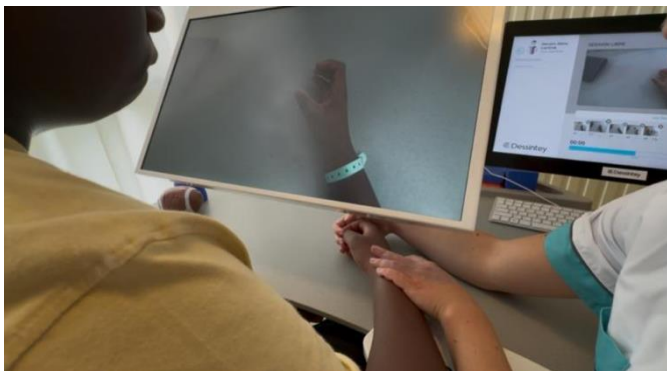
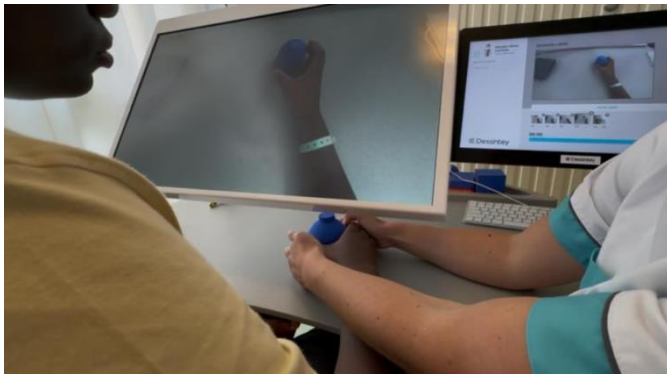
Aliah



Harvey



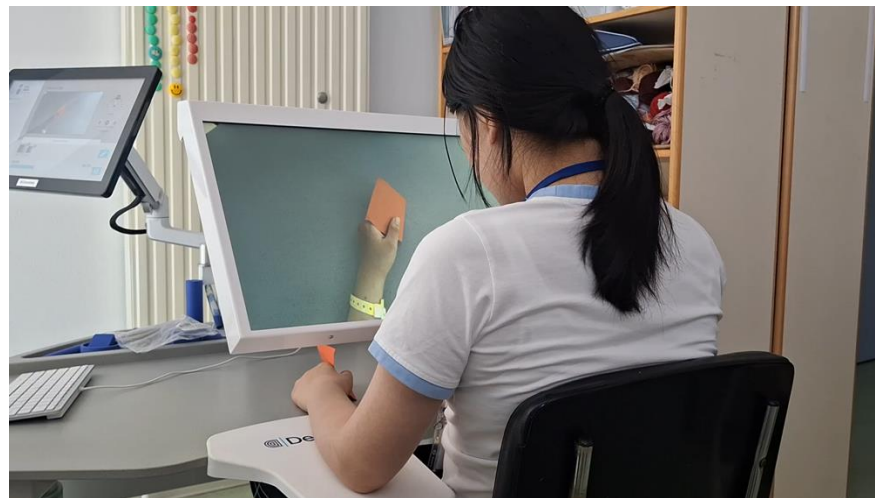
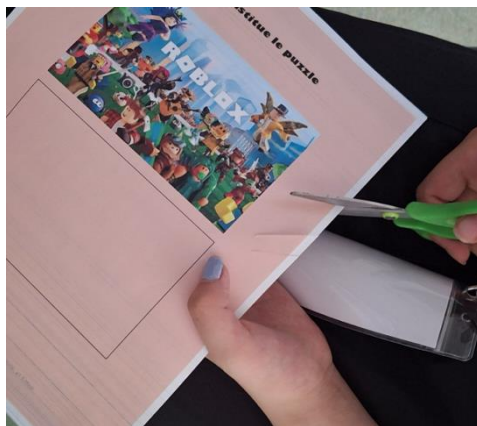
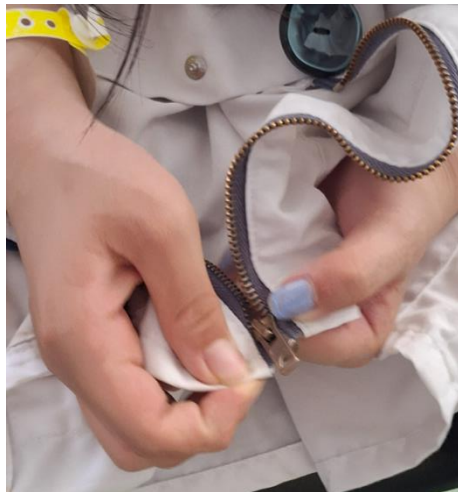
Abreu



Emy



Emy



Return of experience

In regards of the protocol :

- Use 1 time per day
- 4 or 5 times a week
- 10 minutes maximum
- During 1 month approximately



Return of experience



- Easy to manipulate
- Easy to change the side of the screen
- Some teenagers can start their session alone
- Motor improvements
- Attentional disorder
- Chair poorly suited to children
- Not playful
- More analytic than functional

THANKS

Any questions ?

