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### **Purpose:**

Determine benefits of individualized intensive model of therapy on children with neurological and physical disabilities.

### **Intervention:**

An 8-year-5-month-old child with unspecified cerebral palsy, GMFCS level III, participated in intensive therapy. He received a total combined 3 hours of physical and occupational therapy per day, 5 days per week, for 3 weeks. His individualized treatment plan included a traditional occupational hour and a physical therapy hour in the NeuroSuit, an hour of occupational therapy in the Whole Body Support System, with use of Whole Body Vibration Plate throughout various exercises in his plan of care.

### **Outcomes:**

The patient made significant improvements in his strength, balance, posture, and endurance, as evidenced by clinical observations, improvements in gross motor strength, coordination, and endurance. This is further confirmed by his improved standardized score in the GMFM: This patient demonstrated a net 7.908% increase over the course of 3 weeks, 4.18 times the mean improvement over one-year, which the patient accomplished in a span of 3 weeks.

### **Implications:**

The mean amount of improvement over the course of 12 months for a child GMFCS level III over 6 years of age is 1.89% with a standard deviation 4.85%. (68% of children will show a change of -2.96% to 6.74%) This child's progress of 7.908% over the course of 3 weeks therefore represents a remarkable improvement. It is 4.18 times the mean improvement over one year. The progress of children GMFM level III is typically expected to plateau around age 6. This case demonstrates that the potential for improvement persists throughout childhood and even into adolescence.

## No 2. Case Study