

Popularization of technologically assisted functional diagnostics and rehabilitation addressed to children and young adults with cerebral palsy (CP) in the Wielkopolska Region

Project description:

The main objective of the project is to improve the quality of gait in case of children and young adults suffering from cerebral palsy in the Wielkopolska Region by increasing the availability of modern diagnostic and rehabilitation methods. The project is intended for children and young adults between 5 and 21 years of age diagnosed with cerebral palsy.

Technology Supported Rehabilitation Centre was established thanks to this project. It was equipped with modern medical equipment, this includes robotic systems using virtual reality. Those systems apply modern methods in the rehabilitation of gait disorders following global trends. First, patients are taken to a gait laboratory where gait disorders are tested. Diagnosis is conducted based on applications and computer programs and then entered into the memory of devices to be later used to rehabilitate the patient. The programme uses, among others: kinesiotherapy, exercises aimed at improving balance and movement synergy, lokomat (devices for intensive locomotion therapy) – used to train speed, stride length and ranges of motion in the hip and knee joints. Moreover, there are suspended treadmills to regulate the pressure of the gait as well as an exoskeleton to reproduce the gait pattern. The project provided support for the environment of the patients, namely, parents, guardians, physiotherapists by providing accommodation and transport in order to implement medical processes in an effective manner. The treatment cycle is to last 2 weeks. The intensification of the therapy will shorten its duration. This, in turn will reduce the exclusion of patients and their caregivers from family, social and professional life.

Beneficiary:

Ortopedyczno- Rehabilitacyjny Szpital Kliniczny im. Wiktora Degi Uniwersytetu Medycznego im. Karola Marcinkowskiego in Poznan (Orthopedic and Rehabilitation Clinical Hospital named after Wiktor Dega of the Karol Marcinkowski Medical University in Poznan)

Programme:

WRPO 2014+

Fund:

European Social Fund

Total value of the project:

PLN 19,287,677.00

UE contribution:

PLN 16,394,525.45

