RESUMEN DE COMUNICACIÓN CIENTÍFICA

Título: TelerREHA - REHABILITATION PLATFORM FOR HOME USE AND TELE-REHABILITATION

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Research results indicate that effective neurorehabilitation after stroke requires more user involvement and time than the duration of their hospitalization. Outpatient treatments and the continuation of the therapy in local and smaller rehabilitation facilities and at home should follow the clinical rehabilitation. Current challenges are the implementation of affordable rehabilitation systems for outpatient centers and the development of low-cost solutions for home environments. TeleREHA, a nationally financed research project of four leading technological centers has implemented low-cost in-home devices in a tele-rehabilitation platform for home rehabilitation to maximize benefit and availability to the patient, and to simultaneously minimize long-term care costs to the health care system.

The objective of TeleREHA is to generate the necessary knowledge of the rehabilitation process for motor and cognitive impairments as it pertains to robot-mediated therapy and tele-rehabilitation technologies. Iterative phases of the Planning, Execution, Assessment (PLEXAS) in the rehabilitation cycle are investigated. As a mid term goal we propose to the Spanish health care system, that the introduction of low-cost in-home devices is the optimal pathway to maximize benefit and availability to the patient, and to simultaneously minimize long-term care costs to the system, as well as to involve the patient into self-care and self-rehabilitation.