

Note: The information given in this document is still preliminary until partner contracts and funding allocations are finalised.



Project Information

Project Short Name	RGS
Project Full Name	Rehabilitation Gaming System
Project Reference	aal-2008-1-119
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Background of the Project

Stroke represents one of the main causes of adult disability and will be one of the main contributors to the burden of disease in 2030 due to the aging of the world population. Hence, it will be the elderly who will be predominantly confronted with this burden and the sheer volume of stroke will fundamentally challenge our health care system. Many elderly people who have suffered a stroke return home relatively quickly despite often still suffering from impairments and disabilities that could require months of continuous rehabilitation to resume a normal life or at least to achieve an acceptable quality of life. The Rehabilitation Gaming System (RGS) consortium will develop and test a novel virtual reality based system for the at home personalized rehabilitation of the upper extremities of the elderly people who have chronic motor deficits after having suffered a stroke.

Visions and Objectives of the Project

The Rehabilitation Gaming System (RGS) consortium will develop and test a virtual reality based system that will allow an elderly person who suffered a stroke, to take advantage of a novel ICT based product to manage their chronic condition. It will alleviate their chronic long term condition by providing individualized rehabilitation therapy at home in the shape of an interactive virtual reality system. Using the RGS the elderly person will be empowered to personalize and self-manage his/her rehabilitation process. In addition, the RGS will allow the healthcare provider to have remote access to the data reflecting the training and progress of the patients; to ensure the quality of the therapy. This data will include information on brain activity, heart activity, respiration, galvanic skin response and muscle activity combined with their performance in the training scenarios (accuracy, speed, movement patterns...). The RGS incorporates learning and adaptive systems that will allow the system to automatically change the rehabilitation scenario based on the results of the previous exercises and further supervised by the health care provider.

Project Partners and Funding

Full name	Short name	Country Code	Type of Organization	Final granted budget in EUR
Universitat Pompeu Fabra	UPF	ES	Public University	409.585
Guger Technologies OEG	GTEC	AT	SME	288.045
University Hospital Düsseldorf, Heinrich-Heine-Universität Düsseldorf	HHU	DE	Public University Hospital	374.770
Hospital del Mar i de la Esperança	HME	ES	Public University Hospital	214.775
Hospital Vall d'Hebron	HUVH	ES	Public University Hospital	196.625
Tyromotion GmbH	TMotion	AT	SME	247.313,40
Fundación Privada Tic I Salut	FTS	ES	Private non profit organization	78.045
			Total	1.809.158