

Press Release



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Project StrokeBack increases rehabilitation speed and quality of stroke patients in their own home

Frankfurt (Oder), October 2011: The project "StrokeBack - Telemedicine System Empowering Stroke Patients to Fight Back" funded under the Seventh Framework Programme (2007-2013), Objective ICT-2011.5.1: Personal Health Systems (PHS) has started recently and will run for 3 years. This 4.3 million euro project, funded with 3.0 million euro by the European Commission, is being carried out by a consortium, led by IHP – Innovations for High Performance Microelectronics/Leibniz-Institut für innovative Mikroelektronik Frankfurt (Oder), Germany. The project consortium forms a sound basis for the realization of the project's ambitious objectives. Further members of the consortium are Brandenburgklinik Berlin-Brandenburg (Germany), INTRACOM TELECOM (Greece), MEYTEC Informationssysteme (Germany), University of Southampton (United Kingdom), University of Potsdam (Germany), University of Pannonia (Hungary), and Research for Science, Art and Technology LTD, (United Kingdom).

Stroke is hitting about 2 Million people per year in Europe. For these persons the effect of stroke is that they lose certain physical and cognitive abilities at least for a certain time period. More than one third of these patients, i.e., more than 670,000 people, return to their home with some level of disability leading to a significant reduction of quality of life. In addition, the prevalence of ageing in the European societies will lead to an increased number of people suffering from stroke in the future. Experts predicted an increase of more than 2.5 times within the next decades. This will put an enormous pressure on the healthcare systems in terms of cost and quality of care.

StrokeBack addresses both of the sketched problem areas. The goal of this project is the development of a telemedicine system that supports ambulant rehabilitation at home settings for the stroke patients with minimal human intervention. It aims at providing new technical means and service structures enabling patients to enhance their healthiness by increasing the number of training sessions while still being monitored by the system. By ensuring proper execution of physiotherapy trainings in an automated guided way, modulated by appropriate clinical knowledge and in supervised way only when necessary, StrokeBack empowers the patients to exercise much more and at better quality than it is possible today. By that StrokeBack improves rehabilitation speed, and quality of life of the patient. Complemented by a Patient Health Record, in which rehabilitation exercises, training measurements and vital data of the patients will be stored, it provides all necessary information medical and rehabilitation experts need to evaluate rehabilitation success. This allows assessing the overall healthiness of the patient and to provide the patient with mid-term feedback, e.g., her/his rehabilitation speed compared to average, as well as improvements over last day/weeks, in order to keep patients motivation high.

“The envisioned system will empower the patient to do more for fast recovery than today, it provides clinical experts with data not available today and by that it leads also to a better understanding of the stroke recovery process, higher recovery speed and thus, to reduced healthcare cost while improving patients’ quality of life” explains technical project leader Steffen Ortmann from IHP.

More information on this project is available at: www.strokeback.eu

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