

PROPHETIC:An innovating Personal Healthcare Service for a holistic remote management and treatment of Parkinson patients.

<https://neurodegenerationresearch.eu/survey/prophetican-innovating-personal-healthcare-service-for-a-holistic-remote-management-and-treatment-of-parkinson-patients/>

Name of Fellow

Institution

Funder

European Commission Horizon 2020

Contact information of fellow

Country

EC

Title of project/programme

PROPHETIC:An innovating Personal Healthcare Service for a holistic remote management and treatment of Parkinson patients.

Source of funding information

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Total sum awarded (Euro)

€ 648,000

Start date of award

01/01/15

Total duration of award in years

3.0

The project/programme is most relevant to:

Parkinson's disease & PD-related disorders

Keywords

Research Abstract

Parkinson's disease (PD) is a movement disorder characterized by muscle rigidity, tremor, physical movement slowing and in extreme cases, loss of physical movement. Primary symptoms result of decreased motor cortex stimulation caused by insufficient dopamine formation in the brain's dopaminergic neurons. Secondary symptoms include high level cognitive dysfunctions and subtle language problems. PD is chronic and progressive. Currently there is no cure for PD and associated costs, in terms of quality of life and health and social care expenditures, are expected to rise as the population ages. As none of the existing PD interventions has been really effective the field shows potential for the development of systems to monitor individuals and facilitate symptoms' management. The design of efficient ICT management system integrating remote monitoring of multi-parametric factors, decision support for medical staff, personalized and adaptable care, and patient and family education is a viable solution. PROPHETIC will exploit modern smart miniaturized systems and advanced information systems towards an infrastructure for remote, continuous, noninvasive acquisition and advanced processing of multi-parametric data and friendly telecare provision based on serious gaming. It will use embedded electronics (suite and cap) capable of measuring neural, psychological, physiological, and biomechanical parameters, and securely communicating them to a Medical Business Intelligence System where pre-processed data will be further analysed hence overcoming real time activity monitoring limitations. Continuous monitoring while aware of the patient's levodopa medication will help determine health and motor status and avoid levodopa side effects e.g. dyskinesia, freezing, low blood pressure, and falls. It will support caregivers' decisions and allow early interventions. Appropriate information could be shared between the actors through e.g. smart phones with access according to their role.

Types:

Fellowships

Member States:

European Commission

Diseases:

Parkinson's disease & PD-related disorders

Years:

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Database Categories:

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