# "EPSRC – NIHR HTC Partnership Award: Partnership with the MindTech HTC

https://www.neurodegenerationresearch.eu/survey/epsrc-nihr-htc-partnership-award-partnership-with-the-mindtech-htc/

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**Country**

United Kingdom

**Title of project or programme**

"EPSRC - NIHR HTC Partnership Award: Partnership with the MindTech HTC

**Source of funding information**

EPSRC

**Total sum awarded (Euro)**

€ 204,911

**Start date of award**

01/04/2014

**Total duration of award in years**

3

**Keywords**
**Research Abstract**
This is a proposal for a partnership between engineering and physical science (EPS) researchers – initially in the Universities of Manchester, Nottingham, Sheffield, Lancaster and York – and the MindTech Healthcare Technology Cooperative. The aim is to explore the potential for technology to transform the management and treatment of mental health conditions, identifying underpinning EPS research challenges, and working together to address them. Mental health already accounts for 13% of the NHS budget (the highest proportion for any disease area, and growing rapidly) and is a major cause of reduced quality of life. Most care is in the community, but most of the cost is associated with unplanned hospital admissions

resulting from inadequate/ineffective care. There is great potential for technology to transform care in the community – improving diagnosis/stratification, supporting self-care, involving family and friends more effectively, and providing timely prompts and alerts for healthcare professionals. If this potential is to be realised, there are, however, significant EPS challenges to be addressed – in sensing systems, information management, data analytics and human-computer interaction.

The model we propose aims to build an integrated community of EPS researchers and users, who will co-develop an EPS research agenda grounded in a clear clinical need, informed by the perspectives, experiences and needs of patients/carers, healthcare commissioning/provider organisations, healthcare professionals and industry (both technology and healthcare, ranging from SMEs to large multinational companies).

The partnership will focus on four broad clinical areas of major societal importance, aligned with the MindTech HTC agenda: serious mental illness, mood and affective disorder, dementia, and developmental disorders – each with clinical leadership – drawing on mental health expertise in both Nottingham (the MindTech HTC) and Manchester.
We currently identify four areas of challenging EPS research required to underpin the development of effective technologies for managed self-care of mental health conditions: sensing systems for acquiring rich, 'real-time' longitudinal data (new sensing technologies, sensor systems); information management methods for incrementally integrating and linking heterogeneous information and data (integrating and linking data from different sources, information representation); data analytics for extracting predictive outcome models, particularly from temporal data (modelling longitudinal data, modelling populations of temporal models, image computing; and human-computer interaction methods for the managed self-care setting (collaborative decision-support).

**Further information available at:**

**Types:**
Investments < €500k

**Member States:**
United Kingdom

**Diseases:**
N/A

**Years:**
2016

**Database Categories:**
N/A

**Database Tags:**
N/A