



# Newsletter

NEVERMIND

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## ***Physical illnesses and mental health – a two-way street***



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Advancements in telehealth and self-management of chronic illnesses, such as vital sign monitoring and home-based therapy, are focused on treating the primary physical disease condition, but lack supports for early mood assessment and psychological intervention. However, it is widely known that primary physical disease and mental illness are interconnected. World Health Organization showed that:

- Prevalence of major depression is higher for persons with severe physical illnesses than for those without these disorders; For example, prevalence of major depression is 29% for patients suffering from hypertension, 22% with myocardial infarction, 27% with diabetes, and 33% with cancer.
- Odds of noncompliance with medical treatment regimens are three times greater for depressed patients compared with non-depressed patients, which effects prognosis.
- Individuals with mental health conditions are less likely to seek help for physical illnesses.
- Life expectancy of patients with psychotic disorders is two decades shorter due to the cardiovascular disease that may co-occur with their mental health condition.
- Major modifiable risk factors for physical illnesses, such as poor diet, physical inactivity, tobacco use, and harmful alcohol use, are exacerbated by poor mental health.

## **Recent activities from the NEVERMIND Team!**



Dr. Luca Citi from University of Essex will be presenting the work on *Self-reported well-being score modelling and prediction: an approach based on linear dynamic systems* at the IEEE Engineering in Medicine and Biology conference in South Korea in July 2017. This year's conference theme will be "Smarter Technology for a healthier World" covering diverse topics of cutting-edge research in biomedical engineering and healthcare technology.

Inventya exhibited at the 45<sup>th</sup> Intelligent Sensing program – Wearables for diagnostic in March 2017. The event, organized by Knowledge Transfer network, bring together end-user communities, technology providers, researchers and funding agencies in the UK to share knowledge of market opportunities, needs and challenges in wearable technology in healthcare sector.

The above illustrates that chronic physical diseases can lead to the onset of depression. Conversely, depression increases the

chance that an individual will also suffer from one or more chronic physical illnesses. Therefore, pathways leading to comorbidity of mental

disorders and chronic physical illnesses are complex and bidirectional.

## Updates on the NEVERMIND project!

The fourth NEVERMIND consortium meeting was held in June 2017 at beautiful Turin, Italy.



### ***The Pilot study of the NEVERMIND project is underway!***

The NEVERMIND system is being used by a group of patients in Italy and Portugal suffering from physical illnesses including heart diseases and leg amputation.

The pilot study aims to gather patients' perspectives on the usability and comfort of the NEVERMIND tools and the sensorised shirt. All the data will be collected and analysed and ready to be incorporated into NEVERMIND 2.0!

## About NEVERMIND project

### Project Coordinators

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