

Welcome

to the eMEN Autumn newsletter, updating you on our progress and achievements across Europe in e-mental health technologies.

What is happening across the eMEN project?

Over the course of the project, each partner is piloting an e-mental health product. The examples in this autumn's newsletter illustrate some of the innovative approaches emerging from our studies, which aim to address barriers to the uptake of e-mental health. We are also disseminating evidence-based policy and research learning in creative ways, including in early September at a seminar in Geel, Belgium, which focused on e-health trends and development of apps in mental healthcare. If you have missed out on

attending eMEN events so far, we have many upcoming seminars and conferences listed at the end of this newsletter, and they are all free to attend.

Combined expertise across the partners has supported our policy work, illustrated below by the French mental health and psychiatry political roadmap – a good example of how we aim to use the product pilots to influence policy and practice in European digital mental health.

What are we learning from product pilots?

Clever ECAs in Dutch Moodbuster-study Embodied conversational agents (ECAs) are computer-generated characters that simulate human-like behaviors to communicate with users. Can ECAs be used to bridge the gap between guided and unguided online interventions for mental health disorders? What is the effectiveness of ECAs used in internet interventions for the treatment of (light to mild) depression? Do they have a positive effect on rates of client adherence to treatment?

Simon Provoost, PhD student at VU University, decided to investigate the effectiveness of ECAs in online interventions for depression. He started his research with a literature study, and did not find much evidence. However, a second study showed unexpected results, and now it is time for a more sophisticated follow-up. Simon explains:

"ECAs have three necessary components: they need to have embodiment, they must interact with the participant (give simple feedback for example) and they have to act 'clever'. This means it is not just that simple 'smiley' showing up at the end of a lesson, regardless of what you did - it is a smiley that for instance does something different when you take 20 seconds instead of five minutes to answer 10 questions. Our next step will be a study on the effectiveness for adherence of a more clever ECA. More than just 'thumbs up' or 'well done!', this ECA will respond to what participants have been doing in the intervention. It acts as a kind of functional agent, a virtual coach. For this study, which only will take place in The Netherlands, we are going to use a 'light' version of Moodbuster, developed for people with low mood, but not for people with actual depression. The main goal is to teach them certain techniques to attain more positive impulses."

Please see the eMEN website for the full article

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Wearables for mental health: The Carewear pilots

The Expertise unit Psychology, Technology & Society and Mobilab of Thomas More University of Applied Sciences in Belgium recently completed the piloting of Carewear tools. Carewear is an intervention that combines wearables with an online platform, which will be implemented as a useful addition to depression treatment and employee assistance programmes (EAPs). A first pilot study with professionals in mental healthcare shows that, although some technical challenges require further attention, they are generally positive about its potential for give added value to care as usual.

The World Health Organisation (WHO) states that stress-related problems and depression are currently the most important challenges in mental healthcare. Technological innovations can provide novel means for ambulatory monitoring and raise awareness of these conditions. Wearables collect continuous and ecologically-valid physiological data that can provide information on both risk factors and the process of recovery in mental disorders. The Carewear project aims to validate an online platform that will allow healthcare professionals to use wearable data in their clinical practice.

Carewear focuses on the measurement of physical activity (including step count), stress situations, subjective state, resting heart rate and heart rate variability. It consists of four components:









Recently, professionals in our user group piloted the Carewear prototype for some hands-on experience with the tools, to assess their usability, and to help with debugging the platform. Preliminary qualitative analyses suggest that professionals indeed supported the idea that they could be a useful addition to current treatment protocols. Participants liked the approach of an online application where physiological data and self-report were combined, and the manuals were found to be clear and easy to use.

However, they also encountered some technical challenges. Uploading the data from the wearable was a fairly difficult process since the Empatica E4 - the high-end wearable currently used in this study - does not have an API (Application Programming Interface). There were also some instances where data logging did not occur correctly. Finally, the professionals felt that working with the platform could sometimes be a bit cumbersome, and that the design of the interface could be more attractive. The input of the professionals is invaluable since we can now address some specific problems before starting to use the tools with clients. Additionally, more general remarks will be used to optimise the Carewear tools when we move from a validated prototype to a finished platform.

Contact

For more information on this project, feel free to reach out to Nele De Witte (nele.dw@ thomasmore.be). You can also follow our updates on twitter (@care wear).

e-Mental Health events in 2018

Trends and development of apps in mental healthcare (Geel, Belgium)

On September 6th, after a warm summer, the Belgian eMen partners - Pulso and Thomas More University - welcomed everyone interested in "Trends and technical development of apps in mental healthcare" in Geel. During this half-day seminar, the audience was informed about the latest evolutions and more technical aspects of e-mental health developments.

The seminar was officially opened by the Thomas More University's Director of Research, Dr. Joan De Boeck, followed by two interesting keynote presentations. The first keynote speaker, Prof. Dr. Kristof van Laerhoven (University of Siegen), presented "Smoking Detection as a Case Study for Monitoring Human Behaviours", and the second keynote speaker, Artur Rocha (INESC TEC), provided an insight in the development of the Moodbuster application.



The keynote presentations were followed by a more hands-on session. The participants were invited to take part in workshops where existing applications were presented and demonstrated. As this seminar had a focus on the technical part

of e-mental health, the workshops had a major focus on these aspects, more specifically:

"How does an app empower youngsters to regulate tension and how does an app increase joy of living in vulnerable people?" by Wil Wintjens (Ivengi);

"Measurement of stress; subjective versus objective data" by Annelies Goris (IMEC);

"Innovative EAP Tools: EAP online, HappyCare & APPA Tool" by Charlotte Van den Broucke & Dirk Antonissen (Pulso); and

"Wearable technology for mental health care: Outcomes and challenges within the carewear project" by Romy Sels & Nele De Witte (Thomas More).

How is e-mental health influencing European mental health policy?

eMEN mentioned in the French mental health and psychiatry political roadmap

This summer, the French Minister of Health and Social Affairs, Agnès Buzyn, together with the Secretary of State for Disabled Persons, Sophie Cluzel, presented the government's roadmap for mental health and psychiatry (Feuille de route santé mentale et psychiatrie) for the next years. It includes – for the first time in history! – e-mental health and – we are proud to report it!! – the eMEN project.

The government's new roadmap for mental health and psychiatry is a comprehensive plan to change the way we look at mental health and psychiatry, at mental health problems and at people directly or indirectly affected by such problems. The document also aims to promote empowerment, social inclusion and care access.

Mental health promotion and prevention are mentioned as one of the main axes of the roadmap and, in this framework, e-mental health is mentioned as a tool, a lever for action and a possible solution. Indeed, the document states that digitalisation and innovation are at the heart of the digital transformation of the French health system. However, it also confirms that the use of e-mental health potential in France is one of the lowest in Europe. The roadmap therefore affirms its engagement with promoting e-mental health development and its support for initiatives such as the Interreg NWE eMEN project, whose efforts and work are highly welcomed.

Visit the eMEN website for the full article

The future of the Dutch mental health sector

In July 2018 the main Dutch mental health stakeholders (including Mental Health Netherlands and the Ministry of Health) agreed on a joint ambition for mental health. This ambition clearly shows that the Dutch mental health landscape will change quickly in the coming years. There will be a strong focus on integrated care and care in the right place. The latter essentially means: prevent expensive care, provide care closer to home (if possible), provide more ambulant care and replace regular care with other support such as eHealth.

The role of community support teams will increase further, as more care will be brought into the neighbourhood, closer to where people live. More mental health professionals will join these multidisciplinary teams in the coming year. Furthermore, people with lived experiences will become an integral part of the care structure. In addition, stakeholders will cooperate to develop a future-proof education system for mental health care - a system in which prevention (nutrition and lifestyle) and the use of eHealth are structurally embedded, alongside the mental health care standards. On the financial side there will be a focus on multi-annual agreements with insurance companies and lower administrative burdens. Care givers must provide relevant, effective and affordable quality care, and patients must be given clear choices.

In 2019 a new reimbursement experiment will be implemented which supports a new achievement structure in which professionals who contribute most to the reduction of waiting lists will be

covered by the insurance company, such as social workers and people with lived experience. The new funding structure will support correct and timely up- or down-grading of care and proper use of care.

In the meantime - before the new reimbursement system is in place - the National Care Authority will be asked how to reduce the incentive for delivering ineffective care and increase incentives for effective care. The new reimbursement system should become effective from January 1st 2020.

The future is coming; get ready!

Source: Onderhandelaarsakkoord Geestelijke Gezondheidszorg (GGZ) 2019 t/m 2022 (3juli 2018) "Toekomstbeeld / ambitie voor de GGZ)

Read the full version of this article on the eMEN website

Upcoming FREE transnational seminars and conferences

Over the life of the project, eMEN is delivering 24 transnational events across Europe addressing e-mental health evidence-based innovations, quality, access and scale.

9th October: Dublin, Ireland

eMental Health: The Next Big Thing in Psychological Practice?

Mental Health Reform and the Psychological Society of Ireland are hosting a joint eMEN seminar focusing on the challenges and opportunities presented by technology-supported therapy for the future of mental health care. The seminar will be held on the **9th October 2018 in the Hilton Charlemont Hotel in Dublin** and will be launched by the Irish Minister of State for Mental Health and Older People, Jim Daly, T.D. Other confirmed speakers of the seminar include: Prof. Brian Hughes from NUI Galway, Prof. Youseff Shiban from University of Göttingen, Dr. Alison Darcy, the founder of Woebot and Dr. Marie Murray, University College Dublin.

The seminar will explore a variety of subjects including those that are growing in popularity, such as counselling over the phone or instant chat, and eTherapy mobile applications that show promise in supporting ongoing care and self-management for people with enduring mental health difficulties. Gaming applications used to support therapy and engagement for young people and virtual reality that has an important application in the treatment of phobias and anxiety will also be among the subjects discussed. Finally, the seminar will raise questions on the potential and the future of technology and psychology/psychotherapy: is it utopian or dystopian?

You can register here

Future dates for your diaries:

29th November: Berlin, Germany

E-mental health in Europe: learning from our neighbours

11th December: Rennes, France

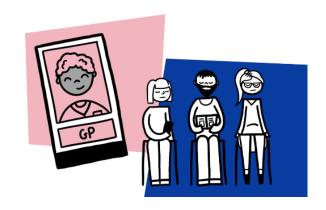
Ethical, juridical and quality dimensions of e-mental health tools and services

24th January: London, UK

Prevention with digital technologies: expanding the possibilities for better mental health

Share our animation!

Our eMEN animation is available at nweurope.eu/emen. It explains the concept of e-mental health and the many ways it can support mental wellbeing. We encourage you to share this with your networks, embed it in your website and use it in your presentations.



Why not join our transnational network?

eMEN is an e-mental health project running until November 2019, funded through the Interreg North West European Innovation Programme with a value of €5.36million. The six country partners are led by the Netherlands and include Belgium, France, Germany, Ireland and the UK, who together combine diverse technological, clinical, research, and policy expertise.

To receive updates on our future activities and connect to e-mental health stakeholders across Europe, we encourage you to <u>register to join our network</u>.

We also welcome invitations to contribute to your event. Further contact information for all the partners is available at www.nweurope.eu/emen.