



## e-MS Experts' Summit Season 2020

## **Abstracts**

## **New horizon: A holistic treatment approach for MS patients**

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MS displays a wide range of signs and symptoms, which differ significantly from person to person and throughout the disease course; this makes it challenging to capture the evolution of MS symptomatology accurately within the limited number and duration of visits by healthcare professionals.

MS symptoms include those involved in physical functioning (mobility, spasticity, etc.), but also more well-known symptoms, e.g. fatigue, sensorial dysfunction, vision/sleep disturbances, bladder/bowel functioning and mental health issues (cognition, depression, anxiety, etc.). In particular, 33–50% of patients with MS have major depressive disorder and >20% report anxiety. Also, patients with MS experience frequent cardiometabolic comorbidities, e.g. diabetes, hypertension, hyperlipidaemia or chronic lung disease.

Several effective medicines are approved for the management of MS. While immune system modulating drugs reduce the likelihood of progression and relapses, other treatments are required to address symptoms, mental health and other MS comorbidities specifically.

Many digital solutions are currently in development to help patients manage their chronic conditions; some of these solutions use behavioural change techniques and/or give providers real-time therapeutic insights.

Smartphones and tablets have transformed every facet of our daily lives, and this technology is now impacting healthcare. Digital Therapeutics (DTx) is reimagining the way we think about treating many aspects of chronic diseases, by using technology to both deliver and collect information anytime and anywhere, allowing the possibility of using software as a therapeutic tool. DTx can deliver evidence-based therapeutic interventions to patients, driven by high-quality software programs that aim to prevent, diagnose and/or treat a broad spectrum of physical, mental and behavioural conditions. The first examples are already a reality, with cognitive behavioural therapy improving fatigue, anxiety and depression in MS clinical trials. DTx could help improve outcomes for patients with MS seeking holistic care.

## References

- 1. National MS Society website. Available at: https://www.nationalmssociety.org/What-is-MS/Definition-of-MS.
- 2. Boeschoten RE, Braamse AMJ, Beekman ATF, et al. J Neurol Sci 2017; 372: 331–41.
- 3. R J Siegert, D A Abernethy. J Neurol Neurosurg Psychiatry 2005; 76: 469-475.
- **4.** Digital Therapeutics Alliance website. Available at: <a href="https://dtxalliance.org/">https://dtxalliance.org/</a>.

