

## **POSTER ABSTRACT**

## Creation of a telehealth application empowering patients with multiple sclerosis: MyApp4SEP

23rd International Conference on Integrated Care, Antwerp, Flanders, 22-24 May 2023

Nicolas Moyano<sup>1</sup>, Christel Halleux<sup>1</sup>, Lara Vigneron<sup>2</sup>, Gaël Delrue<sup>1</sup>, Diamela Vicencio<sup>1</sup>

- 1: Chu de Liège, Liège, Belgium
- 2: Yuza srl, Liège, Belgium

**Introduction:** Multiple sclerosis (MS) is a chronic autoimmune inflammatory disease of the central nervous system. International recommendations advocate multidisciplinary management in specialized centers, still not widely accessible at present. Moreover, this doesn't fit to newly diagnosed or pauci-symptomatic patients that are still professionally active. Ultimately, the lack of recognition of invisible disorders still persists.

The use of e-health as tool for care has been evaluated for many years and its growth is supported by various evidence of its effectiveness in MS.

To our knowledge no comprehensive e-health tool exists in Belgium that aims at empowering MS patients from the prodromal to a more advanced disease stage.

**Policy Context And Objective:** Following our involvement in the national and regional public health plan "Integrated Care for a better health" (www.integreo.be) via the federal project Chronicopôle, we gave up the ""symptom and discipline-centered" approach to develop a more integrated one: health promotion tied to the daily life of patients.

A strong involvement of users in every stages of development of a e-health solution is required to meet their specificities and needs. Placing them at the heart of the thinking process was therefore mandatory.

Such a design needs a multi-step approach involving: Analysis of user needs, definition of desired functionality and finally, development and testing of acceptability and user experience.

We partnered with the Wallonia e-health Living Lab (WeLL) for methodological guidance to achieve this. Based on their approach, different workshops were proposed, first to a group of MS patients, but also to a group of health professionals, in order to leave a dichotomous thinking framework.

**Target Population:** Any Belgian French speaking person (Dutch translation pending) with MS. Healthcare professionals involved in MS patients care.

**Highlights:** Two workshops (n = 11 patients) were organized in collaboration with the WeLL. They took place at their offices and focused on fundamental needs/issues in care pathways of patients. Furthermore, a specific workshop for health professionals was also organized. From the aggregation of these two expertises emerged the architecture and functionalities of our tool.

The application content was determined as follow: patient record, documentation (developing literacy), peer's good tips, toolbox (exercises, questionnaires), diary and logbook, directory (personal and relevant resources).

During the IT development, all the patients/partners were able to give their opinion and validate each step via a functional analysis of each module. Finally, about 20 patients tested the application during a period of 3 months. Final modifications were made before publishing on the main application stores.

**Conclusion:** MyApp4SEP is fully developed and available for free on the Play Store and the App Store starting from november 2022.

Co-creation leads our project and aims at maximize health literacy by putting as first objective coping with real world caveats of our patients.

The goal for the next few years is evolve the app based on patients/users feedbacks and propositions but also by developing partnership with other teams working in a "patient-centered" approach among other chronic diseases.