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## Conference Abstract

### **Developing a managed care network for Multiple Sclerosis: the role of demand stratification to support special group commissioning strategies**

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## Abstract

**Introduction:** Multiple sclerosis (MS) is a chronic and progressive disease characterised by central nervous system lesions and subsequent neural damage. Patients have increasingly severe disability and there are no therapies for healing. Since the onset, usually between 20 and 40 years old, MS dramatically affects the quality of life (QoL) of patients and their families. Whereas literature suggests the importance of integration in MS management, evidences show many difficulties to achieve integration and seamless integrated clinical pathways (ICPs) for this target of patients. Hitherto there are limited experiences around comprehensive interventions for the MS management, exploiting a life-course approach and broader scales and scopes towards special group commissioning strategies – with only one relevant exemption in the U.S. Veterans Integrated Service Network (VISN) supporting MS Regional Program.

The paper presents the undergoing experience at the LHA of Parma, located in northern Italy, in Emilia Romagna Region, which accounts for 443.770 habitants, covering a surface of 3.448 kilometres, including a mountain area, with 46 municipalities. Of interest, in the context of a broad regional programme oriented to reorganise primary health care through the development of medical homes model, the LHA in mid-2014 started a project for setting up a MS managed care network. Moving from a systematic analysis yet of the demand of MS patients yet of the local supply chain, the project has sought for establishing a managed care network based on the newly primary health care system and for identifying special commissioning strategies for this targeted group through ICPs.

**Objectives and methods:** The project pursues two main objectives: developing a managed care network for MS patients from the commissioners' perspective and therefore identifying a system

for programme planning resources needed for MS management and procuring services within the LHA.

The project is broken down into three major phases exploiting different methods and stakeholders' engagement. The first phase focused on the demand analysis.

On one hand, the MS patients' population was identified and stratified using LHA administrative databases. An algorithm based on the individual fiscal code and patient exemption extrapolated the targeted population. To stratify the targeted group and analyse their current pattern of resources' utilization two further actions were performed. Firstly, neurologists' team from MS centres fulfilled a Joint Need Assessment (JNA) through clinical vignette for their patients. Health needs were assessed through the Expanded Disability Status Scale (EDSS) that measures the rate of MS progression. The scale was aggregated in three clusters relying on the disease staging and use of disease modifying drugs (DMDs): little disability (EDSS  $0 < x < 3.5$ ), moderate disability (EDSS  $4 < x < 7$ ) and severe disability (EDSS  $x \geq 7.5$ ). Social care needs were operationalised and scored according to three items: family situation; work condition; cognitive and mental dysfunctions. The final sum allowed assigning the patient to three classes of fragility: mild ( $x < 1$ ); moderate ( $1 \geq x > 2$ ); severe ( $x \geq 2$ ). Cross-tabulating the level of disability and fragility, the group of MS patients was stratified in 9 classes. Secondly, the pattern of resources utilisation for each class was analysed to create care-profiles based on the types of care (PCTC) provided. To this extent through the unique patient record different data sources were consulted: patients discharge reports, A&E reports, specialty and diagnostic outpatients services, pharmaceutical prescriptions (hospital and community databases), home care services, care home and intermediate care services, hospice, social care services and personal budget/disability allowance dataset and finally prosthetics. On the other hand, the first phase included also the analysis of the supply chain, to identify current MS centres and their resources as well as the broad range of services accessed by the MS patients. The second phase is going set up nine ICPs, one for each care-profile, to design seamless and integrated processes through different settings (MS centre, medical homes, rehab services etc.). Moreover, this phase includes the estimation of the total cost of care for each ICP based on the resources' utilisation pattern associated with each PCTC. Finally, the third phase is going to set up the managed care network for SM patients, based on the nine ICPs as standard base-line of the care packages guaranteed and integrated processes of care delivery. To fulfil this phase a consensus building process with professionals and providers will support the implementation of ICPs and the set-up of a dashboard of process and outcome indicators, directly monitored by the LHA commissioners.

**Timeline:** The project started in June 2014 and is expected to end up in February 2015 with the outline of the MS managed care network. The demand analysis and stratification across the nine care-profiles as well as the supply chain review were completed in November 2014. Current work is focused on the ICPs' design for the nine care-profiles and their cost-assessment.

**Highlights and conclusions:** The project holds a paradigmatic and innovative value from two perspectives. Firstly, the methods used for the MS patients group identification and segmentation is remarkable for further exploitation and transferrable yet to different contexts yet to different care groups, providing a reliable tools for strategic commissioning for complex care needs. In fact, the method applied to the LHA of Parma, was previously tested in other contexts and gradually improved through adjustments and due to the maturity of data management systems. Secondly, this methodology hinges on the set-up of ICPs, thus it allows to directly establish a routinely system relating the patient-centred perspective and the commissioners objectives, focused on the programme planning and procuring in a given local health economy. Therefore, the efforts to standardise a set of ICPs through a process-based set of PCTC paved the way for interesting practice achievements in the management of complex chronic conditions.

Finally, the project delivers an innovative experience towards understanding how to implement a managed care network through the integrative function of primary care and ICPs. One of the major question the project ought to reply, in fact, is whether the MS centre, the hub of the care network, could be placed in the future in a medical home, out of hospital, if it will have to coordinate spokes centres at the community level through ICPs.

## **Keywords**

**multiple sclerosis management; clinical governance; administrative data; needs stratification; integrated care pathways**

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## **PowerPoint presentation**

<http://integratedcarefoundation.org/resource/icic15-presentations>