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 Expended 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≥ 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≥x<2); severe (x≥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

PowerPoint presentation

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