Social Return on Investment of an ideal approach to Multiple Sclerosis within the Spanish National Health System

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INTRODUCTION

Multiple Sclerosis (MS) is a chronic inflammatory, demyelinating and neurodegenerative disease that in many cases produces disability, having a high impact in personal, familiar and social aspects of life, reducing importantly the quality of life.[1,2]

MS is the **second cause of disability in Spain among the youth population** after traffic accidents. It causes unemployment in many patients as disability progresses and therefore a high socioeconomic burden.[1,3]

OBJECTIVES

This study **measures the Social Return on Investment (SROI)** of a hypothetical implementation of an **ideal approach to MS** within the Spanish National Health System (SNHS), from a **clinical, healthcare, economic and social perspective**.

METHODS

We used the following sources of information:

a. **A narrative literature review** and **official data sources**.

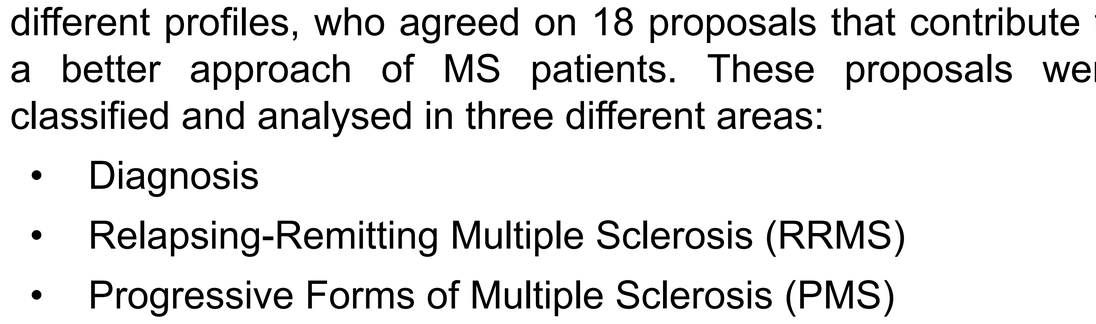
b. **A survey** of 532 MS patients, about the impact of MS in their quality of life.

c. **A multidisciplinary working group of nine experts**, with different profiles, who agreed on 18 proposals that contribute to a better approach of MS patients. These proposals were classified and analysed in three different areas:
   - Diagnosis
   - Relapsing-Remitting Multiple Sclerosis (RRMS)
   - Progressive Forms of Multiple Sclerosis (PMS)

We carried out a **prospective SROI analysis**, with a one-year time horizon. We estimated the required investment of a hypothetical implementation of this ideal approach, as well as the potential social value that it could create (**Figure 1**). We calculated the outcomes in monetary units and measured intangible outcomes through proxy indicators.

Finally, **a sensitivity analysis was performed** based on the variation of certain variables.

Figure 1. SROI Ratio.



RESULTS

The proposed ideal approach revealed that **there are still unmet needs** that can be addressed within the SNHS. This approach included proposals such as early diagnosis, multidisciplinary team management, equity in drug access and social protection. Some **potential outcomes** are SNHS cost savings associated to early diagnosis, unnecessary medical visits and progression delay; reduction of labour productivity losses; and increased emotional wellbeing, autonomy and health-related quality of life.

The ideal approach to MS would require an investment of 148 million €, and would yield 272 million € of social return (**Table 1**).

This ideal approach to MS could yield almost **€2 of social return for each euro invested** (**Table 2**).

Table 1. Investment and Social return by area.

Areas	Investment		Social return	
	Million €	%	Million €	%
Diagnosis	6,319,891	**4.3**	15,350,148	**5.6**
RRMS	64,250,948	**43.3**	144,887,226	**53.3**
PMS	77,775,525	**52.4**	111,703,805	**41.1**
Total	**148,346,366**	**100**	**271,941,181**	**100**

Sensitivity analysis showed that, even in the worst-case scenario, this approach would offer a social return that is greater than the initial investment (1.59); under more favourable conditions, this is even higher (2.15) (**Table 2**).

Table 2. Sensitivity analysis for the SROI ratio by area.

Areas	Worst scenario	Basic scenario	Best scenario
Diagnosis	1.32 €	2.43 €	3.54 €
RRMS	2.14 €	2.26 €	2.37 €
PMS	1.25 €	1.44 €	1.75 €
Total SROI	**1.59 €**	**1.83 €**	**2.15 €**

CONCLUSIONS

Adequate interventions could **benefit the current management of MS.** For this purpose, this study offers essential information to guide health interventions, resulting in money savings for the SNHS and an increase in MS patients' quality of life.

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In collaboration with: Roche

Presented at ISPOR Europe 2018, 10-14 November, 2018. Barcelona, Spain.