

SOCIAL COSTS IN MULTIPLE SCLEROSIS ECONOMIC EVALUATIONS: DO THEIR INCLUSION CHANGE THE RESULTS AND CONCLUSIONS? A SYSTEMATIC REVIEW

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OBJECTIVES: Even though the arguments for including social costs in economic evaluations seems overwhelming, only few studies have actually examined whether social costs in economic evaluations affect the results and conclusion significantly. Multiple sclerosis (MS) is associated with substantial social costs (both informal care costs and to an even higher degree productivity loss of the patient), which is a less explored area in relation to the role of social costs in economic evaluations. The aim of this study is to assess whether social costs (productivity losses and/or informal care costs) are included in MS-related healthcare interventions and to evaluate, if so, the effect of their inclusion on the results and on the conclusions.

METHODS: A systematic review was designed and launched on Medline and the Cost-Effectiveness Analysis Registry from the University of Tufts, from the beginning of 2000 until the end of 2019. Included studies should meet the following criteria: i) being an original study published in a scientific journal, ii) being an economic evaluation of any multiple sclerosis-related intervention, iii) including social costs (productivity losses and/or informal care costs), iv) being written in English, v) using quality-adjusted life years as outcome, and vi) separating the results according to the perspective applied.

RESULTS: Social costs were included in 47% of the identified economic evaluation studies. 29 articles were selected, resulting in 67 economic evaluation estimations. Productivity losses were assessed in 90% of the estimations (being the human capital approach the most used method), whereas informal care costs were included in nearly two-thirds (equally applying the opportunity and the replacement cost methods). The inclusion of social costs changed the conclusions in 10 estimations, six of them switching from not to be implemented from the healthcare perspective to implemented from the societal perspective. The inclusion of social costs altered the results from cost-effective to dominant in 6 additional estimations.

Figure 1: Flowchart of study identification and selection criteria

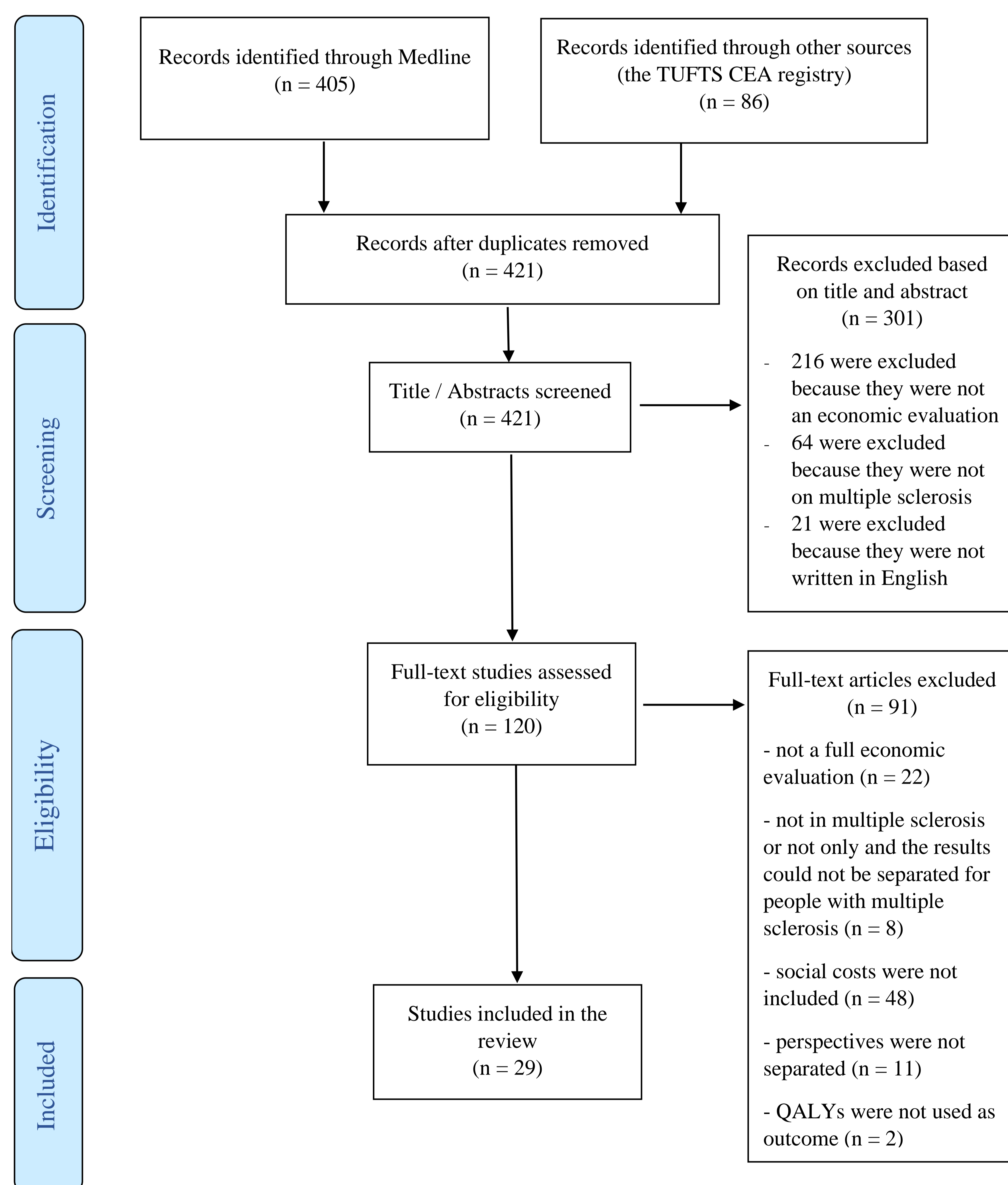


Figure 2: Incremental Cost-Utility Ratios (ICUR) in Multiple Sclerosis from the healthcare perspective.

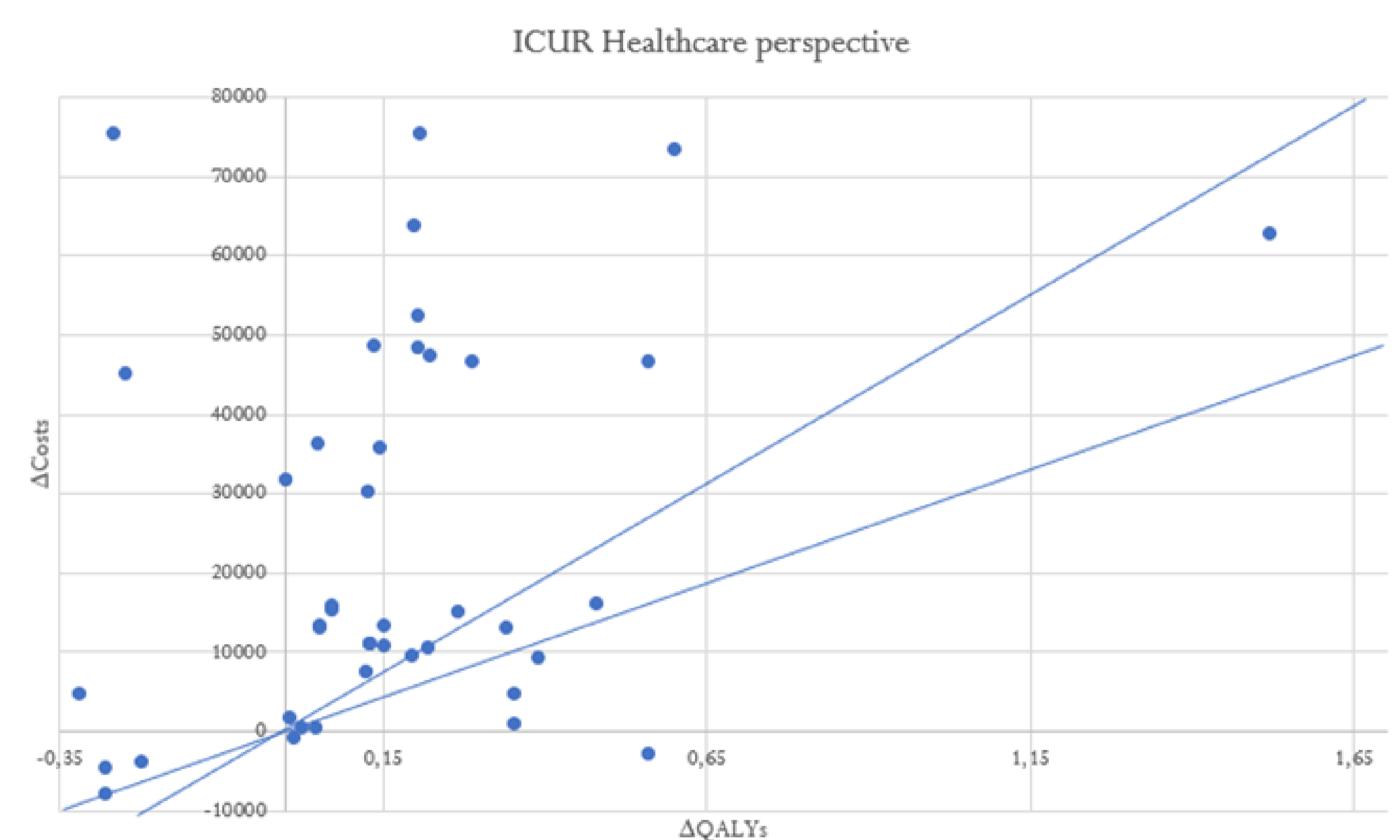
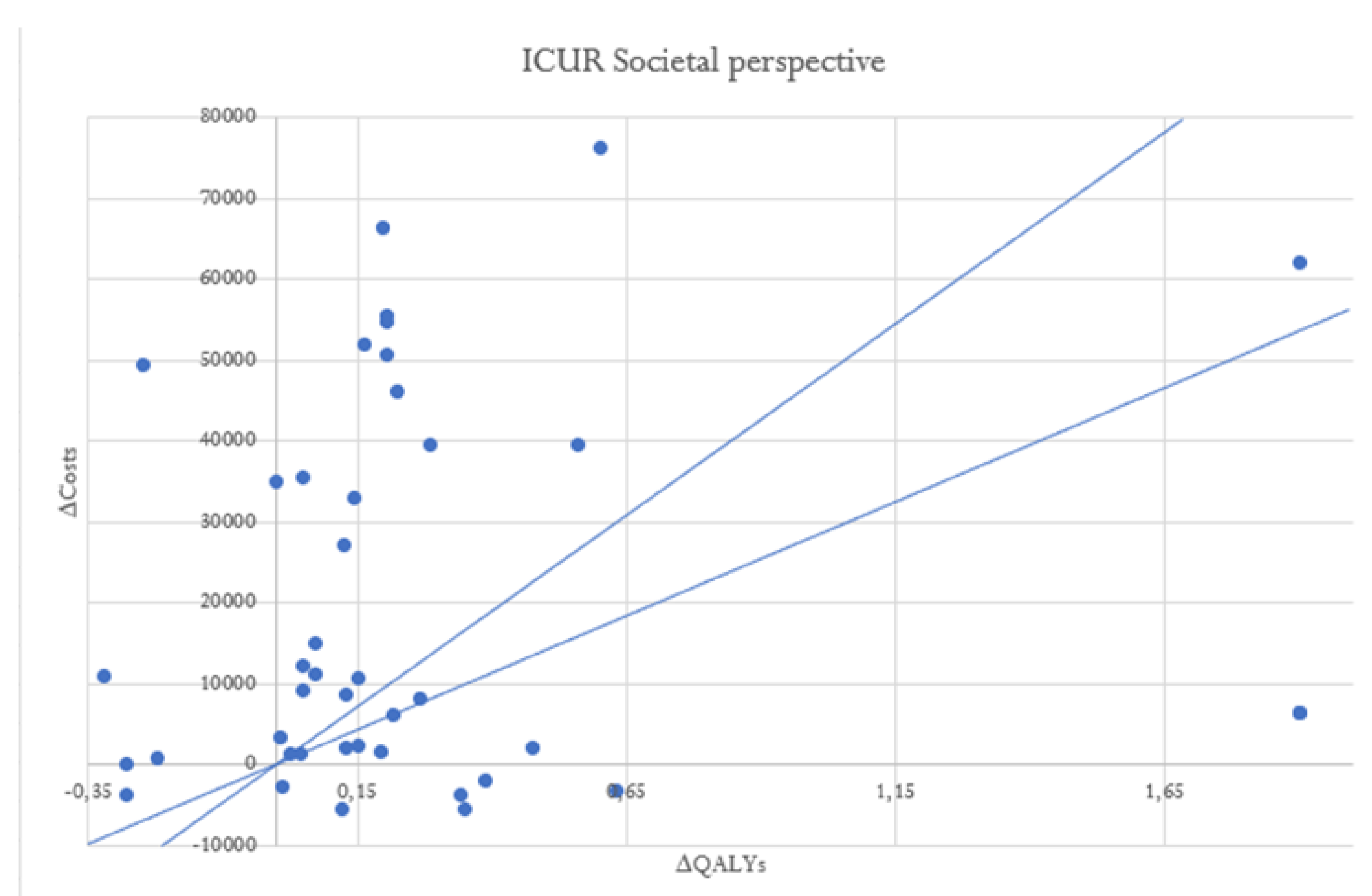


Figure 3: Incremental Cost-Utility Ratios (ICUR) in Multiple Sclerosis from the societal perspective.



CONCLUSIONS: Compared with other diseases, social costs were more frequently included in economic evaluations of multiple sclerosis-related interventions, leading to changes in the results and the conclusions, which might reflect the burden of multiple sclerosis on social costs. Their inclusion would help in identifying the most appropriate interventions for reducing the economic burden of the disease.