SUPPLEMENTARY MATERIAL

Journal: Pharmacoeconomics - Open

Article: Healthcare, Sickness Absence, and Disability Pension Cost Trajectories in the First 5

Years After Diagnosis with Multiple Sclerosis: A Prospective Register-Based Cohort Study in

Sweden

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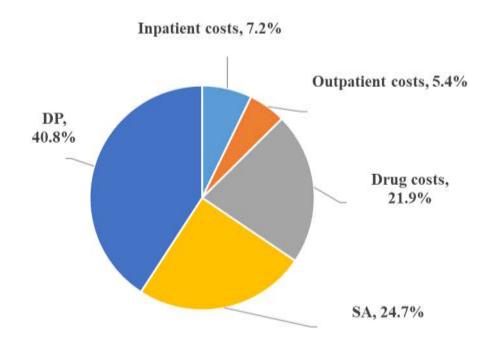
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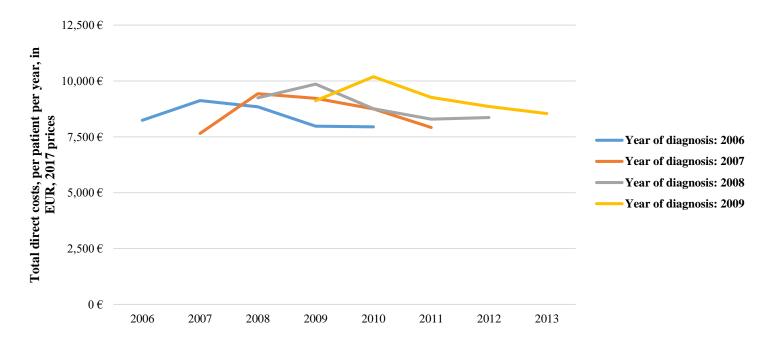
Figure 1: Cost components as % of total costs, average across all years and cohorts



Abbreviations: DP = disability pension; SA = sickness absence.

Figure 2a-b: Change in the mean, annual, per patient, direct and indirect costs, by year of MS diagnosis (four study cohorts)

## a) Direct costs



## b) Indirect costs

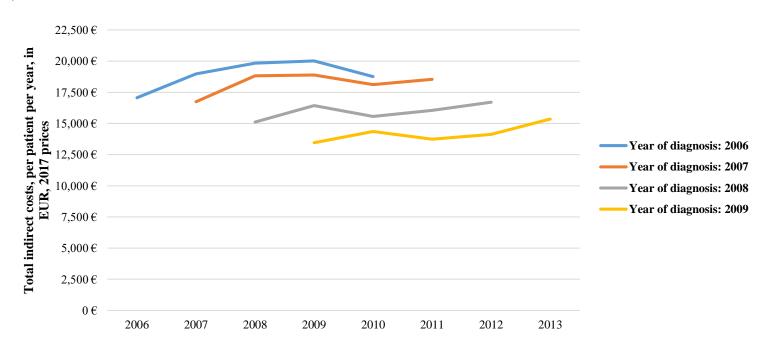
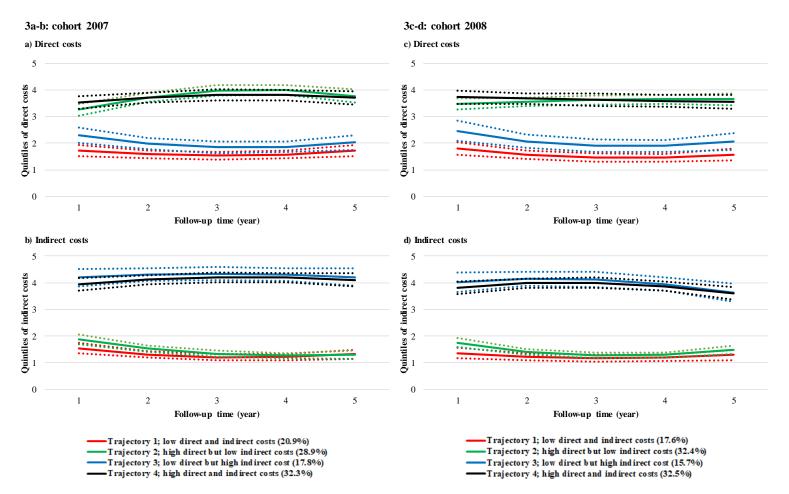


Figure 3: Estimated direct and indirect cost trajectories, for the 2007 (3a-b) and 2008 (3c-d) study cohorts, separately, during the 5-year follow-up; dotted lines present the 95% confidence intervals



**Note 1:** The values 0 to 1 in the y-axis denote the 1st quintile (0-20% of observations), 1 to 2 the 2nd (20 to 40% of observations), 2 to 3 the 3rd (40 to 60% of observations), 3 to 4 the 4th (60 to 80% of observations), and 4 to 5 the 5th quintile (80 to 100% of observations). Each included individual with MS is classified for each year of follow up into the respective quintile for direct and indirect costs, i.e. individuals can be classified in different quintiles for each year of follow-up. For example, an individual diagnosed with MS in 2007, may be in the 2nd (between 20% and 40% of observations) quintile in 2007 when it comes to direct costs, while in the 3rd quintile regarding indirect costs.

**Note 2**: Trajectories represent clusters (sub-groups) of people with MS that have a similar likelihood for belonging to the identified quintiles of costs, over time (up to five years after diagnosis).

Figure 4: Model parameters of the final model selected for the group-based multitrajectory model that was used in the trajectory analysis. Output from the statistical software SAS, using the command *proc traj*.

Maximum Likelihood Estimates
Model: Zero Inflated Poisson (ZIP)

		Standard	T for HO:	
Parameter	Estimate	Error	Parameter=0	Prob >  T
Intercept	0.43503	0.03312	13.136	0.0000
Linear	-0.21047	0.03930	-5.356	0.0000
Quadratic	0.04455	0.00951	4.687	0.0000
Intercept	0.56925	0.02440	23.335	0.0000
Linear	-0.25932	0.02982	-8.697	0.0000
Quadratic	0.05032	0.00726	6.934	0.0000
Intercept	1.41251	0.02236	63.168	0.0000
Linear	0.02549	0.02479	1.028	0.3039
Quadratic	-0.00714	0.00591	-1.207	0.2274
Intercept	1.34938	0.01616	83.519	0.0000
Linear	0.04061	0.01784	2.276	0.0228
Quadratic	-0.00916	0.00426	-2.151	0.0315
Alpha0	-21.79028	805.60059	-0.027	0.9784
Alpha1	-0.34962	432.69648	-0.001	0.9994
Group membe	ership			
(%)	19.87937	0.84741	23.459	0.0000
	04 04006	0.99548	31.993	0.0000
(%)	31.84896	0.33340	011000	0.0000
(%) (%)	16.05601	1.19204	13.469	0.0000
	Intercept Linear Quadratic  Intercept Linear Quadratic  Intercept Linear Quadratic  Intercept Linear Quadratic  Alpha0 Alpha1  Group member	Intercept 0.43503 Linear -0.21047 Quadratic 0.04455  Intercept 0.56925 Linear -0.25932 Quadratic 0.05032  Intercept 1.41251 Linear 0.02549 Quadratic -0.00714  Intercept 1.34938 Linear 0.04061 Quadratic -0.00916  Alpha0 -21.79028 Alpha1 -0.34962  Group membership	Parameter         Estimate         Error           Intercept         0.43503         0.03312           Linear         -0.21047         0.03930           Quadratic         0.04455         0.00951           Intercept         0.56925         0.02440           Linear         -0.25932         0.02982           Quadratic         0.05032         0.00726           Intercept         1.41251         0.02236           Linear         0.02549         0.02479           Quadratic         -0.00714         0.00591           Intercept         1.34938         0.01616           Linear         0.04061         0.01784           Quadratic         -0.00916         0.00426           Alpha0         -21.79028         805.60059           Alpha1         -0.34962         432.69648           Group membership	Parameter         Estimate         Error         Parameter=0           Intercept         0.43503         0.03312         13.136           Linear         -0.21047         0.03930         -5.356           Quadratic         0.04455         0.00951         4.687           Intercept         0.56925         0.02440         23.335           Linear         -0.25932         0.02982         -8.697           Quadratic         0.05032         0.00726         6.934           Intercept         1.41251         0.02236         63.168           Linear         0.02549         0.02479         1.028           Quadratic         -0.00714         0.00591         -1.207           Intercept         1.34938         0.01616         83.519           Linear         0.04061         0.01784         2.276           Quadratic         -0.00916         0.00426         -2.151           Alpha0         -21.79028         805.60059         -0.027           Alpha1         -0.34962         432.69648         -0.001

BIC=-54889.74 (N=32374) BIC=-54854.21 (N=3272) AIC=-54759.77 L=-54728.77