

center study. The adjusted expected treatment success was 78.4% for MPH-OD, LA compared to 55.6% for MPH-IR and 33.8% for BEH. Treatment switches or combinations due to adverse events or inefficacy, and a more intensive follow-up for patients with comorbidities were accounted for. To identify the resource use associated with each treatment, 6 centres were asked to provide data on their management of ADHD in patients between 6 and 16 years old. Data on interventions from parents/caregivers and teachers were additionally gathered. The analytical time horizon was one year. **RESULTS:** Treatment switches to behavioural treatment occur in 11.8% of MPH-OD, LA and 24.2% of MPH-IR patients. Starting treatment with BEH alone resulted in the highest annual cost (€3453), while starting treatment with MPH-IR alone (€2138) and MPH-OD, LA alone (2187 Euro) generated a comparable cost. Probabilistic sensitivity analyses showed that the results were sensitive towards treatment success and the proportion of patients with comorbidities. **CONCLUSIONS:** UK treatment costs over one year appear comparable regardless of whether patients were treated first with MPH-OD, LA or MPH-IR. Treating patients first with BEH and then adding stimulant medication if needed resulted in higher overall annual treatment costs.

PNP13

CAREGIVER HEALTH BENEFITS AND ASSOCIATED REDUCTIONS IN HEALTHCARE COSTS AS A CONSEQUENCE OF TREATING PATIENTS WITH DONEPEZIL

Winblad B¹, Wimo A², Mastey V³, Shah S³, Haglund A⁴, Zhang R³, Miceli R³, Chin W⁵

¹Karolinska Institute, Alzheimer's Disease Research Center, Stockholm, Sweden; ²Umeå University, Umeå, Sweden; ³Pfizer Pharmaceuticals Group, Pfizer Inc, New York, NY, USA; ⁴Pfizer AB, Täby, Sweden; ⁵Axia Research, Hamilton, ON, Canada

OBJECTIVE: To compare the effect of donepezil versus placebo on the health and associated costs of caregivers of patients with mild to moderate Alzheimer's disease (AD). **METHODS:** Two hundred eighty-six patients with mild to moderate AD were randomized to receive either donepezil (n = 142) or placebo (n = 144) for 1 year. The Resource Utilization in Dementia (RUD) questionnaire was used to obtain information on caregiver healthcare resource utilization. Costs are reported in Swedish krona (SEK) and US dollars (USD) using a conversion rate of 8.38. **RESULTS:** Caregivers in the two treatment groups were similar with respect to age, marital status and the proportion living with the patient. Caregivers of donepezil-treated patients reported 16 hospitalizations, involving 69 nights hospital stays compared with 20 hospitalizations, and 122 nights hospitalized in those caring for the placebo group. Caregiver hospitalization costs were 432,821 SEK (51,649 USD) for the placebo group and 254,536 SEK (30,374 USD) for the donepezil group (p = 0.39). Healthcare professionals were contacted more

often by caregivers of the placebo group than the donepezil group (811 vs. 613, respectively), with almost twice as many general practitioner visits (329 vs. 170, respectively). The average cost of healthcare professional contact per caregiver was significantly higher (p = 0.04) for caregivers of placebo- versus donepezil-treated patients. During the study there were 815 reports of medication use by donepezil group caregivers and 1025 reports by placebo group caregivers. A statistically higher use of antihypertensives (p = 0.015), antipsychotics (p = 0.019) and anxiolytics (p = 0.004) was reported in caregivers of placebo- versus donepezil-treated patients. **CONCLUSIONS:** Significant global, cognitive and functional benefits have previously been reported in donepezil-treated AD patients from this study. The current results suggest that these benefits translate into health benefits for the caregivers of donepezil-treated patients and a corresponding reduction in caregiver-associated healthcare costs. Treatment with donepezil therefore represents an improved strategy for the management of AD.

PNP14

COST OF MULTIPLE SCLEROSIS BY LEVEL OF DISABILITY

Patwardhan MB, Matchar DB, Samsa GP, McCrory DC
Duke University, Durham, NC, USA

OBJECTIVES: In considering the impact of Multiple Sclerosis (MS) and its treatment, evidence from other chronic conditions suggests that the economic burden is highly dependant on level of physical disability. We performed a comprehensive review of the economic literature to identify what is known about the relationship between EDSS categories and cost of MS. **METHODS:** The review of literature was a multi-step process—identification of databases, abstraction of individual articles and creating evidence tables. We sought cohort studies of patients with MS that describe costs attributed to each EDSS score, and utilized specific inclusion criteria for the selection of 10 studies. **RESULTS:** Both direct (medical) and indirect (productivity) costs rise continuously with increasing EDSS category, this rise is qualitatively exponential. The rise in indirect costs appears at lower EDSS scores. The cost of a relapse occurring in any given EDSS category exceeds that associated with that particular EDSS category. Few studies comprehensively assessed the entire spectrum of the costs associated with MS, and much of the literature is based on EDSS categories in a coarser grouping. The costs will depend on the practices that were current in the population under study, making this a moving target. **CONCLUSION:** As more expensive interventions become available, cost considerations—and cost-effectiveness analyses in particular—will become increasingly relevant to decision makers, requiring cost estimates that explicitly address the impact of progression of disability. This is a topic of sufficient importance to deserve more precise and detailed research.