COST-EFFECTIVENESS OF 2 DIABETES HEALTH CARE PROGRAMMES IN BELGIUM

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OBJECTIVE: A multifaceted quality improvement programme for the care of diabetes was implemented in two different Flemish regions (Aalst and Leuven) and with slightly different modalities. The overall objective of the programmes was to improve adherence to evidence-based guidelines on diabetes in primary care physicians. The aim of this study was to assess the cost-effectiveness of the programmes compared to regular care in both regions.

METHODS: Short-term effects of the programmes were extrapolated to long-term hard endpoints, using the validated UKPDS Outcomes Model, supplemented by 2 self developed Markov models to account for benefits on process parameters (screening for retinopathy and nephropathy). A simulation of the evolution of patients was made over a time horizon of 25 years with cycles of 1 year, from a public health care payer perspective. Cost data of the different disease states and extra direct medical costs due to intensified patient management were collected from literature and from the National Institute for Health and Disability Insurance. For the self developed Markov models, utility data for all states were obtained from published studies and transition probabilities were obtained from local epidemiological studies and published trials. In the simulation the intervention was assumed to be implemented three times over the predicted life expectancy. Deterministic sensitivity analyses were performed on the combined results of outcome and process parameters.

RESULTS: At a cost of intervention of €185 (Aalst) and €284 (Leuven) per patient, the analyses show ICER'S for Aalst and Leuven of respectively €15206.70/QALY and €10397.96/QALY. Sensitivity analyses show few influence of changed input variables.

CONCLUSION: When using a ratio of €30,000/QALY as threshold of willingness to pay for health gain, the diabetes health care programmes have an acceptable ICER in both regions.