OBJECTIVES: To assess the cost-effectiveness of the SGLT2is empagliflozin 10mg and canagliflozin 100mg when administered as an add-on to MET+SU in patients with T2DM in the UK. METHODS: Long-term diabetes-related complications, QALYs, and costs were estimated for T2DM patients failing MET+SU. A micro-simulation model was developed in combination with the Januvia Diabetes Economic (JADE) model. A network meta-analysis comparing efficacy and safety across SGLT2is was used to populate the model. Data gaps were completed with data derived from published sources, including various cost-effectiveness models. Costs and QALYs were estimated over a patients’ lifetime from the UK National Health Service perspective. RESULTS: Empagliflozin 10mg attained the highest QALYs (6.691), compared to 6.611 for canagliflozin 100mg, 6.798 for empagliflozin 25mg and 6.793 for canagliflozin 300mg due to slightly lower direct costs. Sensitivity analyses were performed using a number of sensitivity scenarios, including a 10-year time horizon, BMI impact, discount rate and parameter values related to utilities, disutilities, adverse events, and discontinuation rates. OVERALL: The introduction of SGLT2is into current treatment regimens for T2DM resulted in an incremental cost-effectiveness ratio (ICER) of £17,808/QALY compared to MET+SU.

PDB111

ABSENTEEISM AND PRESENTEESIM IN A POPULATION OF PATIENTS WITH DIABETIC FOOT ULCERS IN POLAND

OBJECTIVES: Diabetic Foot Syndrome (DFS) is a serious and common complication of diabetes, often leading to limb amputation and disability. Disability and productivity loss in patients with DFS can generate significant indirect costs and potentially significant economic consequences. The purpose of the study is to estimate productivity loss and indirect costs associated with foot ulceration in patients with DFS. METHODS: We conducted a prospective survey in a population of DFS patients with foot ulceration. Loss of productivity was measured with a modified 7-item version of the Work Productivity and Activity Impairment (WPAI) questionnaire. Indirect costs of both absenteeism and presenteeism were estimated using the human capital approach on the basis of the measure of gross value added per employee. RESULTS: Nearly one third of respondents (32%) declared that foot ulceration was the direct reason why they abandoned their professional activity; 40% and 34% of respondents, respectively, were forced to limit or change their professional activity at some point in the past because of the foot ulceration. More than 40% of respondents who changed or limited their professional activity because of the foot ulceration experienced reduced earnings in 22.9% on average. Mean absenteeism was estimated at 32.63% of the nominal working time, while presenteeism was estimated at 23.48% of real working time. Total annual indirect costs were estimated and presented in Table 1. The mean productivity loss was EUR 117.3 million of the costs of sickness absence and EUR 53.5 million of the costs of presenteeism. CONCLUSIONS: Foot ulceration in patients with DFS is a common cause of significant economic consequences. The purpose of the study is to estimate productivity loss and indirect costs associated with foot ulceration in patients with DFS. There is no rationale that would clearly link productivity loss associated with ulceration in DFS and the ulceration severity.

PDB112

EXAMINING THE ROLE OF INSULIN PEN DEVICES IN ACUTE CARE SETTINGS: A REVIEW AND ANALYSIS OF HEALTH RESOURCE UTILIZATION

OBJECTIVES: Insulin administration in the acute care setting is an integral component of inpatient diabetes management. The current method of administration in acute care settings is by vial and syringe. The aim of this study was to evaluate the impact of insulin pen devices in acute care setting on patient and health care worker safety, and health resource utilization (HRU). METHODS: A review of published literature was conducted to identify how insulin pen devices in the acute care setting may impact inpatient diabetes management. Additionally, nurse researchers from the McGill University Health Centre conducted a pilot study in a 52-bed unit to quantify this impact in a local context. Together, the results of the literature search and the pilot study were used to develop a new model, developed in Excel V14. Costs for the volume of insulin dispensed, injection supplies, needlestick injury management, and nursing labour were assessed. RESULTS: Literature search identified studies that provide evidence for the potential to improve inpatient management through better glycemic control, increased adherence and improved self-management education. The combined results from the literature and pilot indicate that moving from vial and non-safety syringe to insulin pen devices in acute care could lead to an estimated reduction in total insulin costs of 20% to 25% in total cost savings of €43,399.66, and 191.42 hours of nursing time saved (site with 52 beds dedicated to patients with diabetes). Cost savings from the adoption of a passive safety insulin pen were predicted based on reductions in injection volume and needlestick injuries. For an institution of similar size using safety syringes, the move to a