the comparative efficacy and safety across SGLT2is. Data gaps were completed with information derived from published sources, including previous cost-effectiveness analyses. The UK National Health Service (NHS) perspective was considered to estimate costs and QALYs over a patients’ lifetime. RESULTS: There were small differences in efficacy and safety across SGLT2is, which resulted in minor QALY and cost differences. The most effective combination on the United Kingdom (UK) insurance tariff was incremental QALYs of 0.029 versus dapagliflozin 10mg and 0.019 versus canagliflozin 100mg, and incremental costs of £178 and £86, respectively, whereas both canagliflozin 300mg and empagliflozin 10mg were dominated by empagliflozin 25mg. This resulted in an incremental cost-effectiveness ratio (ICER) of £4,858 per QALY gained with empagliflozin 25mg vs. canagliflozin 100mg. However, the differences across treatments were not significant when 95% percentile confidence intervals were considered. These results were robust to a number of sensitivity analyses, including a 10-year time horizon, BMI impact, discount rates and parameter values related to utilities, disutilities, adverse events, and discontinuation rates. CONCLUSIONS: Over 5 years, incremental costs and benefits were dominated between SGLT2is used as add-on to and metformin in UK T2DM patients. On average, empagliflozin 25mg was the most cost-effective strategy, with an ICER of £4,858 per QALY gained vs. canagliflozin 100mg.

OBJECTIVES: To assess the cost-effectiveness of the SGLT2is empagliflozin 10mg and canagliflozin 300mg 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, which included a SGLT2is arms (Empa vs. Canagl + Prospective Model) and 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 information derived from published sources, including previous 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 (6.99), compared to 6.98 for canagliflozin 100mg, 6.978 for empagliflozin 25mg and 6.974 for canagliflozin 300mg due to slightly higher HbA1c, SBP and weight control, and a small number of non-severe hypoglycaemias, compared to higher doses. Canagliflozin 300mg was the most costly strategy (£31,409, vs. £30,309, £30,309 and £27,309 for empagliflozin 25mg, 100mg and canagliflozin 100mg, respectively). Canagliflozin 300mg and empagliflozin 25mg dominated other strategies. This resulted in incremental QALYs of 0.029 versus dapagliflozin 10mg and 0.019 versus canagliflozin 100mg, and incremental costs of £178 and £86, respectively, whereas both canagliflozin 300mg and empagliflozin 10mg were dominated by empagliflozin 25mg. This resulted in an incremental cost-effectiveness ratio (ICER) of £4,858 per QALY gained with empagliflozin 25mg vs. canagliflozin 100mg. However, the differences across treatments were not significant when 95% percentile confidence intervals were considered. These results were robust to a number of sensitivity analyses, including a 10-year time horizon, BMI impact, discount rates and parameter values related to utilities, disutilities, adverse events, and discontinuation rates. CONCLUSIONS: Over 5 years, incremental costs and benefits were dominated between SGLT2is used as add-on to and metformin in UK T2DM patients. On average, empagliflozin 25mg was the most cost-effective strategy, with an ICER of £4,858 per QALY gained vs. canagliflozin 100mg.

PDB108

COST EFFECTIVENESS ANALYSIS OF FLASH GLUCOSE MONITORING FOR TYPE 2 DIABETES PATIENTS RECEIVING INSULIN TREATMENT IN THE UK

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OBJECTIVES: A small, minimally-invasive flash glucose monitor (FGM) has recently been approved for use in adults with type 2 diabetes mellitus. FGM has a passive safety pen in acute care settings is by vial and syringe. The aim of this study was to evaluate the potential cost-effectiveness of using FGM in UK insulin-treated type 2 diabetes mellitus (T2DM) patients. METHODS: The IMS Core Diabetes Model was used to evaluate the cost-effectiveness of FGM in adult patients with T2DM failing metformin (MET) add-on treatment. Incremental costs and benefits were estimated for T2DM patients failing MET+SU. A micro-simulation model was developed, which included a SGLT2is arms (Empa vs. Canagl + Prospective Model) and 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 information derived from published sources, including previous 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 (6.99), compared to 6.98 for canagliflozin 100mg, 6.978 for empagliflozin 25mg and 6.974 for canagliflozin 300mg due to slightly higher HbA1c, SBP and weight control, and a small number of non-severe hypoglycaemias, compared to higher doses. Canagliflozin 300mg was the most costly strategy (£31,409, vs. £30,309, £30,309 and £27,309 for empagliflozin 25mg, 100mg and canagliflozin 100mg, respectively). Canagliflozin 300mg and empagliflozin 25mg dominated other strategies. This resulted in incremental QALYs of 0.029 versus dapagliflozin 10mg and 0.019 versus canagliflozin 100mg, and incremental costs of £178 and £86, respectively, whereas both canagliflozin 300mg and empagliflozin 10mg were dominated by empagliflozin 25mg. This resulted in an incremental cost-effectiveness ratio (ICER) of £4,858 per QALY gained with empagliflozin 25mg vs. canagliflozin 100mg. However, the differences across treatments were not significant when 95% percentile confidence intervals were considered. These results were robust to a number of sensitivity analyses, including a 10-year time horizon, BMI impact, discount rates and parameter values related to utilities, disutilities, adverse events, and discontinuation rates. CONCLUSIONS: Over 5 years, incremental costs and benefits were dominated between SGLT2is used as add-on to and metformin in UK T2DM patients. On average, empagliflozin 25mg was the most cost-effective strategy, with an ICER of £4,858 per QALY gained vs. canagliflozin 100mg.

PDB111

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

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OBJECTIVES: Diabetic Foot Ulcers (DFU) is a serious and common complication of diabetes, often leading to limb amputation and disability. Disability and productivity loss in patients with DFU 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 DFU. METHODS: We conducted a prospective survey in a population of DFU patients with foot ulceration. Loss of productivity was measured with a modified WPAI and indirect costs associated with foot ulceration 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 reduction in earnings 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 amounted to £11.37.3 million, £20.9 million and £23.1 million if total cost of DFU was estimated using (£31.73.4 million of the costs of sickness absence and EUR 53.5 million of the costs of presenteeism. CONCLUSIONS: Foot ulceration in patients with DFU is a common problem. Nearly one third of patients give up or change their professional activity, which usually leads to a reduction in earnings. Indirect costs associated with foot ulceration in DFU impose a significant burden on the Polish economy. There is no rationale that would clearly link productivity loss associated with ulceration in DFUs and the ulceration severity.

PDB112

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

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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 implementation in the 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 review and the pilot study were used to develop an economic model, developed in Excel v14. Costs for the volume of insulin dispensed, injection supplies, needlestick injury management, and nursing labour were assessed. RESULTS: Literature reviewed studies have shown that the implementation of insulin pens have 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 a passive safety pen in acute care settings has the potential to reduce needlesticks by 50% and total cost of complications in total care settings of £43,339.66, 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 inpatient volume and needlestick injuries. For an institution of similar size using syringes, the move to a