Abstracts

PD824  COST-EFFECTIVENESS OF ROUX-EN-Y GASTRIC BYPASS IN TYPE 2 DIABETES PATIENTS IN CANADA

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OBJECTIVES: Our objective was to estimate the cost-effectiveness of Roux-en-Y Gastric Bypass (RYGB) for treating obese patients with type 2 diabetes mellitus (T2DM) in Canada compared with standard medical management using clinical data from a prospective observational study conducted at an academic medical center in the United States. METHODS: Our study used the CORE Diabetes Model which employs Monte Carlo simulation with tracker variables to estimate the lifetime costs and clinical outcomes of RYGB as a treatment for obese patients with T2DM compared with standard medical management. Costs and outcomes were discounted at 5% consistent with Canadian-specific guidelines. RESULTS: The base-case analysis showed that RYGB improved life expectancy and quality-adjusted life years (QALYs) compared with medical management of obese patients with T2DM. Our results were robust to doubling the price of RYGB compared with medical management of T2DM in Canada.

PD825  THE ECONOMIC IMPACT OF WEIGHT LOSS FOR PATIENTS WITH NEWLY DIAGNOSED TYPE 2 DIABETES MELLITUS (T2DM) IN THE US

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OBJECTIVES: As excess weight adversely affects health outcomes in patients with T2DM, weight loss a fundamental goal of treatment. This study assessed the effect of weight reduction on long-term health outcomes and associated direct medical care costs for patients newly diagnosed with T2DM. METHODS: We simulated 500 cohorts of 200 patients over 25 years using the Economic and Health Outcomes (ECHO)-T2DM model, which captures the development of key micro- and macrovascular diabetic complications. All patients were assumed to increase weight over time (0.31 pounds per year), however, half of the patients were assumed to lose 10 pounds in any year. Results: Ten pounds of weight loss resulted in cost-savings of $613 over an average of 14.6 years, mainly attributable to reductions in CHF incidence. Life years increased marginally (0.51 pounds per year), however, half of the patients were assumed to lose 10 pounds in any year. The true economic value is likely greater.

PD826  MODELLING COST EFFECTIVENESS OF BEHAVIOUR MODIFICATION PROGRAMMES AND EFFECTS ON MEDICATION: CASE STUDY OF EDUCATION PROGRAMMES IN DIABETES

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OBJECTIVES: 1) To model long-term clinical and cost-effectiveness of the Diabetes Education and Self-Management for Ongoing and Newly Diagnosed (DESMOND) for people with newly diagnosed type 2 diabetes, versus usual care in the UK; 2) To consider issues arising in modelling education / behaviour modification programmes and how such modelling can support the development of clinical research. METHODS: The model incorporates a 12-month long-term outcomes and decision analysis with evidence-based CPGs and expert panel. Transition probabilities were obtained from the PRODIACOR study. The model’s effectiveness outcome is patients who are successfully controlled in terms of glycemic control and resource utilization included only data directly related to the treatment of the acromegaly during the 2 year time-horizon in Colombia. Transition probabilities were calculated based on the efficacy results from clinical trials pooled in the meta-analysis. The model’s effectiveness outcome is patients who are successfully controlled in terms of the disease in Colombia, a hypothetical cohort of 2,503 subjects with acromegaly with an average age of 50 years was included in the model. The total annual medical treatment costs for the octreotide group were COP$ 162,802 million, compared to the total annual costs for the lanreotide group of COP$ 214,047 million. In the octreotide arm 65.3% of the patients and in the lanreotide arm 59.5% of the patients were successfully controlled. The estimated number of deaths was 164 and 168 for the groups with octreotide and lanreotide, respectively. Because the costs are lower and the effectiveness is higher for octreotide in comparison with lanreotide, octreotide is more cost-effective (dominant). Probabilistic sensitivity analyses were consistent showing octreotide as the most cost-effective option. CONCLUSIONS: Costs and effects of octreotide compare favorably to those of lanreotide in the treatment of acromegaly in Colombia. Sensitivity analysis showed that despite the uncertainty in cost-effectiveness ratio this result is robust.

PD827  COST EFFECTIVENESS OF EDUCATIONAL STRATEGIES FOR THE CONTROL AND TREATMENT OF TYPE 2 DIABETES (DMT2) AND CARDIOVASCULAR RISK FACTORS (CVRF)

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OBJECTIVES: To estimate and compare costs and effectiveness of different educational interventions at PRODIACOR study. METHODS: PRODIACOR is a prospective study (three years), randomized controlled trial, which aims to improve the quality of care for people with type 2 diabetes, optimizing the use of resources and prevent complications, thus reducing morbidity and socioeconomic cost. Includes 4 groups (control, education, patients, doctors educated and educated patients and physicians) of 9 physicians and 117 patients each. Clinical and metabolic changes were recorded in an ad-hoc form (annually and semiannually). Costs and utilization rates for drugs, consultations and practices were obtained from the administrative dataset of the coverage interventions. The intervention was approved by independent ethics committee. We performed a descriptive and inferential statistical analysis, verifying differences in means and proportions using t test, ANOVA and Chi square. RESULTS: Clinical and metabolic although there was improvement of several registered indica-