sources. Direct costs of diabetes complications and drug treatment were projected over patients’ lifetimes from a UK National Health Service perspective. Both costs and QALYs were discounted at 3.5% p.a. Sensitivity analyses were performed.

RESULTS: The model projected that treatment with IAsp would result in an additional 0.08 LYG and 0.09 QALYs per patient. Total lifetime costs/patient were estimated to increase by £419. The cost/LYG was calculated to be £5430 and cost/QALY £4825.

CONCLUSION: The model predicted that treatment with insulin aspart would result in long-term improvements in health outcomes and quality of life compared to soluble human insulin in patients with type-1 diabetes. The cost-effectiveness result is well within the range considered to represent good value for money in the UK.

**PDB23**

**EVALUATION OF THE IMPACT ON THE EQ5D INDEX (HEALTH-RELATED UTILITY) OF CONVERSION TO INSULIN GLARGINE (LANTUS) FOLLOWING FAILURE ON ORAL AGENTS IN PEOPLE WITH TYPE-2 DIABETES: INTERIM ANALYSIS**

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OBJECTIVE: In their evaluation of the cost effectiveness of insulin glargine, NICE included an assumption that switching to insulin would result in decreased health utility (8%). This altered notably any resulting cost-utility ratios. The purpose of this study was to test this hypothesis. METHODS: The design was a before-and-after study for type-2 patients who required switching to insulin. All followed an algorithm to achieve fasting and post-prandial blood glucose targets. Outcome measures included a measure of utility (EQ5D index) at baseline, three-months and six-months. This report was a preliminary analysis of the first 48 subjects, of which 32 had completed 12 weeks and 26 had completed the full 24-week study. RESULTS: Of the 26 subjects, 21 (81%) remained on glargine with or without OHAs, two required additional pre-meal boluses, and three required twice-daily pre-mixtures. The mean (SD) EQ5Dindex at baseline was 0.655 (0.275; n = 24), at three-months 0.637 (0.333; Δ vs. baseline NS) and at six-months 0.710 (0.319; Δ vs. baseline NS). At three-months, six patients had worse utility and six better utility, while 12 reported no change. At six-months, four patients had worse utility after switching, and 11 had better utility, the remaining nine subjects reported no change. Over the six-months, mean BMI increased from 29.4 to 30.0 kg/m² (p = 0.046) and mean HbA1c decreased from 10.1% to 7.8% (p = 0.001). Mean daily insulin dose at six-months was 61.6 units (range 24 to 178). CONCLUSIONS: This is a limited but meaningful interim analysis. The hypothesis that switching to insulin—here insulin glargine—resulted in a notable decrease in utility (quality of life) was rejected, with a trend for a clinically meaningful improvement in utility. Economic evaluations should, therefore, exclude this assumption. This observation is not necessarily generalisable to all insulin regimens.

**PDB24**

**ECONOMIC IMPACT OF CARDIOVASCULAR CO-MORBIDITY IN PATIENTS WITH TYPE-2 DIABETES**

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OBJECTIVES: To evaluate the impact of cardiovascular co-morbidity on total and diabetes-related health care costs in patients with type-2 diabetes. METHODS: Retrospective analysis of a state Medicaid claims data was conducted in patients with type-2 diabetes identified using ICD-9 diagnosis codes (250.0x–250.9x, where x = 0 or two) in the year 2001. Patients ≥65 years or those with managed care coverage were excluded. Presence of cardiovascular co-morbidity in total and diabetes-related health care costs was in year 2002, controlling for demographic characteristics (age, gender, race, and urban/rural location), presence of peripheral vascular conditions, cerebrovascular conditions, hypertension, hyperlipidemia, and other co-morbid conditions. Two-part models were used for estimating the impact of cardiovascular co-morbidity on specific costs such as ER/hospitalization, outpatient and prescription. Smearing estimates were used to interpret the results from the semi-logarithmic models. RESULTS: Presence of cardiovascular co-morbidity had a significant impact on all categories of total and diabetes-related health care costs, except diabetes-related prescription drug costs. Type-2 diabetes patients with cardiovascular co-morbidity had significantly higher total health care costs (38.9%, $12,550 vs. $9,031), ER/hospitalization costs (239.8%, $4,845 vs. $1,426), outpatient costs (35.3%, $3,956 vs. $2,925) and prescription drug costs (15.1%, $4,686 vs. $4,071) compared to those without cardiovascular co-morbidity. Similarly, type-2 diabetes patients with cardiovascular co-morbidity had significantly higher diabetes-related total health care costs (59.7%, $4,349 vs. $2,724), ER/hospitalization costs (346.8%, $1,911 vs. $428) and outpatient costs (17.4%, $740 vs. $631) compared to patients without cardiovascular co-morbidity. CONCLUSIONS: Presence of cardiovascular co-morbidity in patients with type-2 diabetes significantly increases total and diabetes-related health care costs, with ER/hospitalization costs accounting for the highest percentage increase.

**PDB25**

**DEPRESSION IN PATIENTS WITH TYPE-2 DIABETES: IMPACT ON UTILIZATION PATTERNS AND ADHERENCE TO ORAL HYPOGLYCEMIC AGENTS**

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OBJECTIVE: To examine the impact of pre-existing depression on utilization patterns and adherence to oral hypoglycemic agents (OHAs) in patients newly diagnosed with type-2 diabetes. METHODS: Newly diagnosed type-2 diabetes patients during the three-year period (1998–2000) were identified from a Medicaid claims database. Presence of pre-existing depression was determined on the basis of ICD-9 CM codes for depression. Utilization patterns (switching, augmentation) and adherence to OHAs were computed for a 12-month follow up period from the date of the index OHA prescription. A multivariate framework was used to estimate the impact of depression on utilization patterns and adherence, controlling for confounders such as demographics, co-morbidity, diabetes severity, regimen complexity, and interaction with health care providers. RESULTS: A total of 1326 newly diagnosed type-2 diabetes patients were identified (depressed = 471; non-depressed = 855). A significantly higher number of depressed patients (23.3%) switched or augmented therapy as compared to non-depressed patients (16.2%). Results of a multinomial logit model indicated that controlling for covariates, patients with depression were 1.7 times more likely to switch (p = 0.046) and two times more likely to augment