Abstracts A269

Treatment effects (improvements in HbA1c, hypoglycemic event rates and changes in body weight) and cohort characteristics (mean age 61.6 years, diabetes duration 13.2 years, HbA1c 8.2%, BMI 29.8 kg/m2) were taken from PREDICTIVE and supplemented with Sweden specific patient data. Costs were retrieved from published sources and expressed in 2005 Swedish Kronor (SEK) from both a third party payer and societal perspective. Total costs were projected over a 50-year time horizon and discounted at 3% per annum. RESULTS: Over patient lifetimes IAsp treatment was associated with lower mean direct medical costs per patient of approximately SEK 8,248 per patient versus HI (SEK 405,910  $\pm$  16,358 versus SEK 414,158  $\pm$  15,544 respectively). Savings were due to reduced costs associated with diabetes-related complications for IAsp compared to HI (difference SEK 14,886) despite increased treatment and patient management costs (difference SEK 6,641). Including indirect costs in the analysis increased the cost savings associated with IAsp treatment to approximately SEK 10,717 (SEK 521,538 ± 22,106 versus SEK 532,226 ± 21,342). CONCLUSION: Over patient lifetimes, IAsp treatment was projected to result in overall cost savings compared to HI when accounting costs from both a health care payer perspective and from a societal perspective in the Swedish setting.

PDB48

## A RETROSPECTIVE ANALYSE OF THE IMPACT OF INCREASING BODY MASS INDEX ON MEDICAL RESOURCES FOR PEOPLE WITH TYPE 2 DIABETES IN UNITED STATES

Colclough HA1, Aagren M2, Hammer M2

<sup>1</sup>Adelphi Group Products, Chesire, UK, <sup>2</sup>Novo Nordisk A/S, Bagsværd, Denmark

OBJECTIVES: The aim of this study was to investigate the annual use of medical resources (outpatient visits and current drug use) and lost productivity (days off work) for people with T2D with increasing BMI. METHODS: A retrospective analysis was conducted in United States based on a sample of T2Ds from the Adelphi Metabolic Syndrome Disease Specific Programme (a large cross sectional study) in 2006 with 643 people diagnosed with T2D, aged between 35 to 64 years and a BMI°Ý 20 kg/m2 (based on physician reported height and weight). People were stratified according to their BMI; normal/ overweight (20–29.99 kg/m2; n = 110), obese (30–34.99 kg/m2; n = 178); very obese (35-39.99 kg/m2; n = 170) and morbidly obese (>39.99 kg/m2; n = 185). The cohort had an average age of 53 years, 58% male, and 69% Caucasians. RESULTS: For people with T2D who was normal/overweight, mean number of total drugs used for any condition was 4.7. The number of annual visits to health professionals (PCP, cardiologist, diabetes specialist, diabetes nurse, other doctor/nurse) was 5.9. The rate ratio i.e. the mean resource utilization relative to the utilization in the normal/overweight group for people with T2D who was obese, very obese and morbidly obese, respectively, were 1.08, 1.15, and 1.32 for total drug use, 1.75, 2.37, and 3.37 for percentage of people using more than 2 diabetes drugs, and 1.21, 1.31, and 1.39 for annual number of visits to health professionals. People not retired had an average annual number of days off work due to CV or diabetes complications of 1.5 for the normal/overweight group, with 3.2 for the obese group. CONCLUSION: These findings suggest a positive correlation between BMI and medical resources. The impact of obesity on resource use is particularly evident in people with T2D in the high obesity groups.

PDB49

## ESTIMATE OF HEALTH CARE RESOURCES NEEDED TO INITIATE INSULIN—RELATIVE COSTS OF DIFFERENT OPTIONS IN UK CLINICAL PRACTICE

McKendrick J, Chetty M, Watkins J

Eli Lilly and Company Limited, Basingstoke, UK

OBJECTIVES: In the UK, the role of insulin initiation has traditionally been one for specialist (secondary care) diabetes teams (SDT) but this trend is changing with primary care increasingly taking a leading role. In order to appropriately plan services, all relevant costs need to be considered. This analysis compares the estimated costs of insulin initiation using different models of service delivery—combinations of primary vs secondary care initiation and group vs individual sessions. METHODS: Using published UK literature, the resources used for 4 different service models were estimated, associated unit costs attached and total costs estimated over the first 3 months of insulin therapy. RESULTS: In the secondary care led models, average costs were £221 per person for an individual start over the 3 month period. As expected, estimated costs for group start sessions were lower than for individual starts (average £187). In a primary care initiation model, the average per patient costs were only slightly lower (£139 individual start, £190 group start). These costs are higher than the costs of the insulin therapy over the same time period (average £120) and key cost components were resources of associated health care professionals (HCP) and length of sessions with the relevant HCP, commonly assumed to be a diabetes specialist nurse CONCLUSION: Details of the range of resources used at the point of insulin initiation are not readily available in the literature. This analysis suggests that significant resources are required compared with the medication costs over this initiation period. The amount of time spent with the range of appropriate HCPs is the key driver of cost. Many other factors need consideration when deciding upon appropriate service models including the experience of the HCPs, the complexity of the insulin regimen and the degree of self-ownership and satisfaction by the patient.

PDB50

## UTILIZING OF CLAIMS DATABASES FOR IMPROVEMENT OF PRESCRIPTION HABITS FOR DIABETES MELLITUS TYPE 2

Ilavska A<sup>1</sup>, Tomek D<sup>2</sup>, Hrmova D<sup>3</sup>, Tesar T<sup>4</sup>

<sup>1</sup>Railway Hospital, Bratislava, Slovak Republic, <sup>2</sup>Health Insurance Fund Apollo, Bratislava, Slovak Republic, <sup>3</sup>GSK, Bratislava, Slovak Republic, <sup>4</sup>Comenius University, Bratislava, Slovak Republic

**OBJECTIVES:** In the long term there is a high rate of sulphonylurea (SU) prescription on oral antidiabetics (OAD) in Slovakia compared to DM treatment standards in other countries. Although this rate is decreasing slowly, there is a need to force the prescription habits improvement in diabetic patients. Our objective was to use collected data and analyse prescription habits of diabetologists with a focus on SU and biguanides rate. METHODS: We used claims data of reimbursed medicines in 2005 of one Slovak health insurance fund. Diabetic patient was identified as the one with at least two prescriptions regarding DM diagnosis on annual basis. SU rate compared to the total SU and metformin prescription was calculated for each diabetologist on the basis of expenditure in DDDs. RESULTS: We identified 13,481 diabetics (7% of total DM patients undergoing pharmacotherapy in Slovakia). These patients were treated by 212 diabetologists. Average SU verus biguanides rate was 59%. Worldwide, this rate stands for approximately 40%. This difference requires further steps so the doctors were categorized in deciles for purposes of targeted audit. Furthermore, we calculated the savings if patients would go to biguanides instead of SU. CONCLUSION: Claims data are an effective tool for auditing of