ences in costs between HbA1c groups were analyzed using a generalized linear model (GLM), controlling for demographics, patient severity, as well as comorbidities and complications. **RESULTS:** In total, 79% of individuals in the analysis obtained good HbA1c (HbA1c of less than or equal to seven) control at some time during the post-period although only 59% of these individuals maintained this level of glycemic control for the duration of follow-up. Individuals in the fair (HbA1c greater than seven to less than or equal to nine) or poor (HbA1c greater than nine) groups had significantly higher diabetes related total medical costs compared to individuals with good glycemic control ($1641 v. $1372 per member per year [PMPY]; $p < 0.05$; $1705 v. $1372 PMPY; $p < 0.05$, respectively). **CONCLUSIONS:** Although initially successful at obtaining good glycemic control, a large percentage of individuals were unable to maintain such control. This is coupled with a finding of higher diabetes-related medical costs for individuals at sub-optimal levels of control. These results suggest that novel therapies which improve the capability of individuals to achieve and maintain glycemic control may have positive financial as well as health implications.

PDB17

BURDEN OF ILLNESS ASSOCIATED WITH SYMPTOMS OF DIABETIC PERIPHERAL NEUROPATHY AND DIABETIC RETINOPATHY

Candrilli SD[1], Davis KL[1], Kan HJ[2], Lucero MA[1], Covington MT[2]
[1]RTI Health Solutions, Research Triangle Park, NC, USA; [2]Eli Lilly and Company, Indianapolis, IN, USA

OBJECTIVES: To evaluate the effect of symptoms of diabetic peripheral neuropathy (SDPN), diabetic retinopathy (DR) and co-morbid SDPN & DR (COMORB) among US adults ≥40 years old with diagnosed diabetes on several burden of illness (BOI) measures, including indirect costs and health care utilization, using the combined 1999–2000 and 2001–2002 National Health and Nutrition Examination Surveys (NHANES). **METHODS:** Included in the analysis were 850 NHANES respondents ≥40 years old classified as having diagnosed diabetes. Logistic regression models were used to assess the effect of SDPN, DR and COMORB on BOI. Model covariates included age, gender, race, education, insurance status, current smoking status, currently asthmatic, and history of cardiovascular disease, cancer, arthritis, COPD, hypertension and stroke. The conditions of interest were assessed based upon respondent self-report. **RESULTS:** Using the combined 1999–2000 and 2001–2002 NHANES, it was estimated that, among US adults ≥40 years old with diagnosed diabetes, those with SDPN (OR = 2.27; 95% CI = 1.34, 3.85), DR (1.67; 1.08, 2.59) and COMORB (2.88; 1.28, 6.48) were each more likely to have four or more health care visits in the past year than those without the corresponding condition. Those with DR (1.81; 1.31, 2.50) and COMORB (2.07; 1.13, 3.77) were both more likely to have had at least one overnight hospital stay in the past year. Finally, those of working age (40–65) with SDPN (3.39; 1.66, 6.89), DR (3.08; 1.55, 6.11) and COMORB (4.51; 2.27, 8.96) were each more likely to be unable to work due to physical limitations. **CONCLUSION:** Among US adults ≥40 years old with diagnosed diabetes, SDPN, DR, and COMORB all appear to significantly increased BOI. Future therapies that offer relief of both of these conditions may have significant benefits on indirect costs (such as lost work time) and direct measures of health care resource utilization.

PDB18

ECONOMIC EVALUATION OF DRUG THERAPY AMONG DIABETES MILLITUS PATIENTS IN OLABISI ONABANJO UNIVERSITY TEACHING HOSPITAL, SAGAMU, OGUN STATE, NIGERIA

Suleiman IA[1], Oloyede FF[2]
[1]University of Lagos, Lagos, Nigeria; [2]Olabisi Onabanjo University, Sagamu, Nigeria

OBJECTIVE: To carry out economic evaluation of drug therapy among diabetic patients. **METHODS:** The methodology was Cost of Illness Analysis. Out–Patients were considered. Drug review was carried out retrospectively for randomly sampled 37 case notes over one-year period. Demographic data were collected and number of hospital visits, fasting blood sugar and blood pressure at each visit, drugs prescribed at each visit. Cost components were the direct costs. These include the total cost of drugs over one-year period, personnel cost, diagnostic costs, and transport cost. Hospital cost of the drugs were used, cost per defined daily dose of each drugs were calculated as well as the total drug cost, taken the duration of therapy into consideration. Stop-watch-time studies and monthly earnings were used in the calculation of personnel cost. Since the study covers one year period (July, 2003–August, 2004) neither discounting nor inflation were considered in the analysis. **RESULTS:** Most of the patients were Type-II Diabetes Mellitus (n = 33; 89.2%) while Type-I (insulin required) were four (10.8%). In total, 83.8% were hypertensive. Total costs of drugs = N1,219,932.70 (US $8,713.81), Anti-diabetic drugs = N689,231.50 (US $4,923.82) (56.5%), Anti-hypertensive drugs = N530,701.20 (US $3,790) (44.5%), Transport = N30,696.70, Diagnostic = N56,400, Personnel = N53,340.40. Total Cost of Illness for one year for 37 patients = N1,360,369.80 (US $9,716.93). Total cost of treating 1000 patients = N1,360,369800.00 (US $9,716,930.00) aside indirect cost among others per year. Average cost per patient = N36,766.75 (US $262.62) (84.7% of N43,400.00 (US $310.0) per capital income in Nigeria). Range; N2,618.44 (US $18.70) and N268,572.81 (US $1918.38). N = Naira. **CONCLUSION:** Spending an average of 84.7% of per capital income to treat an illness annually is highly unfortunate as this further worsens the quality of life of such patients. This call for good understanding of the disease condition by the society to minimize the incidence while ensuring compliance and also for improved policy by government.

PDB19

COLLECTION OF COST DATA FOR DIABETES COMPLICATIONS IN CANADA AND AUSTRALIA

Palmer AJ[1], Ray JA[1], Roze S[1], Valentine WJ[1], Secnik K[2], Oglesby A[2]
[1]CORE—Center for Outcomes Research, Binningen, Basel, Switzerland; [2]Eli Lilly and Company, Indianapolis, IN, USA

OBJECTIVES: The aim of this study was to collect cost data on the complications associated with diabetes mellitus in Canada and Australia for use in a published, validated computer simulation model of the disease. **METHODS:** A search for costs data was performed in PubMed to identify peer-reviewed cost data in Canada and Australia published in the last ten years. Costs not identified in the literature were gathered from published government reports (sources included reports from the Provincial Ministry of Health in Ontario and Newfoundland). All costs were inflated to 2004 values. Major complication costs are presented. **RESULTS:** The costs of diabetes complications are well documented in Canada, but there is a paucity of published cost data for Australia. No Australian cost data were identified, and a specialist research program has been initiated to generate this information. In Canada, the event costs for non-fatal myocardial