9% of total cost of T2DM. The cost estimate was most sensitive to incidence and event cost of peripheral vascular disease, stroke and acute myocardial infarction. Based on the present analysis, T2DM places a significant financial burden on the health care system in Mexico, with cost of treating related complications being the main cost driver. Given the model focuses on diagnosed and treated T2DM patients, it is likely that the costs are lower when undiagnosed and untreated patients are considered. Delaying the onset of complications could result in a reduction in costs, as well as benefits for the patient and health care system.

**PDB7**
**DIRECT COSTS OF TYPE 2 DIABETES FROM THE BRAZILIAN PUBLIC HEALTH CARE SECTOR PERSPECTIVE**

Nisassohn A1, Bahmanno S1M, Pirac de Oliveira C1, McDonell A1, Vega-Hernandez G1
1IMS, London, England, 2Eli Lilly & Company, Indianapolis, IN, USA, 3Eli Lilly da Brasi, Sao Paulo, Brazil

**OBJECTIVES:** This study aimed to quantify the annual financial cost of type 2 diabetes (T2DM) in Brazil and explore the relative contribution of different components of cost.

**METHODS:** A cost of illness model was developed in Microsoft Excel 2007 to estimate the financial cost of T2DM in Brazil from the public health care payer perspective. Data were obtained from health care claims, pharmacy claim data and patient records of patients treated for diabetes over the 5-year study period from January 2006 to December 2010 were selected. Health care resources in the Quebec provincial drug reimbursement program (RAMQ) who had a diagnosis of diabetes varied from $627 (SD $254) over the study period. Annual cost of diabetes medications varied from $320 (SD $115) per patient per year. Costs of hospitalizations and in-patient care were $2,984 (SD $1,525) per patient per year. Costs of complications accounted for 32% of total T2DM cost. Diabetes drug costs were estimated to account for 31% of total T2DM health care spending. The overall cost estimate was most sensitive to incidence and event cost of peripheral vascular disease, stroke and acute myocardial infarction. The findings indicate that there is a high economic burden of T2DM for the Brazilian health care system. Cost of treating related complications was the main driver. An even higher burden of the disease is expected if undiagnosed and patients currently not being treated for diabetes are included. Due to increasing public medical attention, the burden of the disease could considerably be reduced if T2DM related complications were avoided, which not only benefits the health care system but the patients as well.

**PDB8**
**TRENDS IN HEALTH CARE RESOURCES UTILIZATION, COST AND MEDICATION SELECTION IN THE TREATMENT OF DIABETES**

Lachaine J, Beauchemin C.
University of Montreal, Montreal, QC, Canada

**OBJECTIVES:** Diabetes is one of the most common chronic diseases in Canada. It affects about 6.8% of the Canadian population. Treating and managing the disease and its complications is associated with a significant economic burden. The objective of this study was to analyse trends in terms resource utilization, cost and treatment patterns in the management of diabetes.

**METHODS:** Patients covered by the Quebec provincial drug reimbursement program (RAMQ) who had a diagnosis of diabetes, in 2005 and 2006 were surveyed continuously by the public drug program for the period from January 2006 to December 2010 were selected. Health care resources in terms of hospitalizations, complications and physician visits and physician care, were recorded. The study period was 5 years and proportion of diabetes medications used each year in the 5-year study period were estimated.

**RESULTS:** A total of 46,194 diabetic patients were included in the study. The mean age of the study population was 65.4 years (SD = 20.8) and proportion of male/female was 47% and 53% respectively. Over the study period, annual cost of diabetes medications varied from $5,750 (SD = 4,660) in 2006 to $372 (SD = 546) in 2010 (+14%) while total cost of treatment associated with diabetes varied from $6,272 (SD = 1456) to $7,155 (SD = 1632) (+14%) during that period. Metformine remains the most widely used medication throughout the study period with 64.3% of users in 2006 and 65.6% in 2010. Proportion of insulin users increased from 15.2% to 22.7% while gliclazide users increased from 4.4% to 11.2% during the study period. Metformine is the most widely used medication throughout the study period.

**CONCLUSIONS:** Over the five-year study period cost of diabetes treatment showed an increased rate similar to inflation, while trends of increased adoption of insulin and newer medications is observed.

**PDB9**
**COST-EFFECTIVENESS OF PARICALCITOL VERSUS PARATHYROIDECTOMY FOR SECONDARY HYPERPARATHYROIDISM TO CHRONIC KIDNEY DISEASE IN MEXICO**

Sanchez-Casillas JL, Ramirez-Lopez-De-N MG
Abibво Lorem Inc., Mexico City, Mexico

**OBJECTIVES:** Secondary hyperparathyroidism (SHPT) affects one of every two Mexican HC patients on dialysis (HCD). The objective of this research was to assess cost-effectiveness (CE) of Paricalcitol intravenous administration (IV) versus parathyroidectomy (PTX) from Mexican payer perspective.

**METHODS:** A decision tree model was used to simulate patient resource usage and survival rate in 5 years time-frame treated with paricalcitol IV and parathyroidectomy based on clinical data in recent published literature. Time-frame begins when a patient is refractory to Calcitirol therapy and physician decides to treat with Paricalcitol or program PTX. Resource use data were obtained from medical records and references. One-way sensitivity analysis were tested. The probabilistic sensitivity analysis showed very close iterations of both treatment options showing evidence of dominance. We conclude that Calcitirol has advantage over PTX for WTP near to zero, in low to middle income countries where containment of expenditures is important.

**PDB10**
**PROBABILISTIC SENSITIVITY ANALYSIS TO ANALYZE THE COST-EFFECTIVENESS OF ORAL HYPOGLYCEMIC AGENTS IN THE INITIAL ORAL DRUG TREATMENT OF OUTPATIENTS DIAGNOSED WITH TYPE 2 DIABETES IN PRIMARY CARE**

Diaz de Leon-Castañeda C., Pinzon-Florez C.E., Arredondo A.
Instituto Nacional de Salud Publica, Cuernavaca, Mexico

**OBJECTIVES:** To perform a probabilistic sensitivity analysis to analyze previously reported results about the cost-effectiveness of oral hypoglycaemic agents (OHAs) in the initial oral drug treatment of patients diagnosed with type 2 diabetes mellitus in public primary attention in Mexico. **METHODS:** A probabilistic sensitivity analysis was made in order to analyze results previously reported in which a deterministic sensitivity analysis resulted in the conclusion that the OHAs: metformin, gliclazide and acarbose. We used TreeAge® software for programming and simulating a Markov model of two health states (HbA1c ≤5% or >5%) and twelve cycles of 1 month each time line. The probabilistic sensitivity analysis showed similar results as mentioned before, showing 59.72% of iterations below the WTP – 1 Mexican GDP per capita line. **CONCLUSIONS:** The probabilistic sensitivity analysis showed which the initial drug therapy with gliclazide or metformin have not sufficient evidence and acarbose has advantage over metformin for WTP near to zero, as in low to middle income countries where containment of expenditures is important.