and compare the economic costs and clinical outcomes associated with ranibizumab monotherapy versus laser photocoagulation alone for the treatment of DME in Canada. METHODS: Cost-effectiveness of ranibizumab to a Canadian healthcare system was analyzed using a Markov model based on data from the RESTORE clinical trial. In addition, these data were used to perform a sensitivity analysis and to conduct a threshold analysis. RESULTS: On a per patient basis, ranibizumab monotherapy accrued an additional 1.44 years of life with a cost of $1,837,075 (2010 USD), which is $2.26 million lower than the threshold for $100,000/QALY. The cost effectiveness ratio was lower in the intervention group as compared with the control group. CONCLUSIONS: While ranibizumab monotherapy was more expensive than laser photocoagulation, it was cost-effective when the threshold for QALYs was $100,000.

FD836 AN ECONOMIC MODEL OF THE EFFECTS OF QUICK RELEASE BROMOCRIPTINE MESYLATE VERSUS ALTERNATIVE ORAL ANTIDIABETIC DRUGS ON HOSPITALIZATIONS AND COSTS
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OBJECTIVES: Quick release (QR)-bromocriptine mesylate is a new treatment for type 2 diabetes (T2DM) that has been shown to reduce Hba1c and cardiovascular (CV)-related hospitalizations over one year. The objective of this study was to estimate the economic impact of QR-bromocriptine versus other oral antidiabetic drugs as add-on therapy for patients who failed initial treatment. METHODS: A decision-analysis model was designed to compare outcomes among QR-bromocriptine, pioglitazone, rosiglitazone, and sitagliptin over one year when used as add-on therapy. In each drug group, all patients were estimated to receive prescription drug treatment costs. The diabetes management and complications costs were obtained from Chinese published data and adjusted to 2010 values using the Chinese Consumer Price Index. An annual discounting rate of 3% was used for both health and economic outcomes. One-way sensitivity analysis was performed. RESULTS: The treatment of I1d converted from I1glar was projected to reduce the cumulative incidences of DM-related complications. Background retinopathy, end-stage renal disease, ulcer, myocardial infarction events were reduced 0.685%, 0.167%, 0.243%, 0.482% respectively. Therapy conversion to I1d was projected to improve life expectancy by 0.061 year, and was associated with improvements of 0.484 quality adjusted life year (QALY). The costs of complications were reduced by CN$ 5,595, resulting in a total direct medical cost saving of CN$ 2,869.

CONCLUSIONS: Therapy conversion from I1glar to I1d in T2DM patients could delay the onset of diabetes complications, was associated with improved Hba1c levels and QALYs, and reduced direct cost over patient lifetimes. I1d was shown to be a dominant treatment option in patients with T2DM inadequately controlled with I1glar in Chinese setting.

FD834 PHARMAECONOMIC EVALUATION OF A PHARMACIST-MANAGED DIABETES CLINIC
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OBJECTIVES: The aim of this research was to assess the cost-effectiveness of pharmaceutical care (PC) programme (relative to control) for patients with type 2 DM. METHODS: A total of 222 patients were recruited at a pharmacist-managed diabetes clinic of a government hospital in Malaysia and randomly allocated to intervention and control group. Patients in the intervention group (n = 111) were provided with PC, whereas patients in the control group (n = 111) received usual pharmacy service. Clinical and economic outcomes of patients were evaluated at baseline and after six months. RESULTS: There was no significant difference in the demographic and clinical characteristics at baseline between the intervention and the control group. Significant reduction in glycosylated haemoglobin (Hba1c) was observed from baseline to 6-month in the intervention group (Mean ± standard deviations = 9.93 ± 1.76 versus 8.83 ± 1.85%, p < 0.05). Although the total costs per patient were significantly higher for the intervention group (Rm681.07 versus Rm542.64, p = 0.014), the cost effectiveness ratio was lower in the intervention group (A15.15 versus Rm619.15). The incremental cost-effectiveness ratio for Hba1c was Rm154.72. CONCLUSIONS: In conclusion, incorporation of PC into the management of type 2 DM can have a definitive, positive impact on glycaemic control and lead to more cost-effective treatment.

FD835 UTILIZATION OF PHYSICIAN, NURSING AND DIETICIAN SERVICES BY TYPE 2 DIABETIC PATIENTS ATTENDING PRIMARY CARE CLINICS IN SINGAPORE
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OBJECTIVES: Physicians, Nursing Care Managers (CMs) and Dietitians are part of the healthcare team looking after patients with diabetes mellitus at the public sector primary care clinics in the National Healthcare Group (NHG) in Singapore. This paper studies the association between the level of glycaemic control and the utilization of outpatient tertiary hospital services by type 2 diabetes mellitus (T2DM) patients at these clinics. METHODS: This study included all patients with T2DM who had attended the same clinics in 2009 for at least 12 months for the treatment of diabetes. Data was extracted from the NHG Diabetes Registry (CDMS). The number of outpatient clinic visits to the Physicians, CMs and Dietitians in a year was compared by age and degree of glycaemic control using the general linear model with the mean glycated haemoglobin (HbA1c) for the year, “Optimal” being <7%, “Acceptable” 7-9% and “Poor” 9% +. RESULTS: There were 58,057 T2DM patients with more females (54%) and proportionately more Indians (13%) and fewer Chinese (71%) than the general population. Mean HbA1c was 7.42±1.27% which decreased gradually with age from 8.16% (<40 years) to 6.86% (90+ years). The annual Physician attendances for diabetes consult increased from 4.1+1.5 (“Optimal” Hba1c control) to 5.2+2.2 (“Poor” control). There were 85-89% more visits to CMs and dietitians in attendance for type 2 patients compared with “Poor” glycaemic control, in order to achieve better long-term health outcomes and reduce healthcare utilization and costs.

FD837 MAIL-ORDER PHARMACY USE AND MEDICATION ADHERENCE AMONG MEDICARE PART D BENEFICIARIES WITH DIABETES
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OBJECTIVES: To examine medication adherence among Medicare Part D beneficiaries with diabetes and explores whether there is any association using mail-order pharmacy (vs. retail pharmacy) with better adherence in this patient population. METHODS: Using administrative pharmacy claims data, we conducted a retrospective cohort study on the Medicare Part D beneficiaries who newly initiated oral antidiabetic therapy between January 1, 2008 and December 31, 2008. The primary outcome of interest was medication adherence to oral antidiabetics during the benefit year of 2009, which was measured using the proportion of days covered (PDC). Mail-order pharmacy users were matched to retail pharmacy users via propensity scoring, controlling for patient’s demographic and clinical characteristics. RESULTS: A total of 22,546 patients with diabetes were matched. The average PDC was 0.60 and only 41.6% of the study population was adherent (defined as PDC=0.8) with oral anti-diabetic medications during calendar year 2009. The matched sample included 1361 patients from each cohort. Compared with the retail pharmacy