BACKGROUND: Previous findings regarding the effect of depression treatment and its co-morbidities on health-related quality of life (HRQoL) of adults with diabetes were inconsistent and targeted certain groups of population. Therefore, there is a critical need to perform a study that focuses on a general population with diabetes and depression. OBJECTIVES: The primary aim of this study is to examine the effect of depression treatment and its co-morbidities on HRQoL of adults with diabetes. 

METHODS: A longitudinal design using multiple panels (2005-2011) of Medical Expenditure Panel Survey to create one year of baseline and one year of follow-up. We categorized baseline depression treatment into no depression treatment, antidepressant use only and psychotherapy with or without antidepressants. We used physical and mental health status during the follow-up years as measurements of HRQoL. Chi-square tests and multinomial logistic regressions were used to examine the association between depression treatment categories and HRQoL measures. In the adjusted analysis, we controlled for socio-demographic factors, lifestyle risk factors, other chronic conditions, and the baseline HRQoL. Measures of the dependent variable were constructed in two ways: different models of treatment and physical HRQoL measure in both unadjusted and adjusted models. Among adults who received psychotherapy (with or without antidepressants) 17.7% reported excellent/very good physical HRQoL while only 9.3% of those without depression treatment did so. In adjusted analyses, adults who received psychotherapy (with or without antidepressants) were more likely to report excellent/very good health compared to those without depression treatment [adjusted OR = 2.32, 95% CI = 1.01, 5.34]. For mental HRQoL, no significant differences were observed between treatment groups in the adjusted model. CONCLUSIONS: Depression treatment, especially psychotherapy (with or without antidepressants) may improve physical HRQoL.

DIABETES/ENDOCRINE DISORDERS – Health Care Use & Policy Studies

PDB87 PATIENT BENEFIT-RISK PREFERENCE OF INSULIN TREATMENT: AN EXAMINATION OF HEALTH LITERACY- AND BELIEFS AS PREDICTORS OF PREFERENCE AND RISK AVERSION

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OBJECTIVES: The aim of this study was to determine patient benefit-risk preference of insulin treatment, and to examine how preference is predicted by health literacy, sociodemographic status and patients own health risk perception. As a secondary objective we investigated whether elicited priorities were sensitive to the presentation of benefits as either a surrogate or clinical health outcome. METHODS: This was a questionnaire based study involving Danish type 2 diabetes patients recruited through a diabetes registry. Laboratory- and clinical data on diabetes management were obtained from the Electronic Health Records. The questionnaire included a section on diabetes management, health literacy, demographics and a discrete choice experiment (DCE). In the DCE, respondents were asked to choose between two unlabelled insulin treatments. These were defined by improvements in glucose control (HbA1c or long-term sequelae risk reduction), weight control, hypoglycemic events (severe/minor) and treatment-related heart attack risk. A Bayesian efficient design (Ngene v 1.1.1) was used to construct the choice tasks. Logit-based regression analysis was used as the data relating utilities to regression coefficients derived from this model were used to estimate maximum acceptable risk (MAR) of treatment in return of benefit. RESULTS: One thousand and thirty-three patients completed the questionnaire. Overall, the avoidance of a minor increase in heart attack risk (3 additional people of 1000) was driving choice of treatment across all versions of the DCE. This was followed by avoiding severe hypoglycemic events. We observe some differences in preference estimates across the DCE versions indicating that patients are sensitive to the presentation of benefits as long-term sequelae risk reduction rather than a surrogate measure of health improvement (HbA1c). Detailed results on subgroup analysis and predictors of preference are presented at the conference. CONCLUSIONS: Risk aversion towards heart attack, although it is a minor additional risk, influence patient choice of treatment. Final conclusion is presented at the conference.

PDB88 PRESCRIBING PATTERN, GUIDELINE ADHERENCE AND DIABETES MELLITUS MANAGEMENT WITH CO-MORBIDITIES: A MALAYSIAN HOSPITAL PERSPECTIVE

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OBJECTIVES: To evaluate the prescription pattern, adherence of prescribers with Clinical Practice Guideline 2009 and management of diabetes mellitus (DM) with co-morbidities in a tertiary-care hospital, Pinang General Hospital Malaysia. METHODS: Cross-sectional study performed on 300 prescriptions written by the same prescribers (20 prescriptions for each prescriber). All 1020 DM patients were suffered with other co-morbidities. All of the prescriptions were different groups of adherent and non-adherent prescriptions. Self-administered research tools were used and demographic characteristics of the patients were determined by descriptive statistics. Data was analyzed by using SPSS 21.0. Comparison between adherent and non-adherent groups was done using independent sample t-test. RESULTS: In all prescriptions, metformin tablets of physician adherence was seen with respect to the recommendations of CPG 2009. A statistically significant negative association (β = -0.094, p-value = 0.003) was observed between DM management and co-morbidities. CPG adherent had shown statistically weak negative association (β = -0.081, p-value = 0.010) with patients having co-morbidities. No statistically significant association was observed between CPG 2009 adherence and co-morbidities. CONCLUSIONS: The study explored the various aspects of prescribing pattern of physicians, their adherence to the CPG 2009 and the management of DM with other co-morbidities. This study also recognized the need for improvement in prescribers’ pattern of prescription and DM management with co-morbidities.

PDB89 MULTIVARIATE ANALYSIS OF PRESCRIBING INFORMATION FOR NEXT GENERATION TYPE 2 DIABETES TREATMENTS

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OBJECTIVES: To compare the pivotal clinical endpoints on the prescribing information labels of next generation treatments for type 2 diabetes (T2D) and to identify the most clinically-relevant diabetic outcomes. This multivariate analysis was designed to verify the treatment benefit and also be an instrument for the management of patients with T2D, based on symptomatology and relative efficacy. METHODS: A multivariate analysis of clinical efficacy endpoints from product information labels of 10 recently approved next generation treatments for adult T2D was undertaken. The presentation of benefits as either a surrogate or clinical health outcome from this model were used to estimate maximum acceptable risk (MAR) of treatment and physical HRQoL measure in both unadjusted and adjusted models.

PDB90 MEDICATION UTILIZATION PATTERN FOR PAIN MANAGEMENT AMONG INDIVIDUALS WITH TYPE 2 DIABETES

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OBJECTIVES: Various medications are commonly used to treat pain among individuals with type 2 diabetes mellitus (T2DM). This study examined the drug utilization trends and factors associated with the use of pain medications among patients diagnosed with T2DM. METHODS: Data from the National Ambulatory Care Survey (NAMCS) 2006-2010 and the outpatient department component of the National Hospital Ambulatory Medical Survey (NHAMCS) 2006-2010 were used. The study explored the various diabetes-related ambulatory visits among patients with T2DM. Bivariate chi-square analysis and multiple logistic regression were performed to evaluate the factors associated with prescribing of the medications (e.g., anticonvulsants, antidepressants, opioids and some topical agents). SAS survey procedures that adjust for the complex sampling procedure of NAMCS and NHAMCS were used. RESULTS: An average of 50 million (4.63%) visits was made by patients with T2DM from 2006 to 2010. The majority of visits were made by females (54.8%), Whites (69.8%) and individuals aged 45-64 years (47.6%). Among patients with T2DM, 9.70% were prescribed pain management drugs. The most commonly prescribed pain management drugs were anticonvulsants (6.0%), antidepressants (4.8%) and opioids (2.30%). Multiple logistic regression analysis showed that females (OR: 1.48; 95% CI: 1.19-1.82), number of physician visits greater than 1 (OR: 1.39; 95% CI: 1.32-1.46), having private insurance (OR: 0.67; 95% CI: 0.60-0.90), and endocrinologist visit (OR: 0.68; 95% CI: 0.51-0.89) are significant predictors of pain medication use among T2DM patients. CONCLUSIONS: Patients with T2DM were prescribed anticonvulsants two times more often as compared to opioids for pain management. Dispensed prescriptions for pain medications were related to gender and number of physician visits. More frequent pain management related visits from patients over age 65 was consistent with the literature. Endocrinologist are less likely to prescribe medication for pain management than general medicine specialists.

PDB91 COMPARATIVE PERSISTENCY WITH NEWER AGENTS USED TO TREAT TYPE 2 DIABETES (T2DM) IN THE UNITED STATES: CANAGLIFLOZIN VERSUS DIFEPITYL PEPTIDE-4 (DPP-4) INHIBITORS AND GLUCAGON-LIKE PEPTIDE-1 (GLP-1) AGONISTS

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OBJECTIVES: To compare time to discontinuation with canagliflozin versus DPP-4 inhibitors and GLP-1 agonists in patients with T2DM using retrospective claims data. METHODS: Patients with T2DM who received a first prescription for a DPP-4 inhibitor (sitagliptin, saxagliptin, linagliptin), GLP-1 agonist (liraglutide, exenatide, exenatide LAR) or dapagliflozin were identified in claims databases from 2011-2013. Two sales claims databases from commercial of privately insured patients (Truen, Optum). The analytical sample included only patients with ≥6 months of retrospective data prior to their first paid claim. Discontinuation was defined as an observed refill gap ≥90 days (sensitivity analysis for 30/60/90 days) between钱币.
two subsequent prescriptions. Time to discontinuation was analyzed using Kaplan-Meier analysis and Cox proportional hazards regression, including demographics, treatment background, and diabetes-related complications/comorbidities as covariates.

RESULTS: 66,206 patients (mean age 52.6 years; 50% male; median/maximum follow-up, 10/19.0 months) were identified in the Truven database. After propensity score matching, type of patients falling on treatment was significantly higher with canagliflozin 100 mg (n=7,445, 64.0%) and 300 mg (n=4,486, 65.0%) versus DPP-4 inhibitors (30.2% [linagliptin] to 50.1% [sitagliptin]) and GLP-1 agonists (n=1,566, HR=2.01 [1.96, 2.07]). For patients who captured both SSU and SU 1SRM University, Barabanki, India, 2Maulana Azad Medical College, New Delhi, India, 3SGPG University, All India,