two subsequent prescriptions. Time to discontinuation was analyzed using Kaplan-Meier and Cox proportional hazards regression, including demographic information, 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 exclusion, 5,776 type of patients fall 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 (30.2% [exenatide long-acting] to 58.2% [liraglutide]). The adjusted hazard ratio (HR) for time to discontinuation for canagliflozin 100 mg (reference) and 300 mg (HR=0.92 [95% CI, 1.00; 0.99]) was significantly lower versus DPP-4 inhibitors and GLP-1 agonists: sitagliptin (HR=0.89 [0.88; 0.91]), saxagliptin (HR=0.88 [0.85; 0.90]), linagliptin (HR=0.87 [0.85; 0.89]), exenatide long-acting (HR=0.85 [0.83; 0.87]), liraglutide (HR=0.75 [0.73; 0.77]) after adjustment for baseline covariates in a Cox proportional hazard model. CONCLUSIONS: Canagliflozin has the potential to reduce diabetes management costs and is cost-effective compared to DPP-4 inhibitors and GLP-1 agonists over the long-term.

PDB92 CURRENT REAL-WORLD PRESCRIBING PATTERNS IN TYPE 2 DIABETES MELLITUS: WHAT COMES AFTER METFORMIN? EVIDENCE FROM U.S. INTEGRATED DELIVERY NETWORKS

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OBJECTIVES: Within the US type 2 diabetes mellitus (T2DM) treatment, following metformin failure, the prescribed treatments are highly variable, driven by local market, and not evidence-based. We therefore, sought to determine if new agent classes or patient age influenced prescribing patterns. METHODS: De-identified prescriptions from the Truven Healthcare MarketScan© database from 2011 onwards for all T2DM patients were described, 1/1/2010-6/30/2014. RESULTS: Selection criteria were met by 193,599 T2DM patients, of whom 71,452 (37%) were ≥65 years old (“elderly”). Of first-line prescriptions, metformin was the most common (59%) followed by SU (13%), basal (9%) and combination (8%) medications. Combination with GLP1R agonists, SUs, DPP4s and DDP4 inhibitors increased with higher age. CONCLUSIONS: Common patterns to across sensitivity analyses using alternative discontinuation definitions. Analyses from Optum were generally consistent with these results. CONCLUSIONS: These analyses indicate that patients who received canagliflozin versus DPP-4 inhibitors would proceed in their therapy longer, which may reflect better effectiveness and/or tolerability.

PDB93 DOES TREATMENT FOR NEWLY-DIAGNOSED DEPRESSION REDUCE HEALTHCARE EXPENSES AMONG MEDICAID BENEFICIARIES WITH TYPE 2 DIABETES MELLITUS?

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OBJECTIVES: To examine whether depression treatment is associated with health-care expenditures among Medicaid beneficiaries with Type 2 Diabetes Mellitus (T2DM) and newly-diagnosed depression. METHODS: A retrospective longitudinal repeated measures cohort design was used Multi-year (2000-2008) three-state Medicaid data were used. The cohort included non-elderly, fee-for-service, continuously enrolled Medicaid beneficiaries with T2DM and newly-diagnosed depression (N=5,295). The depression diagnosis date was the “index-date,” baseline and follow-up periods were defined as 12-months prior and subsequent to the index-date. Depression treatment was received if it was quite variable given a second-line therapy treatment with antidepressants or psychotherapy only both antidepressants and psychotherapy and no treatment. Total healthcare expenditures were calculated for each follow-up month. Linear mixed effects regressions on log transformed total expenditures were produced by fitting random intercept and fixed effects of time in months, depression treatment, types of co-existing chronic physical conditions (hierarchically classified based on their similarity to T2DM primary condition required for the valuation of a HealthCoin that would incentivize the public payer to offer the HealthCoin as a payment to the private payer, which in turn would have the incentive to purchase the cure, is min{INMBMedicare, PCure} ≥

PDB94 EVOLUTION OF THE MARKET FOR ORAL ANTIDiABETIC AGENTS IN CANADA AFTER INTRODUCTION OF Dipeptidyl Peptidase-4 INHIBITORS

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OBJECTIVES: To evaluate the cost of type 2 diabetes (DM) accounts for over 90% of all diagnosed diabetes cases. Hyperglycemia is an important risk factor for diabetic complications, supporting the use of glucose-lowering agents in the treatment of diabetes. Among glucose-lowering agents to treat type 2 DM are oral antidiabetic agents. The objective of this study was to evaluate the Canadian market for OAD agents since 2008, after the introduction of DPP-4 inhibitors. METHODS: Data on retail prescriptions and on drugstore and hospital purchases of OAD agents in Canada were obtained from IMS Brodaty. Number of prescriptions and purchases (in $Can) were collected for 2008, 2012 and 2014. RESULTS: Total number of prescriptions for OAD agents in Canada amounted to 13.6 million, 20.5 million and 23 million in 2008, 2012, and 2014, respectively. Contribution of the two OAD agents mainly prescribed, metformin and sulfonylureas, decreased during this period while percentage of prescriptions for DPP-4 inhibitors over total OAD agents increased from 0.07% to 6.5% and 14.5%, respectively quite visas by the increase in prescriptions of sitagliptin, alogliptin/metformin, saxagliptin, and linagliptin. Total drugstore and hospital purchases for OAD agents in Canada reached $394.2 million, $418.7 million and $520.9 million in 2008, 2012 and 2014, respectively. CONCLUSIONS: OAD agents represent a market of more than half a billion dollars in Canada; this will likely continue to grow due to the limited use of cases of type 2 DM in the general population. The introduction in 2008, DPP-4 inhibitor use has grown rapidly so that in 2014, they captured approximately one-sixth of prescriptions and, at almost two-thirds of purchases, were the market leaders among OAD agents.

PDB95 INFO-DIABETIC APPROACH FROM CELLULAR PHONE TEXT MESSAGING CAN MINIMIZE THE COMPLEXITIES IN DIABETIC PATIENT CARE

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OBJECTIVES: Info-Diabetic is becoming an imperative approach in E-health to stipulate the diabetic patient care and management. In this study we tried to get an overview for application of cellular phone text messaging over adolescent diabetic patients (ADPs). The major objective of this study was to test whether adding cellular application for patient care compared with control cases would reduce Glycated Hemoglobin (HbA1c). METHODS: 13 cellular users and 13 control cases were introduced. In the introduction of cellular phone text messaging over adolescent diabetic patient care management in ADPs. CONCLUSIONS: We observed no age-related differences in prescribing patterns. The outcomes and costs of such treatment patterns in the elderly relative to hypoglycemia and its sequelae were further evaluation.
CONCLUSIONS: Hypoglycemia more often control emerged as the most important factors when deciding to DC or DT SU therapy. DC and DT patients were more likely to have experienced H/E, and with greater severity, than current SU patients.

PDB100
USE OF HEDIS A1C TARGETS IN CHARACTERIZING TREATMENT GOALS IN PATIENTS WITH TYPE 2 DIABETES MELLITUS (T2DM) INITIATING BASAL INSULIN THERAPY

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OBJECTIVES: While change in glycated hemoglobin (A1C) is typically used as the primary measure of efficacy in clinical trials of diabetes medications, quality of care in "real-world" clinical practice is often assessed based on attainment of patient-specific A1C targets, as recommended in HEDIS 2014 performance benchmarks by the National Committee for Quality Assurance. HEDIS measures are used by health plans to measure care and service performance. To assist in the design of pragmatic clinical trials for new insulin glargine 300 U/mL (Gla-300), we estimated A1C targets for T2DM patients initiating basal insulin in real-world clinical practice, using a large retrospective database and data from a clinical trial.

METHODS: Insulin-naive T2DM patients initiating basal insulin were identified in both the insulin-naive T2DM patients (IMB) database and the IMPACT database (n=22,428) and IMB (n=86), a clinical trial of Gla-300. Patients were stratified according to whether they were aged ≥65 and free of selected comorbidities (A1C target <7.0%), or aged ≥65 and had at least one of the selected comorbidities (A1C target according to HEDIS measures).

RESULTS: In the IMPACT database, mean age was 52y, and mean baseline A1C (SD) was 9.0% (±2.7) in those with available A1C. Patients aged ≥65 without comorbidities (target <7.0%) constituted 68.1% of the sample, while 31.9% were aged ≥65 and had at least one of the selected comorbidities. In the IMPACT database, mean age was 58y, and mean baseline A1C (SD) was 8.5% (±1.1). Patients aged ≥65 without comorbidities (target <7.0%) constituted 73.0%, and 27.0% were aged ≥65 and had at least one of the selected comorbidities (target <8.0%).

CONCLUSIONS: The distribution of patients initiating basal insulin by A1C target, based on HEDIS performance measures, was similar in both real-world and clinical trial settings. Findings from trials therefore may be useful in the design of pragmatic clinical trials of Gla-300.