4,282 saxagliptin and 1,286 linagliptin) and 3,229 patients with Commercial coverage (2,368 sitagliptin; 643 saxagliptin and 218 linagliptin). Patient demographics were similar for index medications: Medicare cohort – mean age 70-72; female 50-52% Commercial cohort – mean age 55-56; female 44%. Patients on linagliptin showed a higher co-morbidity level at baseline (Medicare DCSI = 3.0 vs 2.4/2.2; Commercial DCSI = 1.2 vs. 0.9/0.9), higher use of pre-index insulin (Medicare 22% vs 15%/14%; Commercial 18% vs 11%/10%) and higher pre-index costs (Medicare mean $14,448 vs $11,818/$10,399; Commercial mean $13,868 vs $9,357/$8,223) than sitagliptin or saxagliptin cohorts, respectively. When controlling for other factors, post-index costs were similar between the medication cohorts - Medicare: sitagliptin $13,913; saxagliptin $13,651; linagliptin $13,859; Commercial: sitagliptin $11,677; saxagliptin$12,059; linagliptin $11,163. **CONCLUSIONS:** For Medicare and Commercial populations, members on linagliptin may have been more complex patients (higher DCSI, more use of insulin, higher pre-index costs). When controlling for baseline factors, 12-month post-index direct medical costs were similar between index DPP4 medications.

PDB27

IMPACT OF NURSE-LED TELECOACHING ON THE ANNUAL HEALTHCARE UTILIZATION AND COSTS IN PEOPLE WITH TYPE 2 DIABETES IN BELGIUM. WITHIN-TRIAL ANALYSIS OF HEALTH INSURANCE DATA

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OBJECTIVES: to compare the healthcare utilization and costs in the year before and after randomization among participants of a clinical trial assessing the effectiveness of nurse-led telecoaching in optimizing diabetes control in Belgium. **METHODS:** Patients were affiliates of the Independent Sickness Funds with type 2 diabetes selected by hypoglycaemic agent consumption, invited into the study and randomized to telecoaching or usual care. The intervention was delivered by diabetes educators in five telephone sessions spread over 6 months. Costs of the intervention were collected along the trial. Information on resource utilization was extracted from the database of the sickness funds and the between group difference in change was analyzed per service category. **RESULTS:** 287 patients enrolled in the intervention and 287 in the control group. The average cost of the intervention was €300.64. At baseline, the annual mean healthcare cost (CI) was €5,543 (4,410–6,677) in the intervention and €4,101 (3,375–4,827) in the control group and in the year of the trial €5,516 (4,630 –6,402) and 4,757 (3,892–5,622), implying a change of -1% and +16% respectively. Hospitalizations affected 19% and 15% of patients in the intervention and control group, accounting for 33% and 23% of total costs at baseline, respectively. In the year of the trial, changes were observed in the intervention and control group respectively in the number of hospital admissions: -27% and +36% (p=.048), endocrinologist consultations: +35% and -10% (p=.023), HbA1c tests: +9% and -12% (p<.0001), lipid tests: +8% and -16% (p<.0001) and consumption of lipid modifying agents: +14% and +1% (p=.042). **CONCLUSIONS:** Participants of the nurse-led telecoaching program aimed at improvement of diabetes selfmanagement demonstrated increased costs for guideline recommended outpatient care and a decrease in the number and costs of hospital admissions compared to controls. These findings are hypothesis generating.

PDB28

PHARMACY COST DIFFERENCES ASSOCIATED WITH THE INITIATION OF EXENATIDE ONCE-WEEKLY COMPARED TO LIRAGLUTIDE ONCE-DAILY

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OBJECTIVES: To compare drug acquisition costs and most commonly used doses between two GLP-1 agonists, once-weekly exenatide (QW) 2.0 mg with no dose titration, and once-daily liraglutide with a recommended starting dose of 0.6 mg and titration to 1.2 mg or 1.8 mg over 2-weeks. **METHODS:** This cohort study included patients with type 2 diabetes initiating exenatide QW or liraglutide between Jan 2012 and Feb 2014, who had > 6-months of preceding coverage in U.S. healthcare claims database. During the 6 months following treatment initiation, drugs dispensed and associated pharmacy costs were compared between exenatide QW 2 mg dose and liraglutide dose subgroups, defined by maintenance dose at 60 days. **RESULTS:** The exenatide QW (N=3,217) and liraglutide (N=10,954) cohorts had comparable characteristics at baseline. Due to titration recommendations, the majority of the liraglutide patients received 1.8 mg per day dose (56.2%), while 2.2% and 41.6% received 0.6 mg and 1.2 mg per day, respectively, by the end of follow-up. Comparing costs associated with exenatide QW versus specific liraglutide maintenance doses, patients on liraglutide 1.8 mg per day had higher average pharmacy costs of $3,827 (95%CI: $3,752-$3,902) compared to exenatide QW costs of $3,556 (95% CI: $3,462-$3,649), and higher average pharmacy costs associated with all antihyperglycemic drug dispensings, $2,543 (95%CI: $2,502 - $2,585), compared to exenatide QW costs $2,345 (95%CI: $2,290 - $2,401). **CONCLUSIONS:** Exenatide QW, which does not require titration, provided savings in both overall pharmacy costs and costs of antihyperglycemic drugs compared to the majority (56.2%) of liraglutide patients who required titration to the highest dose of 1.8 mg. Lower pharmacy costs in addition to overall safety and efficacy profile, convenience of no titration, and once weekly dosing, provide a good cost-benefit value for patients treated with exenatide QW.

PDB29

IMPACT OF OVERWEIGHT AND OBESITY IN THE FREQUENCY MEDICAL COMPLICATIONS DURING PREGNANCY AND ECONOMIC BURDEN IN THE HIGH RISK PREGNANCY IN MEXICO

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INTRODUCTION: Pre-pregnancy overweight and obesity have been proposed as risk factor to diabetes and hypertension during pregnancy. These medical complications enhance the economic burden related to attend the pregnancy when it is classified as high risk pregnancy. **OBJECTIVES:** Identify diseases related to pre-gestational overweight and obesity in women with high risk pregnancy and estimate the economic burden to attend high risk pregnancy compared with normal pregnancy **METHODS:** Were studied 600 patients with high risk pregnancy to identify pre-pregnancy overweight and obesity and were estimated the cost related to the medical health care during pregnancy. Were calculated: mean, standard deviation, median, percentilar values, logistic regression and Odds Ratio with 95% confidence interval. Were estimated costs for a hypothetical group of 600 women with normal pregnancy, using Monte Carlo simulation method to compare economic burden between high risk pregnancy and normal pregnancy. Statistical differences were calculated with Student T test to paired samples. Groups were paired by maternal age and gestational age. **RESULTS:** Pre-pregnancy body mass index mean was 29.59 (±6.42)kg/m2. The obesity was a risk factor to develop gestational diabetes (OR: 1.95; IC95%: 1.39 to 2.76; p=0.000). Were estimated in USD, to following costs: mean cost for prenatal health care: [$165.28 (±$52.39) in normal pregnancy; $801.18 (±$272.14), for high risk pregnancy, p=0.000], mean cost for laboratory test [$ 138.41 (±$32.12) normal pregnancy; $895.91 (±$304.32) high risk pregnancy (p=0.000)], delivery cost [$748.39 (±$340.51) normal pregnancy; $1,762.60 (±$513.88), p=0.000 high risk pregnacy] and mean total cost $2,514.86 (±$852.57), in normal pregnancy and $6,800.34 (±$3,829.82) high risk pregnancy (p=0.000). **CONCLUSIONS:** 75% pregnant women reach the pregnancy with pregestational overweight or obesity, and these conditions are risk factor to medical complications during pregnancy with significant higher costs derived from health care during pregnancy respect to women with normal pregnancy without pre-pregnancy overweight or obesity

PDB30

COST ANALYSIS STUDY OF ANTI-DIABETIC FIXED DOSE COMBINATION DRUGS: AN INDIAN SCENARIO

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OBJECTIVES: To compute the annual cost of FDC drugs used in the treatment of Type2 Diabetes Mellitus (T2DM) and study the variation in the costs. **METHODS:** Indian Council of Medical Research (ICMR) and International Diabetes Federation (IDF) guidelines were used to understand the treatment of T2DM. Current Index of Medical Specialities (CIMS) Oct- Jan 2015 issue and Indian Drug Review (IDR) issue 1, Jan 2015 were used to capture the prices of medicines available in the Indian market. The annual cost of treatment and variation in the annual cost of drugs was studied. **RESULTS:** Recommended first line FDC according to International Diabetes Federation is metformin + sulfonylurea. If we initiated the treatment with metformin + glimepiride (500mg + 1mg) OD, then annual cost of treatment was found to be Rs.438-2744. A maximum variation of 533% was noted in the least-highest cost of treatment. A minimum of 1% variation was observed for metformin + glipizide (2.5mg + 400mg) OD, among combination therapy in its least-highest cost of treatment. Likewise, if the treatment is initiated with other combination therapy, say metformin + pioglitazone (500mg +15mg) BD, then annual cost of treatment was found to be Rs.1387-6935. This showed a maximum variation of 665% in its least-highest cost of treatment. On the other hand metformin + voglibose (500 + 0.3mg) combination showed a minimum price variation of 86% only. **CONCLUSIONS:** It was concluded that a maximum of 6 fold variation was observed in the least-highest costs of treatment with metformin + voglibose (500mg + 0.3mg). A wide variation exist in the minimum and maximum price of anti-diabetic FDC manufactured across the different brands available in the Indian market.

PDB31

ECONOMIC ASPECTS IN THE MANAGEMENT OF DIABETES IN ITALY

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OBJECTIVES: Diabetes Mellitus (DM) is a chronic-degenerative disease associated with a high risk of chronic complications and co-morbidities. The aim of this study is to estimate the average annual cost incurred by the National Health Service (NHS) for the treatment of DM stratified by patients' comorbidities. Moreover, the model estimate the economic impact implementing good clinical practice for the management of diabetic patients. **METHODS:** Data were extrapolated from administrative database of the Marche Region and specific inclusion and exclusion criteria were developed from clinical board in order to estimate patients with DM only, DM+1, DM+2, DM+3 and DM+4 comorbidities (cardiovascular disease, neuropathy, nephropathy and retinopathy). Regional data were considered a good proxy for implementing a previous developed Cost of Illness model from NHS perspective already published. Scenario analysis were considered to estimate the economic impact of good clinical practice implementation in the treatment of DM and its comorbidities in Italy. **RESULTS:** The model estimated an average number of diabetic patients per year in the Marche region of 86.155 (5.5% of population) from 2008-2011. Mean costs per patients with DM only, DM+1, DM+2, DM+3 and DM+4 comorbidities were € 179, € 1,560, € 2,736, € 8,494 and € 21,321, respectively. From the NHS perspective, the total economic burden of DM in Italy amounted to € 8.5 billion/year (22% for drugs, 74% for hospitalization and 4% for visits). Scenario analysis demonstrate that implementation of good clinical practice could save over € 700 million year. **CONCLUSIONS:** This model is the first study that consider real world data and CoI model to estimate the economic burden of DM and its comorbidities from the NHS perspective. Integrated management of the diabetic patient could be a good driver for the reduction of the costs of this disease in Italy.