from approximately 2.5 million patients. Data was extracted for insulin naïve and prior insulin T2D patients initiated on basal insulin as monotherapy or as part of a basal-bolus regimen in 2004–2006. **RESULTS:** The study included 7209 new basal insulin users, of which 4792 (67%) were insulin naive. Overall, 4728 (66%) used analogues, with similar proportions using monotherapy (67%) and basal-bolus therapy (65%). The proportion of analogue users was greater among prior insulin users: 541 of 619 (87%) for monotherapy and 1331 of 1798 (74%) for basal-bolus therapy compared with 2258 of 3702 (61%) and 598 of 1090 (55%) among naïve users. Monotherapy for naïve patients was initiated mainly by the GP (NPH 70%, analogue 59%), for prior users mainly by the internist (NPH 49%, analogue 59%)%), same as for basal-bolus users (NPH 67–68%, analogue 75–80%). With NPH, 22% discontinued their prescription (average of 220 days) and with basal analogues 17% (average of 230 days). Furthermore, 6% of patients on NPH and 11% with basal analogues added-on to their prescription (after an average of 119 days and 126 days, respectively). Only 17% of patients switched treatment with basal analogues compared with NPH (average of 190 days) versus 32% (average of 158 days), respectively. **CONCLUSIONS:** When new insulin treatment is initiated, analogues are more often prescribed than NPH, more frequently prescribed by Dutch internists and not discontinued or switched as frequently as NPH, indicating that basal insulin analogues give a more sustained and satisfactory result.

PDB66

PAYING FOR COSTLY PHARMACEUTICALS—REIMBURSEMENT STATUS OF LONG-ACTING INSULIN ANALOGUES IN SELECTED DEVELOPED COUNTRIES

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OBJECTIVES: Many aspects of the scientific, economic and political discussions on the benefit of new medicines, for which modern insulins are a pivotal example, influence recent decisions about drug reimbursement. This study was undertaken to compare the reimbursement status of long acting insulin analogues (LAIA) in several industrialized countries around the globe, where different criteria for public funding of pharmaceuticals have been used, but all include estimates of clinical effectiveness and/or cost effectiveness. **METHODS:** The study was performed based on a combination of desk research, direct contact with national diabetes stakeholders and expert review, using a pre-defined questionnaire. In the first phase, information was gathered from each country on diabetes prevalence, cost, relevant policies and guidelines through a range of sources including government and patient association websites, published scientific literature, media reports. In the second phase additional information about reimbursement status of LAIA was sought from recommendations obtained from the websites of HTA or similar agencies, or interviews carried out with national stakeholders representing health ministries, patient organisations or medical community. **RESULTS:** Fifteen countries have been included in the study (Australia, New Zealand, Canada, UK, The Netherlands, France, Germany, Austria, Sweden, Norway, Latvia. Lithuania, Estonia, Hungary, Bulgaria). Only in France LAIA are reimbursed in 65%, in all remained countries—in 100%. But in most countries there are several restrictions on access to LAIA, namely criteria for this type of treatment have been developed to respond the clinical and economic evidence (use in selected patients, application only from a relevant specialist, regular reassessments of metabolic control, listing after the company agreed to a price reduction). **CONCLUSIONS:** The story of LAIA is important not only because of the way the evidence has been interpreted, but because the voice of consultative bodies resulted in action by the health care purchasers.

PDB67

HEALTH CARE UTILISATION AND EXPENDITURES ASSOCIATED WITH TREATMENTS OF DIABETES MELLITUS WITHIN THE SLOVAK REPUBLIC

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OBJECTIVES: The aim of this study was to collect comparable and reliable data about consumption of drugs for treatment of diabetes mellitus in Slovakia during the period 1999–2008. **METHODS:** Data of wholesalers (following ATC/DDD), who are legally obliged provide this information to the Slovak Institute for Drug Control, was used for the analysis. The results were expressed in the numbers of the packages, finance units (€) and defined daily doses per 1000 inhabitants per day (DID). **RESULTS:** The collected data shows a significant increases in the antidiabetic's consumption from 1999 to 2008 in term of DID (in 1999 (33.34) and in 2008 (48.63)). A moderate increase in A10AB group (Insulins and analogues, fast-acting) in 1999 (3.03), in 2003 (3.47) and in 2008 (5.25), a significant decrease in A10AC group (Insulins and analogues, intermediate-acting) in 1999 (4.79), in 2003 (3.94) and in 2008 (2.20), a moderate increase in A10AD (Insulins and analogues, intermediate-acting combin.) in 1999 (2.47), in 2003 (2.71) and in 2008 (4.05), a noticeable increase in A10AE (Insulins and analogues, long-acting) in 1999 (0.05), in 2003 (0.02) and in 2008 (1.99), a dramatic increase in A10BA (Biguanides) in 1999 (4.82), in 2003 (7.66) and in 2008 (13.51), a relatively stable consumption in A10BB (Sulfonamides) in 1999 (17.57), in 2003 (15.87) and in 2008 (19.29) and a moderate increase in A10BD (Biguanides and sulfonamides in combination) in 1999 (0.52), in 2003 (0.95) and in 2008 (1.68) in term of DID can be seen from this analysis. Financial expenditures for antidiabetics were in 1999 (€19,271,000) and in 2008 (€38,952,000). **CONCLUSIONS:** Inseparable components of the Slovak drug policy must be viewed realistically with regard to the antidiabetics' consumption. Adherence to principles of diabetes mellitus treatment's guidelines lead to fundamental short and long term financial savings within health care systems.

PDB68

A RETROSPECTIVE ANALYSIS OF MEDICATION USE, RESOURCE UTILIZATION, AND CLINICAL EFFECTIVENESS OF EXENATIDE COMPARED TO GLARGINE IN PATIENTS WITH TYPE 2 DIABETES

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OBJECTIVES: Exenatide and glargine are used for the treatment of type 2 diabetes (T2D) patients who are inadequately controlled on oral antidiabetic (OAD) medications. This study examined concomitant medications (including "off- label" use), resource utilization, and mean HbA1C (A1C) reduction after initiation of exenatide compared to glargine. **METHODS:** A retrospective claims analysis comprised of adult patients with T2D who initiated exenatide (N = 9264) or glargine (N = 3791) therapy between April 1, 2005 and June 30, 2007. Concomitant medications and resource utilization were estimated using logistic regression with propensity score stratification used to control for baseline patient characteristics. A subgroup analysis was performed in patients who had baseline and follow-up A1C data for exenatide (n = 606) and glargine (n = 251) to examine mean A1C reduction. **RESULTS:** A higher percentage of exenatide-treated patients were using concomitant metformin only (21.4% vs. 10.7%, $p < 0.0001$) and a lower percentage were using concomitant sulfonylurea only (3.2% vs. 6.4%, $p = 0.001$). There was no significant differences between percentage of patients using at least 1 OAD medication (89.2% vs. 88.9%, $p = 0.14$) in both cohorts. Exenatide-treated patients had 26% lower risk of hospitalizations (OR: 0.74, $p < 0.0001$) mainly due to 38% lower risk of macrovascular complications (OR: 0.62, $p < 0.001$). Exenatide-treated patients also experienced 22% lower risk of hypoglycemic events (OR: 0.78, $p = 0.037$). A higher percentage of exenatide-treated patients with a baseline A1C ≥ 7% achieved an A1C goal of < 7 (36.3% vs. 19.3%, $p < 0.001$). Exenatide-treated patients experienced a significantly greater mean reduction in A1C compared to glargine-treated patients after adjusting for baseline A1C (–0.80 vs. –0.52, $p = 0.0142$). **CONCLUSIONS:** Most patients were concomitantly using some OAD medications in both cohorts. Exenatide-treated patients had a significantly lower risk of hospitalizations, macrovascular complications and hypoglycemic events. In the patient subset with A1C data, exenatide-treated patients had a significantly greater reduction in mean A1C and higher percentage achieving goal than glargine-treated patients.

PDB69

SIGNIFICANT REDUCTIONS IN POLYPHARMACY AND HEALTH CARE UTILIZATION WITH INSULIN PUMP THERAPY (CSII) IN PATIENTS WITH TYPE 2 DIABETES

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OBJECTIVES: Clinical evidence evaluating polypharmacy and health care utilization with the use of continuous subcutaneous insulin infusion (CSII) in persons with uncontrolled Type 2 diabetes is limited. This study provides a real-world (retrospective) evaluation of the impact of CSII among 973 patients with Type 2 diabetes initiating CSII therapy between January 2005–October 2007 (mean age 48 years, 47% male, mean duration of follow-up 17 months). We hypothesized that CSII therapy would reduce rates of polypharmacy (multiple diabetes medication use), ER visits, and hospitalizations. **METHODS:** Administrative claims from a large, geographically diverse, US health plan were used. **RESULTS:** More than 1/3 of subjects taking oral anti-diabetic medications (OADs) before CSII initiation discontinued oral therapy altogether once they began CSII. The mean number of OADs used by subjects decreased by 0.67 OADs (1.45 OADs before vs. 0.78 OADs after, $p < 0.001$) after CSII initiation. The number of subjects using multiple OADs decreased by 58% (40% before vs. 17% after, $p < 0.001$) and rates of switching or augmenting oral therapy decreased from 44% to 25% ($p < 0.001$) from baseline to follow-up. The rate of ambulatory visits increased from pre- to post-CSII initiation (1.80 visits/subject/month before vs. 2.01 visits/subject/month after CSII initiation, $p < 0.01$), likely reflecting increased use of diabetes education services related to CSII. However, the rates of ER visits (0.11 visits/subject/month before vs. 0.08 visits/subject/month after, $p < 0.01$) and hospitalizations (0.03 visits/subject/month before vs. 0.01 visits/subject/month after, $p < 0.01$) significantly decreased after CSII initiation. **CONCLUSIONS:** Insulin pump therapy (CSII) was associated with significant decreases in polypharmacy and medication changes. Also, CSII may lead to a reduction in health care utilization as indicated by reductions in rates of ER visits and hospitalizations.

PDB70

ORAL MEDICATIONS VS INSULIN FOR DIABETES: EPIDEMIOLOGICAL & HEALTH POLICY IMPLICATIONS IN GREECE

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Diabetes is one of the most prevalent diseases of 21st century. In Greece, according to IDF, 737.700 people were suffering from diabetes in 2006 with prevalence rate 8.6% of the adult population. The Greek NHS decides reimbursement level based on disease. Nevertheless a paradox that exists in Diabetes case is that insulins are fully reimbursed whereas oral medications are reimbursed 75%. Moreover, the blood glucose measuring tapes are distributed for free in patients taking insulin, contrary to patients in oral medications that have to pay the whole amount. **OBJECTIVES:** To assess the