Association (ADA) guidelines were simulated. Cost of treatment and complications were based on officially published sources for medicines prices (www.mh.gov. mil) for hospital charges (www.nhi.bg) and verified expert opinion survey (1 BGN = 0.51 EUR). Future costs were discounted with 5%. RESULTS: Treatment to postpones minor complications by up to 4 years, delays major complications by 3 to 4 years and extends life expectancy from diagnosis by 3 years compared with the baseline scenario. Total discounted cost savings over remaining life expectancy from the diagnosis were from 2483 BGN to 2908 BGN per person. CONCLUSIONS: Enhanced treatment leads to avoidance or delay of the complications of diabetes. This significantly reduces the impact diabetes can have on patients’ quality of life, life expectancy and cost of diabetes treatment in Bulgarian health care system settings.

PDB30

ASSESSMENT OF THE IMPACT OF THE NEW ANTIDIABETIC TREATMENT WITH VILDAGLITIN TO CHANGE THE TOTAL COSTS ON DIABETES TYPE 2

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BACKGROUND: Under the data of Russian Federal State Registry 2010 there are around 3 million patients in diabetes. Also data of epidemiology assessment in the frame of national project ‘Health’ demonstrates that estimated number of patients consists of 5.7% from total population that is 4 times higher. Death rate of cardiovascular complications is 1.5 thousand people per year. Every second patient gets invalidity. So total expenditures for complications treatment costs ten times more than costs on medical products and control devices. OBJECTIVES: 1) Provide local costs of the disease, and 2) Assess benefits of new technology treatment versus traditional therapy. METHODS: Retrospective analysis of case studies of patients in D2T from 4 regions of Russia. Average age - 61 years, duration of D2T - 7.5 years, body mass index - more than 32 kg/m2, HbAc - 8.1%. Isolation of two groups of patients: 1) traditional diabetes treatment (n=26); 2) - treated by traditional OAD with sulfonylureas (n=600). Comparative analysis ‘Cost of Illness’ of two groups, and correlation between anti-diabetic medical products and risk of fatal complications. RESULTS: Average cost of antidiabetic medical treatment of group 1 versus 2 is more than 2 times expensive, 16,600 rub versus 7,000 rub per patient per year. Exchange rate is $1 = 30 rub. But total costs for the treatment of patients group 2 versus 1 is 30% higher (26,000 rub and 18,000 rub per patient per year accordingly). The main reason - more number of vital important cardiovascular events and exacerbations of hypertension and heart disease in group 2. Part of direct medical costs - treatment without anti-diabetic products is 7% and 73% for total costs for groups 1 and 2 accordingly. CONCLUSIONS: Usage of new antidiabetic products - vildaglitin is a way to control diabetes, development of cardiovascular complications and total budget for the disease.

PDB31

COST OF DIABETES IN CROATIA: IMPACT ON COMPLICATIONS OF THE COSTS OF ‘TYPE II DIABETES’

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OBJECTIVES: The prevalence of diabetes continues to grow, and it is estimated that in Croatia there will be 60,000 adults with diabetes (9.2% adult population), although in many patients the disease has not yet been diagnosed. Majority of patients suffers from diabetes mellitus type 2. The objectives of this study are to quantify the economic burden of illness caused by increased health resource use and to provide detailed breakdown of the costs attributed to diabetes. METHODS: Prevalence-based ‘Cost-of-Illness’ approach from the institutional perspective was employed. A pre-tested data extraction form was used to review the medical records of 304 diabetes patients randomly selected. RESULTS: The mean age was 55.4 years. The annual financial cost of managing one diabetes patient was estimated to be 464.51 EUR (USD 373.34). Service cost constituted 22% whereas direct medical costs constituted 78%. Direct medical costs were related to the hospitalization of patients. CONCLUSIONS: The cost of hospitalization per patient-day at Croatia clinic was estimated to be 464.51 EUR (USD 373.34). The total financial cost of Diabetes management was estimated at 420,087.67 EUR (USD 289,715.63). This accounted for 8% of the total expenditure for the Clinics in year 2009. The study of the sensitivity analysis showed that the choice of treatment is associated with the cost of Diabetes management to Croatian society. The cost of managing Diabetes Mellitus and accompanying complications can be used to forecast the economic burden of the disease to the clinic. The mean age indicates delay in diagnosing diabetes and accompanying complications which has cost implications. This calls for policies that will help in the early detection in clinical practice and effective management protocols by Croatian clinics. Keywords: Diabetes, financial cost, Croatia clinics, complication, Cost-of-Illness, Croatia.

PDB32

MEDICAL TREATMENT COSTS ATTRIBUTABLE TO OBESITY IN DIABETIC PATIENTS IN THE UNITED STATES

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OBJECTIVES: To determine annual treatment costs attributable to obesity (TC-ATO) in diabetes patients in the US. METHODS: The study used Medical Expenditure Panel Survey data from 2001-2008, a nationally representative sample of US non-institutionalized population. Diabetic patients (<18 years old) were identified using (CD-1105) and ICD-9-CM codes 250, clinical classification codes 049 and 050, or physician reported diagnosis. Patients were classified as normal (body mass index (BMI)<18.5–25 kg/m2), overweight (BMI 25–30 kg/m2), or obese (BMI ≥30 kg/m2). Patients with pregnancy, malignancy, kidney dialysis, immuno deficiency, or low BMI (<18.5 kg/m2) were excluded. Treatment costs included all costs for treating diabetic patients, excluding dental health and injury costs. Adjusted costs were calculated using generalized linear model (GLM) with log link function and gamma distribution. TC-ATOS were estimated using reduced predicted and quantile regression method. The reduced prediction method predicted costs for obese patients by calculating costs using estimated coefficients from normal patients using GLM after adjusting for the study variables. TC-ATO was the differences between actual costs and predicted costs in the obese patients. In quantile regression, TC-ATO for each quantile was estimated as the coefficient of the obese patients. All costs were converted to 2010 US dollars using the Consumer Price Index. RESULTS: The average treatment costs were $9,196 (95% CI: $8,213–$10,178) and $9,614 (95% CI: $9,124–$10,104) for normal and obese patients, respectively. The treatment costs in obese patients were 12% higher than those in normal patients after adjusting for other study variables (p<0.02). Overall, the average TC-ATO in diabetic patients was predicted to be $527,905 (95% CI: $49,001–$1,005). TC-ATO calculated by quantile regression were $1,514,955 (95% CI: $1,680–$2,040), $2,835,395 (95% CI: $1,365–$4,342), $3,935,955 (95% CI: $2,465–$4,545), $7,055,955 (95% CI: $3,951–$1,015) and $9,200,443 (95% CI: $3,137) for 25th, 50th, 75th, and 90th percentile, respectively. CONCLUSIONS: Obese patients with diabetes have significantly higher treatment costs compared to normal diabetic patients. The increased economic burden attributable to obesity represents potentially avoidable costs, which justifies allocating additional resources to therapeutic interventions aimed at reducing weight.

PDB35

ESTIMATING THE REAL LIFE DAILY USAGE AND DAILY COST OF GLP-1 RECEPTOR AGONISTS IN THE UK SETTING

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OBJECTIVES: To estimate the daily medical treatment costs attributable to obesity (TC-ATO) in diabetes patients in the US. METHODS: The study used Medical Expenditure Panel Survey data from 2001-2008, a nationally representative sample of US non-institutionalized population. Diabetic patients (<18 years old) were identified using (CD-1105) and ICD-9-CM codes 250, clinical classification codes 049 and 050, or physician reported diagnosis. Patients were classified as normal (body mass index (BMI) <18.5–25 kg/m²), overweight (BMI 25–30 kg/m²), or obese (BMI ≥30 kg/m²). Patients with pregnancy, malignancy, kidney dialysis, immuno deficiency, or low BMI (<18.5 kg/m²) were excluded. Treatment costs included all costs for treating diabetic patients, excluding dental health and injury costs. Adjusted costs were calculated using generalized linear model (GLM) with log link function and gamma distribution. TC-ATOS were estimated using reduced predicted and quantile regression method. The reduced prediction method predicted costs for obese patients by calculating costs using estimated coefficients from normal patients using GLM after adjusting for the study variables. TC-ATO was the differences between actual costs and predicted costs in the obese patients. In quantile regression, TC-ATO for each quantile was estimated as the coefficient of the obese patients. All costs were converted to 2010 US dollars using the Consumer Price Index. RESULTS: The average treatment costs were $9,196 (95% CI: $8,213–$10,178) and $9,614 (95% CI: $9,124–$10,104) for normal and obese patients, respectively. The treatment costs in obese patients were 12% higher than those in normal patients after adjusting for other study variables (p<0.02). Overall, the average TC-ATO in diabetic patients was predicted to be $527,905 (95% CI: $49,001–$1,005). TC-ATO calculated by quantile regression were $1,514,955 (95% CI: $1,680–$2,040), $2,835,395 (95% CI: $1,365–$4,342), $3,935,955 (95% CI: $2,465–$4,545), $7,055,955 (95% CI: $3,951–$1,015) and $9,200,443 (95% CI: $3,137) for 25th, 50th, 75th, and 90th percentile, respectively. CONCLUSIONS: Obese patients with diabetes have significantly higher treatment costs compared to normal diabetic patients. The increased economic burden attributable to obesity represents potentially avoidable costs, which justifies allocating additional resources to therapeutic interventions aimed at reducing weight.