centage of patients aged 65–74 years with comorbidities was 52.9% higher than people aged 25–34 years old (p < 0.05). For all cohorts, regardless of age, one of four patients with T2D coincides with hypertension, one of ten patients with T2D coincides with hyperlipidemia, and one of three patients with T2D coincides with both hypertension and hyperlipidemia. In 2003, the frequency of physicians’ visits for T2D patients with hypertension and hyperlipidemia was 2.3 times higher than for T2D patients without comorbidities (p < 0.01). In terms of T2D comorbidities, a major trigger for physicians to prescribe a drug is the coexistence of both hypertension and hyperlipidemia. CONCLUSIONS: The analysis of T2D incidence trends demonstrates that developing disease management strategies for physicians should include in their judgment, the fact that in a majority of cases, patients have T2D coinciding with cardiovascular diseases and hyperlipidemia.

PDB7

CLINICAL JUDGMENT OF DRUG THERAPY FOR TYPE-2 DIABETES PATIENTS AND RESULTS OF HBA1C TESTS

Lipsky N
Surveillance Data Inc, Plymouth Meeting, PA, USA

OBJECTIVE: The goal of this study is to evaluate physicians’ prescribing behavior based on the results of Hb1Ac tests for patients with type-2 diabetes. METHODS: The study design was retrospective covering the 12-month longitudinal period June, 2003 through May, 2004. We used a three-month look back period and a three-month look forward period for the validation of pre and post test (HbA1c) therapy. The study was based on the analysis of electronic CMS1500 claims for 33,764 unique patients (HIPAA compliant) and their results from the most recent HbA1c tests. Patients’ medication was assessed through NCPDP electronic claims utilizing NDC codes and drug classes. Analysis included calculations of descriptive statistics and regression modeling. RESULTS: The high level of HbA1c was discovered during laboratory testing where a higher percentage of patients without medication were placed on medication. In particular, within a category of patients with HbA1c greater than or equal to 9mg/dL, this switch occurred 32.1% more frequently then within a category of patients with Hba1c less than 7mg/dL (p < 0.01). For patients with HbA1c greater than or equal to 9mg/dL, the likelihood to change an existing therapy was 64.2% higher than for patients with HbA1c less than 7mg/dL (p < 0.01). Also, for people with a high level of Hb1Ac, the likelihood to switch from monotherapy to polytherapy was 1.6 times higher than for people with a low level of testing. CONCLUSIONS: For patients with type-2 diabetes, a level of Hb1Ac is one of the important predictors of change in a physician’s prescribing behavior. High levels of HbA1c most likely will cause a switch from just a dietary and exercise regimens to additional medication component.

PDB8

PREVALENCE OF DIABETES MELLITUS AND TREATMENT PATTERNS BASED ON CLASSIFICATION OF BODY MASS INDEX AMONG ADULTS

Sub DC, Shin HC, Vo L, Valyeva E, Barone JA
Rutgers University, Piscataway, NJ, USA

OBJECTIVES: To examine trends of diabetes mellitus (DM) prevalence in adults and to investigate treatment patterns and HbA1c control according to their body mass index (BMI) classification. METHODS: This study used the Third National Health and Nutrition Examination Survey (NHANES III for 1988–1994) and NHANES 2001–2002, representing a national sample of the non-institutionalized civilian US population. Study patients were identified if they were ≥20 years old, were previously diagnosed with DM by a physician or is currently using DM therapy (insulin or a hypoglycemic agent). DM patients were classified as normal (BMI < 25), overweight (BMI: 25–29), or obese (BMI ≥ 30). Data were analyzed using SAS and SUDAAN statistical software. RESULTS: The age-adjusted prevalence of DM significantly increased from 5.4% in 1988–1994 to 7.1% in 2001–2002 (increase of 1.7%; p < 0.05). In 2001–2002, DM was more prevalent in overweight patients (6.1%) and obese patients (10.5%) than in normal weight patients (4%). These trends were similar in 1988–1994. More DM patients (80% of overweight and 87% of obese patients) received treatment in 2001–2002 than during 1988–1994 (70% and 78%) (increases: p = 0.05 respectively). Patients were treated with oral antihyperglycemics only most frequently (56%), followed by insulin only (17%), and with both insulin and an oral agent (9%). Overall, mean HbA1c decreased from 7.7% (57% of DM-patients: HbA1c ≥ 7%) in 1988–1994 to 7.5% (30% of DM-patients: HbA1c ≥ 7%) in 2001–2002 (p = 0.24). CONCLUSIONS: Over the past decade, DM has become more prevalent in US adults, more overweight and obese DM patients have received treatment, yet 20% of overall DM patients still have not received treatment. In 2001–2002, half of diabetic patients did not control their HbA1c level and diabetic patients who were obese were less likely to control their HbA1c compared to patients who were normal weight.

PDB9

FACTORS ASSOCIATED WITH A LOWER GLYCOSYLATED HEMOGLOBIN A1C (A1C) IN A DIABETIC LATINO POPULATION

Aranda GA, Bonnet PO, Johnson KA
University of Southern California, Los Angeles, CA, USA

OBJECTIVES: To investigate the association between a lower A1c (a measure of better diabetes control) and multiple health system and individual variables in a Latino population. METHODS: Data were obtained from the Los Angeles Latino Eye Study (LALES) and included 6980 participants who were >40 years old. Subjects with a physician diagnosis and those without were stratified and compared. Continuous variables were summarized using means, standard deviations and T-tests. Categorical variables were summarized using frequency tables and Chi-square tests. Multivariate linear regression was performed on subjects with diabetes. P-value less than 0.05 was considered statistically significant. RESULTS: There were 1095 subjects with DM resulting in a prevalence of 18%, 73.0% of subjects were married or living with their partner. 43.4% of subjects were males, 65.9% of subjects had insurance coverage, and 3.8% of the subjects without a diagnosis had A1c values that were above the diabetic goal, indicating probable diabetes disease. Diabetics were older than non-diabetics (57.8 vs. 53.9; p < 0.0001), insured (73.9% vs. 64.2%; p < 0.0001) and had a higher percentage of individuals with a household income less than $20,000 (55.8% vs. 49.6%; p < 0.0002). In total, 57.4% of diabetics were using oral anti-diabetic medication alone, 5.9% were using insulin alone, 3.6% were using diet alone and 15.3% were using a combination of oral medication and insulin. Multivariate linear regression analysis (R2 = 0.1225, p < 0.0001) showed that being older, single, insured, male and a lower income was associated with a lower A1c. Also fewer disease years, higher BMI, on diet vs. combination treatment were associated with a lower A1c. How much the subjects have adopted the American culture, expressed as an acculturation score, was not significantly associated with A1c. CONCLUSIONS: Though this study did not measure severity of disease and medication