TREATMENT COSTS ATTRIBUTABLE TO OVERWEIGHT/OBESE IN PATIENTS WITH DIABETES MELLITUS IN THE U.S. ADULT POPULATION
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OBJECTIVES: To estimate treatment costs attributable to overweight or obesity in diabetic patients. METHODS: Data from 23,825 adults in the 2004 Medical Expenditure Panel Survey (MEPS), a nationally representative sample of the U.S. non-institutionalized population, were examined for this cross-sectional analysis. Diabetic patients were identified if they reported having diabetes in the medical conditions file of MEPS. Based on their BMI, patients were further classified as normal (body mass index (BMI) 18.5 to <25), overweight (BMI 25 to <30), or obese (BMI ≥ 30). Treatment costs associated with diabetes mellitus included costs for treating kidney and heart disease, stroke, eye, skin, and foot complications, and neuropathy. The costs for overweight or obese patients were predicted from estimated parameters in patients with normal weight using a generalized linear model with log link function, with adjustment for patients’ demographic characteristics, BMI, services used, and co-morbidities. Attributable costs were estimated by the difference between predicted costs and observed costs. All costs were converted to 2005 U.S. dollars using appropriate price indices. Data were analyzed using SAS and SUDAAN statistical software to adjust for the complex sample design. RESULTS: The age-adjusted prevalence of diabetes in the U.S. population was 6.26% (15.3 million people). More than 80% of diabetic patients were overweight (30.4%) or obese (51.4%). Among obese patients, the medical costs associated with diabetes were higher in women ($6263) than men ($4505), as well as in white ($6209) than black ($4819) or Hispanic ($2421) patients. Overall, compared to patients with normal weight, predicted costs attributable to overweight were $709 (95% CI:$237–$1181) and obesity, $2301 (95% CI:$748–$3854). CONCLUSION: Overweight and obesity were prevalent in diabetic patients that significantly increased economic burden. Patient education to emphasize the importance of weight control is strongly recommended to reduce treatment costs attributable to diabetic complications.

EMERGENCY ROOM CARE FOR DIABETES MELLITUS IN THE UNITED STATES: HOW MUCH DOES IT COST?
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OBJECTIVES: The objectives of this study were (1) To provide a population-based estimate of the cost of emergency room care for the US population with diabetes in 2006 dollars and; (2) To examine if there are any differences in ER costs for the study population by age, gender, race, ethnicity, marital status, insurance status, educational level, family income, census region, locality, body mass index, and comorbidities/complications. METHODS: This was a cross-sectional retrospective study of the cost of emergency room care for individuals with diabetes. The data source for the study was the 2003 MEPS Household Component Full Year Consolidated File (MEPS HC-079, 2003). People reporting diabetes in the MEPS data file were identified by the ICD9-CM code 250 (diabetes) and the relevant ICD9-CM codes were used to further identify those individuals reporting both diabetes and any of the associated comorbidities/complications after merging the data by the person identification number DUPSIDS. The total cost of ER care for the study population was computed by summing the facility and provider costs for the year and then adjusted to 2006 dollars. Differences in the mean ER cost for diabetes by each of the demographic and clinical variables were tested for significance using two sample t-tests. All computations and analyses incorporated the MEPS sampling weights to obtain estimates for the noninstitutionalized US civilian population with diabetes in 2003. RESULTS: The total cost of ER care for diabetes in 2003 was $3.1 billion adjusted to $3.4 billion in 2006 dollars. The difference in the mean ER cost was significant only by gender and educational level. CONCLUSION: ER care for diabetes cost $3.4 billion in 2006. Appropriate educational interventions might be needed for people with diabetes so they can better cooperate with their providers in their disease management so as to reduce ER use and costs.

DETERMINATION OF HEALTH CARE COSTS INCURRED BY SWEDISH PATIENTS WITH TYPE 2 DIABETES
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OBJECTIVES: The objective of the present study was to estimate annual costs of care incurred by Swedish patients with type 2 diabetes between 2000 and 2004 and to determine the drivers of costs using data from the RECAP-DM study, which included medical records on 11,856 patients with type 2 diabetes retrospectively identified in computerised registers at 26 primary care centres in Uppsala county (*³030,000 inhabitants). METHODS: Costs of outpatient care, drugs and devices were estimated by assigning unit costs from published sources to care-giver contacts and prescriptions recorded in computerised primary care records. Costs of inpatient care were estimated by classifying hospitalisations of study patients into diagnosis-related groups (DRGs) according to the Nord-DRG classification system and assigning average costs per DRG. Costs of dialysis were estimated using data from the Swedish Register for Active Care of Renal Failure. Drivers of costs were analysed through multiple regression analysis. RESULTS: The average annual cost of care over the studied years was $2658 per patient (n = 7269 on average). Costs of inpatient care accounted for an average 59% of total costs. Results of the regression analysis indicated that the main driver of costs was the presence of complications. Undergoing treatment for renal failure in a given year was associated with a $70,662 increase in total costs of care during the year. Experiencing a major cardiovascular event (acute MI, stroke, PCI or CABG) in a given year was associated with a $15,094 increase in total costs of care during the year. CONCLUSION: Diabetes continues to impose a heavy economic burden on society. Cost estimates from this population-based sample of Swedish type 2 diabetics may serve as reference values for a Swedish setting and provide additional information on the composition of costs.

THE RELATIVE COST EFFECTIVENESS OF INSULIN GLARGINE VERSUS NPH INSULIN USING UK REAL LIFE DATA IN PATIENTS WITH TYPE 2 DIABETES MELLITUS
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OBJECTIVES: The purpose of this study was to evaluate the cost effectiveness (cost utility) of insulin glargine in the UK for people with Type 2 diabetes mellitus (T2DM) using observational data in patients continuing on NPH versus those switching from NPH to insulin glargine. METHODS: A discrete event simulation was