matched sample of patients with HbA1c greater than or equal to 7%, for a difference of $2,713 [$2,065, $5,140]. In contrast, when we examined the change in cost from 2006 to 2008 for patients who had sustained control at 7% for all 3 years, we found that total cost care for patients with sustained control decreased by $2,207 compared to a $3,066 increase for patients without sustained control, for a difference of $-5,214, 95% CI[$-10,163, $-264]. CONCLUSIONS: Our study suggests that we are reducing HbA1c levels to target goals may not immediately result in cost reductions, sustained HbA1c control is likely to reduce costs in a three-year time frame.

PDB42 HEALTH CARE RESOURCES UTILIZATION AND COST FOR HYPOGLYCEMIA AND METABOLIC ACIDOSIS IN TYPE II DIABETES: AN ANALYSIS OF THE RAMQ DATABASE
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OBJECTIVES: Diabetic patients with chronic renal failure are at risk of developing hypoglycemia and metabolic acidosis. The purpose of this study was to estimate the health care resource utilization and costs associated with these complications.
METHODS: Patients covered by the Quebec provincial drug reimbursement program (RAMQ) who had a diagnosis of diabetes, had used a hypoglycemic agent and, who had experienced hypoglycemia or metabolic acidosis in the period from January 2005 to December 2010 were selected. Health care resources in terms of physician visits, hospitalization, intensive care unit stay, hospital outpatient clinic visits, and home care visits were estimated for the 10-day period before and the 30-day period after a complication event. The resources consumed during a 40-day period one year before the event, corresponding to a period without any complication event, was deducted to estimate the incremental costs associated with the complication event, was deducted to estimate the incremental costs associated with the complication.
RESULTS: A total of 4889 patients had a diagnosis of diabetes with chronic renal failure (average age 69.2 years (SD 10.1)). Of these, 530 (10.8%) experienced a hypoglycemic event and 95 (1.9%) an episode of metabolic acidosis. Estimated incremental costs of medical resources were $3859 for hypoglycemia and $5019 for metabolic acidosis. In both cases, hospitalization was the major cost component: $2560 and $3065 for hypoglycemia and metabolic acidosis, respectively. CONCLUSIONS: A significant proportion of diabetic patients with chronic renal failure experienced hypoglycemia or metabolic acidosis, with substantial associated costs. Treatment options that minimize the risk of these complications should be considered.

PDB43 THE COST OF HYPOGLYCEMIA IN DIABETES: DEFINING THE SEVERITY OF THE HYPOGLYCEMIC EVENT IS KEY TO UNDERSTANDING THE ECONOMIC BURDEN Chollat M1, Briggs A2, Brin S3, Dain MP4, Menghini LT5, Bergenthal R6
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Hypoglycemia is one of the limiting factors for achieving adequate metabolic control in diabetic patients. Although it is well accepted that the economic burden of diabetes is substantial, the financial impact of hypoglycaemia to patients, the health system and society is unclear.
OBJECTIVES: To assess the economic impact associated with hypoglycemic events through a search of the published literature in type 1 and type 2 diabetic patients using oral antidiabetes drugs and/or insulin therapy.
METHODS: An in-depth literature review was conducted, EMBASE and PubMed databases were searched from 2005 to November 2011. A total of 24 US and European articles were retrieved. Costs were collected according to severity of hypoglycemia: symptomatic non-severe and severe hypoglycemia.
RESULTS: Direct non-medical costs and indirect costs were studied for symptomatic non-severe hypoglycemia, as the economic impact is limited to lost work productivity, increased out-of-pocket costs mainly due to groceries, extra test trips and transportation services. The lack of consensus of the definition of severe hypoglycemia leads to great variation of published costs. Total costs per severe episode (direct/indirect costs), for patients requiring assistance from family members ranged from 30 to €36, for patients needing medical attention but not admitted to hospital overnight ranged from 274 to €489, and for patients requiring hospitalization ranged from €1306 to €3917. US Study reported mean cost per severe episode of $1087. CONCLUSIONS: No clear consensus on the definition of severity of hypoglycemia was specified in the literature. Costs for symptomatic or non-severe hypoglycemia are sparse and a high variation in costs for severe hypoglycemia was observed. Hospitalization costs are the main cost driver. A better understanding of the evaluation of severe hypoglycaemia needs to consider the subcategories of assistance in order to reduce uncertainty in third payer point of view.

PDB44 DIFFERENCES IN UTILIZATION OF AND EXPENDITURES ON OFFICE-BASED HEALTH CARE BETWEEN UNINSURED AND INSURED CHILDREN 0-17 YEARS OF AGE FROM 2004-2008: RESULTS FROM THE MEDICAL EXPENDITURE PANEL SURVEY Berry EA1, Heaton PC2, Fairbrother GD, Hansan DA, Goo JT3, Kelton CM4
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OBJECTIVES: To explain differences in number of and expenditures on office-based health care visits between uninsured and insured children.
METHODS: Using four two-year panels from the Medical Expenditure Panel Survey (MEPS) from 2004-2008, a 1:1 nearest-neighbor-with-replacement case-control design (matching on age category, race, region, health status, change in health status, specific MEPS panel, and self-reported insulin use) was used to match a continuously (24-months) uninsured (case) with a continuously insured (control) child. The Wilcoxon matched-pairs test was used to compare the mean number of office visits and mean expenditures between cases and controls. Then, ordinary-least-squares regression was conducted to test to estimate the difference between uninsured and insured costs. Adjusted means are presented.
RESULTS: Out of the approximately 257 million (weighted total) children aged 0-17 across 4 MEPS panels, 4.13% had no health-insurance coverage over the 2-year panel, while 76.95% experienced continuous insurance coverage. The average number of office visits was 0.07 (p-value < 0.01) less per month than that for insured children, mean expenditures on these visits per month was $11.57 (p-value < 0.01) less for uninsured children. Regressor predictions with statistically significant coefficients included age, sex, race, insurance status, change in health status, panel, age category, race, income category, and region of the country. Children whose health status improved over the panel had a drop (p-value < 0.01) in the difference between care and control in office-based health care expenditure, relative to children whose health status remained steady. CONCLUSIONS: Utilization of and spending on office-based health care are significantly higher for children covered by health insurance. Moreover, the penalty for lack of insurance can be explained by important predictors including income, age category, and health status. The lack-of-insurance barrier for office-based visits may potentially also be a barrier for uninsured children to center medical homes.