on US health-care, both directly and through substantially increased risks of micro- and macrovascular complications over time. The purpose of this study was to model diabetes-related clinical and economic outcomes following a myocardial infarction (MI) or stroke. The impacts of experiencing an MI or stroke on five-year mortality rates and life expectancy were estimated using National Health and Nutrition Examination Survey (NHANES) and United Kingdom Prospective Diabetes Study (UKPDS) data. Five-year mortality rate and medical and pharmacy costs were estimated for a cohort of 100,000 patients. Cohorts were simulated for five years and projected over a lifetime with and without an initial MI or stroke. The models were implemented for both genders and different age groups. One-way sensitivity analyses including years since diagnosis, baseline HbA1c, blood pressure, cholesterol, and smoking were performed separately for MI and stroke. RESULTS: A 60-year-old male patient with a HbA1c of 7.3% and diabetes-related clinical and economic outcomes after an initial MI or stroke. The patient’s life expectancy decreased from 14.8 years to 7.9 years and 6.6 years for initial MI and stroke, respectively. CONCLUSIONS: Diabetes-related clinical and economic outcomes significantly decrease life expectancy and increase the economic burden of T2DM. Preemptive actions and treatments to reduce MI and stroke risk in T2DM patients can be cost-justified.

PBDA3 ECONOMIC BENEFITS OF ULTRASONIC DEVICES IN THYROIDECTOMY Ho-Shing C.C., Cheng H.L., Tao C., Chauwa A.S., Paulkner E.C., DeRamus S.1
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OBJECTIVES: The use of ultrasonic devices (UD) in thyroidectomy may have significant economic benefits due to improved outcomes and cost savings. The objective of this study was to develop a provider budget impact model to quantify potential cost savings over conventional methods. METHODS: A budget impact model was developed in the perspective of a US hospital, comparing the use of UD with conventional techniques in patients undergoing thyroidectomy. Clinical parameters were derived from published literature, including a meta-analysis of 26 studies, and focused on the differences between ultrasonic and conventional surgeries across four areas: 1) operating time, 2) blood loss, 3) duration of recovery time, and 4) risks of other complications. Costs of care were obtained from published commercial and Medicare fee schedules. Results and risks compared to traditional thyroidectomy were obtained from published literature. RESULTS: UD showed clinical and economic advantages compared to conventional surgery, with notable reductions in operating time and blood loss by 29% and 20%, respectively. Reductions were also seen in risk of surgical site infection and anesthesia utilization due to reduced operating time, with the possibility of reducing other surgical side effects associated with operating time such as venous thromboembolism. Total cost savings were estimated at approximately $1,500 per patient, with the highest up-front cost of the UD offset by the aforementioned savings. CONCLUSIONS: The clinical benefits of UD can be translated into economic benefits for providers in the US. Further studies are needed to confirm the cost-effectiveness of these benefits. Although the UD technique was not specifically analyzed in this study, its potential clinical benefits make it an appealing addition to the available surgical options for thyroidectomy.

PBDA4 HEALTH CARE RESOURCE UTILIZATION AND COSTS AMONG DIABETES PATIENTS RESIDING IN LONG-TERM CARE FACILITIES Huanga A.1, Shrestha S.1, Baser G.2, Yaceh H., Wang L.3
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OBJECTIVES: To evaluate health care resource utilization and costs among diabetes patients residing in long-term care facilities. METHODS: Patients diagnosed with diabetes (International Classification of Diseases, 9th Revision, Clinical Modification diagnosis codes 250.x, 250.x2) were identified using the Long-Term Care Minimum Data Set (MDS) linked to 5% Medicare data from 01/AN2009 through 31DEC2010. The initial diagnosis date was designated as the index date. A comparison cohort was created for patients without diabetes, using a 1:1 propensity score matching (PSM) to control for age, region, gender and baseline Charlson Comorbidity Index score. The index date for the comparison cohort was randomly selected to reduce selection bias. Patients in both cohorts were required to be age 65 years, have at least two consecutive quarterly assessments documented in MDS data 6 months prior to the index date and have continuous medical and pharmacy benefits for 1-year pre-index period. The model incorporated costs and complications of care of individuals with diabetes and comparison cohorts. RESULTS: After applying PSM, 783,500 patients were included in each cohort, and baseline characteristics were balanced. Diabetes patients had 2.5 higher percentage of older patients (71.9% vs. 22.7%, p<0.0001), skilled nursing facility (SNF) (31.55% vs. 22.73%, p<0.0001), durable medical equipment (27.46% vs. 16.48%, p<0.0001) and pharmacy visits claim (91.10% vs. 88.76%, p=0.0028) compared to those without diabetes. Patients in the diabetes cohort also incurred significantly higher pharmacy claim (vs. $3,071, p<0.0001), SNP ($5,523 vs. $3,244, p<0.0001), carrier claim ($3,118 vs. $2,437, p<0.0002) and pharmacy visit costs ($5,040 vs. $4,275, p<0.0005) than those in the comparison cohort. CONCLUSIONS: Patients diagnosed with diabetes had significantly higher health care resource utilization and costs than those without diabetes.