glutide than with sitagliptin based on data from a recently published 52-week clinical trial.

PDB5

COST-EFFECTIVENESS OF ADDING A PHARMACIST TO THE PRIMARY CARE TEAM FOR THE MANAGEMENT OF TYPE 2 DIABETES PATIENTS

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OBJECTIVES: To evaluate the cost-effectiveness of pharmacist intervention (the enhanced care group-ECG) relative to primary care physicians only (control group) in improving cardiovascular (CVD) outcomes among patients with Type 2 diabetes mellitus (T2DM). METHODS: Data were collected from medical charts at Kaiser Permanente (KP) clinics in the ECG were matched 1:1 to patients in the control group based on age, gender, HbA1C, and Charlson comorbidity score. The UKPDS risk engine was used to estimate the 10-year CVD risk. A Markov state-transition model was developed to simulate the difference in CVD risk between the two hypotheses.

RESULTS: The base case model suggests that the ECG dominated the control group with lower treatment cost ($35,740 vs. $44,528) per patient and more life years (8.9 vs 8.1) and QALY (0.51 vs. 0.50) over the 10-year period. Within the reasonable range of variability of all parameters, however, the multiple one-way SA revealed that the relative value of ECG depends on the time horizon adopted by the payers. The probabilistic sensitivity analysis suggests that when adopting a longer time horizon such as 5 or more years in management, the ECG has a far higher chance of being chosen as a cost-effective strategy regardless of the level of willingness to pay. When the time horizon was shortened, however, the likelihood for the ECG being cost-effective decreased.

CONCLUSIONS: Adding pharmacist to primary care management in the long term can be a cost-effective strategy in terms of the improvements in the cardiovascular outcomes achieved over the long term.

PDB58

COST-EFFECTIVENESS ANALYSES OF TYP E 2 DIABETES MELLITUS TREATMENTS PUBLISHED IN THE UNITED STATES: A SYSTEMATIC LITERATURE REVIEW OF RESULTS AND QUALITY ASSESSMENT

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OBJECTIVES: 1) To identify key features of cost-effectiveness analyses (CEAs) of type 2 diabetes mellitus (T2DM) of the United States (US) population; 2) to assess the quality of T2DM CEAs; and 3) to identify the predictors of quality. METHODS: We searched PubMed for several MeSH terms with English language restriction, through August 2011. The quality of eligible studies was evaluated using the Qual of Life Economic Evaluation (QHES) instrument. Multiple linear regression analysis was conducted for the predictors of quality (overall QHES score) and independent variables being features of the T2DM CEA literature. RESULTS: A total of 38 full-text articles met the inclusion criteria with 24papers over sixty percent of which were pharmaceutical companies funded/sponsored, 82% were conducted from healthcare payers perspective, 77% were published in clinical-focused journals, 85% used quality-adjusted life-years (QALYs), 79% used published literature as the data source, 28% used RAND-36 as the instrument for health outcomes, however 51% were classified as disease treatment/management, and 64% used more than one-way sensitivity analysis. Overall, mean quality score using QHES was 73.2 ± 11.5 and only 51% of studies scored ≥ 75 (high-quality). Many studies (69%) failed to describe the analysis perspective and 94% failed for its selection, whereas, most of the studies (95%) used valid and reliable health outcomes scales/measures. Multiple linear regression found the following significant variables (p < 0.05): journal impact factor (p < 11.2, CI -7.4 to 14.0), studies using QALY (p < 34.9, CI 11.2 to 48.1), and published after year 2000 (p < 35.8, CI 13.9 to 46.8). CONCLUSIONS: All studies funded/sponsored by a pharmaceutical company concluded the product of that company to be cost-effective; this may be indicative of publication bias and/or design bias. Several studies failed to follow the societal perspective recommendations of the US Panel on Cost-effectiveness in Health and Medicine, possibly because of preferences of the funding agency or researcher’s interests. Decisions based on these studies should consider quality and other key features of the later.

PDB59

COST-EFFECTIVENESS ANALYSIS OF MEDICATION THERAPY MANAGEMENT IN PATIENTS WITH TYPE 2 DIABETES IN COMMUNITY PHARMACY/AMBULATORY CARE SETTINGS: RESULTS FROM A DECISION-ANALYTIC MARKOV MODEL

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OBJECTIVES: Pharmacist-provided medication therapy management (MTM) has been shown to improve patient outcomes in a variety of settings and patient populations. Yet, little is known about the long-term economic and clinical outcomes of MTM. Here, we sought to estimate the incremental, lifetime cost-effectiveness of MTM in type 2 diabetes, over “usual” dispensing care, from a healthcare payer perspective. METHODS: We constructed a decision-analytic Markov model with 10 diabetes disease states. A hypothetical cohort of 40-year-old patients were followed for the rest of their life expectancy (31 years). Transition probabilities were derived from the validated CDC-RTI diabetes model. Costs (in 2010 dollars) associated with each disease state were derived from the ADA’s 2007 report on diabetes costs. In the base case, MTM was assumed to increase annual, per-patient direct medical costs by 1.7%, which is a median of values retrieved from the literature.