and men with diabetes-related comorbidities/complications by 13% and 5% compared to IDDM without diabetes-related comorbidities/complications. The probability of working for women and men with NIDDM also were 7% and 2% less than women and men without this disorder. Similarly, these probabilities were even smaller for women and men with NIDDM related comorbidities/complications by 2% compared to NIDDM without diabetes-related comorbidities/complications (all at p-values <0.05). The predicted weekly work hours for women and men without diabetes were 29 and 41 hours, with IDDM were 18 and 30, with IDDM and comorbidities/complications were 13 and 23, with NIDDM were 21 and 35 hours and finally with NIDDM and related comorbidities/complications were 17 and 30, respectively. CONCLUSIONS: The effect of diabetes and its related comorbidities especially for men with NIDDM and related comorbidities/complications on the probability of unemployment and predicted weekly work hours in Canada are substantial. The results of this study have implications for cost-effectiveness of diabetes control and may facilitate studies of the health burden of diabetes for the prevention and treatment of diabetes and thus increase the labor productivity.

OBJECTIVES: We report on the results of proof-of-concept study designed to encourage patient adherence to treatment guidelines and allow German physicians treating patients with Type-2 diabetes with nateglinide to gain patient feedback using an entirely wireless design. Subject Sample: 60 patients and 5 physicians agreed to participate in the study. METHODS: Using mobile communications devices, patients reported on their medication-taking experience and clinical values, including blood glucose levels, according to a clinical protocol have five (5) patient reporting events during the study period of 14 days. This information was then delivered via dedicated web technology to treating physicians. RESULTS: Participating physicians enrolled an average of seven patients in the study. Each physician visited the website an average of 40 times. Twenty-one percent of these visits involved the physician reviewing individual patient responses. Sixty percent of physicians agreed that their understanding of the medication and of the condition was improved by their participation in the study. Sixty-five percent of patients reported believing that the wireless handset device was easy to use, and 71% noted that the screen of the device was acceptable for reading, navigating and entering information about their condition. CONCLUSIONS: In a small, proof-of-concept study designed to assess the viability of entirely automated communications among physicians and patients regarding treatment and clinical endpoints in Type-2 diabetes, both physicians and patients were able to use the system without significant difficulty and reported favorable experiences with the approach.

OBJECTIVES: A 24-month randomised, open-label parallel group study in type 2 diabetes patients compared the safety and efficacy of biphasic insulin aspart (BIAsp30/70) and biphasic human insulin (BHI30/70) injected twice daily before meals. Major hypoglycaemic episodes were reduced with BIAsp30/70 (annual rate 4.1% versus BHI30/70 (annual rate 15.5%) and were significantly lower in the second study year (p = 0.04). Glycaemic control did not differ between groups. A peer-reviewed, validated model projected the impact of the different rates of major hypoglycaemia events on long-term health economic outcomes in multinational settings. METHODS: The CORE Diabetes model employs standard Markov/Monte Carlo simulation techniques to describe long-term incidence and progression of diabetes-related complications. Transition probabilities were derived from major diabetes studies. The clinical effects of the comparators were derived from the trial described. The analysis was performed in multinational settings using published country-specific costs, health care resource utilization, clinical data, and recommended discount rates. A lifetime horizon and payer perspective was taken. Only direct costs were considered. Sensitivity analyses were performed. RESULTS: Discounted quality-adjusted life years (QALY) were improved by 0.15–0.22 years with BIAsp30/70 versus BHI30/70 depending on country specific discount rates. Increases in lifetime costs were seen with BIAsp30/70 in all settings. Costs per QALY were DKK61,922, €9784, 12,840€, NOK38,911€, 14,068€, SEK76,495€, and £658,585 in the Danish, Finnish, German, Norwegian, Spanish, Swedish, and UK setting respectively. Results were most sensitive to assumptions regarding major hypoglycaemia rates, mortality following major hypoglycaemic events, HbA1c changes and to the relative costs of BIAsp30/70 versus BHI30/70. CONCLUSIONS: Treatment with BIAsp30/70 was projected to result in additional QALYS and reduced health care costs associated with major hypoglycaemic events versus treatment with BHI30/70. The higher acquisition costs of BIAsp30/70 led to increased overall costs, but the incremental cost/QALY fell within the range generally considered to be cost-effective in each country.

PROOF OF CONCEPT OF A WIRELESS APPROACH FOR ENABLING COMMUNICATIONS BETWEEN GERMAN PHYSICIANS AND THEIR PATIENTS WITH TYPE 2 DIABETES TREATED WITH NATEGLINIDE Netherton DR1, LeVine P2
1InfoMedics, Inc, Woburn, MA, USA; 2InfoMedics, Inc, Philadelphia, PA, USA
OBJECTIVE: We report on the results of proof-of-concept study designed to encourage patient adherence to treatment guidelines and allow German physicians treating patients with Type-2 diabetes with nateglinide to gain patient feedback using an entirely wireless design. Subject Sample: 60 patients and 5 physicians agreed to participate in the study. METHODS: Using mobile communications devices, patients reported on their medication-taking experience and clinical values, including blood glucose levels, according to a clinical protocol have five (5) patient reporting events during the study period of 14 days. This information was then delivered via dedicated web technology to treating physicians. RESULTS: Participating physicians enrolled an average of seven patients in the study. Each physician visited the website an average of 40 times. Twenty-one percent of these visits involved the physician reviewing individual patient responses. Sixty percent of physicians agreed that their understanding of the medication and of the condition was improved by their participation in the study. Sixty-five percent of patients reported believing that the wireless handset device was easy to use, and 71% noted that the screen of the device was acceptable for reading, navigating and entering information about their condition. CONCLUSIONS: In a small, proof-of-concept study designed to assess the viability of entirely automated communications among physicians and patients regarding treatment and clinical endpoints in Type-2 diabetes, both physicians and patients were able to use the system without significant difficulty and reported favorable experiences with the approach.

UTILITIES & COSTS

HEALTH ECONOMIC COMPARISON OF CONTINUOUS SUBCUTANEOUS INSULIN INFUSION WITH MULTIPLE DAILY INJECTION FOR THE TREATMENT OF TYPE 1 DIABETES IN THE UK Zakrzewska K1, Roze S2, Valentine WJ3, Palmer AJ4
1Medtronic AG, Täolumenaz, Switzerland; 2CORE Center for Outcomes Research, Binningen/Basel, Switzerland
OBJECTIVES: The aim of this study was to project the long term costs and outcomes of continuous subcutaneous insulin infusion (CSII) compared with multiple daily injection (MDI) in patients with type 1 diabetes (T1D) in the UK. METHODS: The CORE Diabetes Model is a peer-reviewed, validated model that employs standard Markov/Monte Carlo simulation techniques to describe the long term incidence and progression of diabetes-related complications. Baseline cohort characteristics were taken from published studies of T1D in the UK (mean age 26 years, duration of diabetes 12 years, 54% male, 90% Caucasian, mean HbA1c 8.68%). Transition probabilities were derived from major diabetes clinical studies. Effects associated with CSII and MDI deliv-