was 38 years. Age and importance of religion were significant predictors of non-trader status. People of younger age, age group 18 to 25 years (OR = 0.97, p = 0.0345) and those who placed a higher importance on religion in their lives (OR = 5.08, p = 0.0131) were more likely to be non-traders. Gender and race/ethnicity had no association. **CONCLUSIONS:** Younger age and greater importance of religion in a person’s life were significantly associated with being predictors of non-trader status.

**DEVELOPMENT AND VALIDATION OF A PATIENT-REPORTED USEFULNESS SCALE TO EVALUATE ANTIETEPILEPTIC PHARMACOTHERAPY IN PATIENTS WITH EPILEPSY**

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**OBJECTIVE:** Patients’ perceptions of the value of their antiepileptic medications are important factors in assessing antiepileptic drug therapy. We developed and validated a scale to combine patient-reported efficacy, convenience and tolerability of antiepileptic pharmacotherapy into a single measure of overall usefulness. **METHODS:** Neurologists in two practices assigned patients *a priori* to either a “doing well” or “not doing well” group based upon clinical assessment of efficacy, tolerability and convenience of each patient’s antiepileptic medication. Adult outpatients on antiepileptic medications completed a four-item self-administered questionnaire. Patients scored the overall usefulness, efficacy, tolerability and convenience of their antiepileptic pharmacotherapy on visual analogue scales ranging from 0 to 100. Fisher’s exact test was used to determine systematic differences in demographic characteristics or neurologist’s assessment of the two groups. Differences between groups in mean overall usefulness and component scores were assessed using the t-test. A multivariate model was used to assess weights in mean overall usefulness and component scores were assessed in **RESULTS:** Sixty percent (60%) were classified as “doing well” and 24% (40%) as “not doing well” *a priori* on antiepileptic medication. Both groups had similar demographic characteristics. The “not doing well” group had significantly more problems with efficacy, tolerability and convenience than the “doing well” group (p < 0.001). The mean overall usefulness score was higher for the “doing well” group (88) compared to the “not doing well” group (53) even after controlling for all demographic variables (p < 0.0001). Similar results were observed for efficacy and tolerability scores. No individual domain (efficacy, tolerability, convenience) had a disproportionate influence on the overall usefulness score. **CONCLUSIONS:** This patient-reported usefulness scale for antiepileptic drug therapy has potential application in research and clinical settings to discriminate between patients whose antiepileptic pharmacotherapy is efficacious, tolerable and convenient and those whose antiepileptic pharmacotherapy is not.

**SESSION IV**

**DIABETES**

**THE IMPACT OF USING EITHER THE FRAMINGHAM OR THE UNITED KINGDOM PROSPECTIVE DIABETES STUDY RISK FORMULAE IN DIABETES HEALTH ECONOMICS MODELING**

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**OBJECTIVE:** The impact on health economic outcomes of using either Framingham or United Kingdom Prospective Diabetes Study (UKPDS) risk equations for stroke and myocardial infarction (MI) was evaluated. The effects of interventions aimed at lipid profile improvement, blood pressure control, or improved glycemic control were modeled in typical type 2 diabetes cohorts using either the Framingham or the UKPDS risk formulae embedded in a documented, validated type-2 diabetes simulation model. **METHODS:** The progression of diabetes complications including both micro- and macrovascular disease was simulated. Total lifetime costs/patient (TC), life expectancy (LE), and costs/life-year gained (C/LYG) of 3 hypothetical interventions affecting either lipid profile (LDL lowered from 150–120mg/dl and HDL raised from 35 to 45mg/dl costing $300/year/patient), blood pressure (systolic blood pressure reduced from 170 to 140mmHg costing $300/year), or glycemic control (HbA1c lowered from 10 to 8.5%, costing $300/year) were calculated. **RESULTS:** Using Framingham formulae consistently underestimated improvements in LE when compared to using UKPDS formulae. Due to the interplay of a number of factors, effects on TC and C/LYG were less consistent. In the lipid-intervention, LE improved by 0.41 years using Framingham formulae, and by 0.74 years using UKPDS. TC were decreased by ~$3400/patient using both sets of formulae, but C/LYG were $13,094 using Framingham and $7103 using UKPDS. In the blood pressure intervention, LE improved 0.40 or 0.52 years using Framingham formulae or UKPDS respectively. TC were decreased by around $5814/patient using Framingham, and by $6591 using UKPDS. In the glycemic control intervention, LE improve 0.37 years using Framingham formulae, and by 0.66 years using UKPDS. TC were decreased by $20,072/patient and by $4948 using Framingham or UKPDS respectively, but C/LYG were $13,094 using Framingham and $7103 using UKPDS. **CONCLUSIONS:** The choice of cardiovascular disease risk formulae has an important impact on long term health economic outcomes of type-2 diabetes patients, and the predicted cost effectiveness of interventions.

**INDIVIDUALIZED PREDICTIVE DISEASE MODELING AS A TOOL TO IMPROVE EFFICACY AND EFFICIENCY OF DISEASE MANAGEMENT PROGRAMS FOR DIABETES MELLITUS**

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**OBJECTIVES:** In the past contradictory results on the effectiveness of various disease management programs (DMP) for Diabetes mellitus (D.m.) have been reported. Beyond the chosen care process, it seems particularly important to select only those patients with the highest probability to benefit from such a program by risk stratification to optimize the effectiveness (patient outcome) and efficiency of DMPs. Here, a new method is presented to stratify cohorts and identify patients using individualized predictions with the D.m. disease model Mellibase. **METHODS:** A Markov based disease model was used to calculate individual expected medical and economic outcomes (five typical complications of D.m.) for 121 real-life cases on the basis of baseline clinical parameters like HbA1c, blood pressure and lipid levels. Two kinds of parameters were then used to select one third of all cases: 1) Clinical parameters (those cases with the worst values), and 2) computed parameters like life-expectancy (those cases with the highest theoretical potential for improvement). All stratification parameters were then tested for actual improvement of outcomes with real pre-post data taken from a German DMP with type-2-diabetes. **RESULTS:** A strat-