ification of the cohort using the predictive parameters "cumulated complication events avoided" (CCEA) and "life years gained" was more effective to identify those patients with a high real-life improvement of outcomes than using others. Clinical parameters performed particularly poorly even if they were combined. For example, for the sub-cohort selected using highest potential for "CCEA" the life expectancy increased by 0.26 years per patient, but decreased by 0.29 if stratified by the risk factor HbA1c > 7.5%. **CONCLUSIONS:** Individualised Predictive Disease Modeling is a valuable strategy to identify patients with the highest potential to avoid diabetes related complications. This powerful strategy should be used to improve the effectiveness and efficiency of DMPs for D.m.

DB3

OUTCOMES ASSOCIATED WITH THE INTRODUCTION OF THIAZOLIDINEDIONE THERAPY IN ELDERLY PATIENTS WITH TYPE 2 DIABETES MELLITUS: A RETROSPECTIVE DATA ANALYSIS

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OBJECTIVES: To compare health care service utilization and medication adherence in an elderly (age ≥ 65 years) population newly starting thiazolidinedione therapy with patients starting insulin or other oral antidiabetic medications in the same period. **METHODS:** This was a retrospective data analysis using a Medicare HMO database. We compared adherence, health care service utilitzation, and cost impact of starting thiazolidinediones for 12 months after initiation of therapy. A total of 165 patients starting thiazolidinedione therapy between July 1999 and December 2001 were compared with patients starting insulin (n = 82) and other oral antidiabetic medication (n = 288). Propensity scores were created by using variables from a comprehensive health status assessment and health care claims data in the year prior to beginning new antidiabetic medication and utilized in multivariate analyses examining predictors of health care costs and diabetes medication adherence in the year following start of therapy. **RESULTS:** Patients starting thiazolidinedione therapy had 56% higher medication adherence than did patients starting insulin ($P < 0.01$) and had adherence comparable with that in patients starting other oral antidiabetic medications (after confounder adjustment). There were no health care cost differences between patients starting either drug therapy. **CONCLUSIONS:** The introduction of thiazolidinedione therapy in an elderly type 2 diabetic population was associated with improved adherence compared with insulin and with no increases in health care costs. The usefulness of propensity scores in the bias reduction and balanced sample selection while determining outcomes associated with introduction of new pharmacotherapies is highlighted through these findings.

DB4

DRIVERS OF TREATMENT PREFERENCE AMONG INDIVIDUALS WITH TYPE-2 DIABETES

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OBJECTIVE: Patient preferences are crucial in treatment decision-making when several equally efficacious alternative treatments are available. The objective of this study was to investigate the principal drivers of treatment preference among individuals with type-2 diabetes. **METHODS:** We conducted 11 focus groups with 84 adults with type-2 diabetes supplemented with treatment preference driver checklists. **RESULTS:** The first 5 focus groups yielded 10 drivers of treatment preference. The second 6 focus groups ranked the importance of the 10 drivers among 100 points. The principal driver of treatment preference was medication effectiveness with an average score of 36.2 out of 100. The next two highly-rated drivers were treatment flexibility and physician recommendation (9.5 and 9.4, respectively), followed by quality of life impacts and correct dosing (7.5 each), financial costs (7.3), treatment convenience (6.4), physical side effects (6.3), emotional side effects (6.0), and treatment tolerability (3.8). A full 62% of participants chose 5 or more drivers, while only 12% chose one or two drivers. We then asked participants to assume medication effectiveness was perfect and to reallocate the 100 points among the remaining 9 drivers. In this round, the principal driver of treatment preference was physical side effects (17.4). The next most highly-rated drivers were financial costs and physician recommendation (12.9 and 12.2, respectively), followed by correct dosing (11.1), treatment flexibility (10.9), quality of life impacts (10.1), treatment convenience (9.4), emotional side effects (8.5), and treatment tolerability (7.3). Only 8% of participants chose one or two drivers, while 38% chose 8 or more drivers. **CONCLUSIONS:** Great variability exists in the drivers of treatment preference among individuals with type-2 diabetes. Group averages mask tremendous inter-individual variability in the importance of drivers and their relative rank. These findings underscore the need for continued methodological work on the concept of treatment preference.

MENTAL HEALTH

MH1

AN ECONOMIC ANALYSIS OF ANTIPSYCHOTIC TREATMENT FOR SCHIZOPHRENIA

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OBJECTIVE: Evaluate direct health care costs associated with olanzapine and risperidone treatment for patients with schizophrenia. **METHODS:** Using the North Carolina Medicaid Claims database, patients diagnosed with schizophrenia (ICD9-CM: 295) were assigned to olanzapine or risperidone cohort on the basis of which drug was received first. Medication, medical service and total health care costs were examined for schizophrenia-related, mental health related, and all-cause services using multivariate models controlling for possible confounding factors including demographics, types of schizophrenia, co-morbidities, and prior use of medications and medical services. **RESULTS:** A total of 498 patients (286 olanzapine and 212 risperidone) were identified with available data for three-month prior and eighteen-month after antipsychotic treatment. During 18-month treatment, olanzapine patients incurred significantly higher drug expenditures (+$1235, $p < 0.0001$) than risperidone patients. Patients on olanzapine, however, had significantly lower medical service costs (–$3212, $p = 0.02$) than risperidone patients, leading to no statistical difference in total health care costs between the two groups (–$1976 lower for olanzapine, $p = 0.16$). The findings are consistent with the schizophrenia-related and mental health-related cost models. Additionally, age, race, type of schizophrenia,