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DETERMINANTS OF STOPPING TREATMENT WITH ORAL ANTI-DIABETIC DRUGS IN DAILY CLINICAL PRACTICEKoerselman J¹, van der Bij S¹, Erkens JA¹, Kessabi S², Groot MT³, Penning-van Beest FJA¹, Herings RMC¹¹PHARMO Institute, Utrecht, Utrecht, The Netherlands, ²Novartis Pharma AG, Basel, Switzerland, ³Novartis Pharma B.V., Arnhem, The Netherlands

OBJECTIVES: In daily practice many Type 2 Diabetes Mellitus (T2DM-)patients discontinue treatment. Therefore, the aim of this study was to investigate the determinants of (non-)persistence with oral anti-diabetic drugs (OADs) in daily clinical practice. **METHODS:** From the PHARMO record linkage system, comprising among others linked drug-dispensing, and hospital data for >2.3 million subjects in The Netherlands, new users of OADs were identified in the period 1999–2005. Patients with ≥ 1 year of follow-up, were included in the study-cohort. Persistence with OAD-treatment in the first year of therapy was determined using the method of Catalan. Potential determinants of (non-)persistence included patient-characteristics, type of initial OAD-therapy, and cardiovascular co-morbidity. **RESULTS:** The study included 33,299 new users of OADs. One year after start, 42% of new T2DM-patients had stopped using any OAD. The risk of non-persistence was decreased with male gender (HR: 0.97; 95% CI: 0.94–1.00), and cardiovascular drug use (HR: 0.91; 95% CI: 0.86–0.97). Regarding age, compared to patients ≥ 76 years, the age-group 55–75 years had a 16% lower risk, and the age-group 30–44 years had a 32% increased risk of non-persistence. Patients starting on combined metformin + SU had a lower risk of non-persistence with any OAD; compared to patients starting on metformin monotherapy, the risk was 23% lower (HR: 0.77; 95% CI: 0.70–0.85). The risk of non-persistence was increased with a specialist as first prescriber (HR: 1.20; 95% CI: 1.15–1.26), higher initial daily dose (HR: 1.09; 95% CI: 1.00–1.22), and higher initial daily dosing frequency (HR: 1.10; 95% CI: 1.02–1.20). **CONCLUSION:** In daily clinical practice about 40% of new T2DM-patients stop OAD-therapy within one year. Determinants of stopping OAD-medication were male gender, age-group, specialist as first prescriber, dosing, cardiovascular drug-use, and type of initial OAD-treatment.

PDB70

EVALUATING CLINICAL AND PATIENT-REPORTED OUTCOMES (PROS) FOR PATIENTS WITH DIABETES PARTICIPATING IN A COMPREHENSIVE DISEASE MANAGEMENT PROGRAMPinto SL¹, Morgan EE²¹University of Toledo, Toledo, OH, USA, ²Hamot Medical Center, Montville, OH, USA

OBJECTIVES: To determine if patients enrolled in a pharmacist-provided disease management program have improved clinical and PROs (humanistic and economic). **METHODS:** This program was developed and implemented at three independent community pharmacy sites. A prospective pre-post design was used. Adult patients with Type 2 DM and HbA1c levels > 6% were included. Study measures: 1) Clinical: glycemic control, blood pressure, random blood glucose value, and body mass index (BMI); 2) Humanistic: Diabetes Knowledge Test (DKT), diabetes specific quality-of-life (D-39), and self-monitoring of blood glucose (SMBG); 3) Economic: diabetes-related sick days and ER visits; and 4) HEDIS process measures: incidence of annual eye and foot exams. Data were collected at baseline, 3 months, and between 6–9 months and analyzed using SPSS v14.

Descriptive statistics and repeated measures ANOVA were used. Comparisons were made with 2005 NCQA national averages. **RESULTS:** Sixty patients were enrolled. Most were women (63.3%) and the mean age was 62.43 years (± 12.09). At study termination, 73% of patients achieved optimal glycemic control compared to 66% at baseline. Patients knowledge scores improved from 30.07 to 33.08 ($p = 0.003$). Patients experienced better control of their diabetes as was measure by D-39 ($p = 0.02$). The frequency of SMBG, increased from 1.83 to 2.17 tests per day ($p = 0.045$). The mean number of sick days and ER visits reported was 0.13 days (± 0.46) and 0.03 visits (± 0.16) at baseline, and 0.00 days (± 0.00) and 0.05 visits (± 0.32) at study termination. Percentage of patients receiving an eye exam and annual foot exam increased from 79.7% to 90.0%, and from 35.6% to 55.0%, respectively. **CONCLUSION:** Comparisons with NCQA data indicated that patients were relatively well controlled. Pharmacists' interventions helped improve and maintain increased knowledge regarding diabetes. As a result of this heightened knowledge, patients were able to stave off disease progression during the study period.

PDB71

PILOT STUDY OF CLINICIAN ATTITUDES TO PUMP THERAPY: INTERNATIONAL DIFFERENCES AND THE NEED FOR A GREATER UNDERSTANDING OF THE PATIENT PERSPECTIVEReaney M¹, Barnard K², Skinner TC³, Speight J¹¹AHP Research Ltd, Uxbridge, Middlesex, UK, ²University of Southampton, Southampton, UK, ³University of Wollongong, Wollongong, NSW, Australia

OBJECTIVES: To identify and survey health care professionals (HCPs) attitudes to insulin pump therapy (CSII). **METHODS:** Eight specialists were interviewed to explore the attitudes and beliefs about CSII. Responses were analysed thematically and used to inform the design of a new 22-item questionnaire: the Attitudes to Pump Therapy (APT) Survey. The APT was pilot-tested among 95 HCPs (54% male; 75.5% diabetologists/DSNs, 13.8% general practitioners) at the International Diabetes Federation (IDF) conference, 2006. Results were analysed using non-parametric statistics with bonferroni correction. **RESULTS:** Analyses of interview data identified 9 themes: biomedical, perceived control of care/diabetes, technology, quality of life, financial resources, training, education & support, suitability, and evidence-base. Items were designed to reflect these themes with responses scored on a 5-point Likert scale (strongly agree—strongly disagree). No statistically significant differences were found by gender, HCP speciality, country (and continent) of origin or proportion of patients using CSII. Most notable differences were found in relation to gross domestic product (GDP) and the potential for pump therapy to achieve tight blood glucose control (lower GDP = more agreement: $p = 0.001$), and result in diabetic ketoacidosis (DKA) (lower GDP = less agreement: $p < 0.005$). Ranked mean scores showed a split between biomedical/clinical items ($N = 11$) and items concerned with patient experience ($N = 11$). Attitudes about biomedical/clinical issues were generally clear (i.e. for 7/11 items, the mean score was “agree”) but less decisive about patient experience (i.e. for 8/11 items, the mean score was “neither agree nor disagree”). **CONCLUSION:** Few subgroup differences existed, but those that did may be explained by lack of access to treatment (directly corresponding to GDP). Clinicians' were generally clear in their attitudes regarding biomedical aspects but less so regarding patient experience. Research focusing on patient-reported outcomes is likely to offer clinicians a greater understanding of the patients' perspective of insulin pump therapy.