The chart audit provided evidence that in the clinical practice setting, detemir and glargine are equipotent and deliver similar outcomes.

**PDB62**

**IMPACT OF INSURANCE PAYMENT SYSTEMS ON QUALITY OF CARE AND HEALTH CARE SERVICE UTILIZATION IN TYPE 2 DIABETES MEDICAID ENROLLEES**

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OBJECTIVES: The type of insurance payment system could affect the quality of care, patient health outcomes and use of health care resources in patients with chronic disease. The objective of this study was to examine the impact of the type of insurance payment plan (Capitated vs. Fee-For-Service (FFS)) on the quality of care, and health care service utilizations in type 2 diabetes Medicaid enrollees. METHODS: A retrospective database analysis comprised of an equal mix of both capitated and FFS type 2 diabetic patients (n = 8,581) enrolled in the Medstat MarketScan® MultiState Medicaid database from July 1, 2002 to December 31, 2005. Patients were followed for 6 months before and 12 months after the index anti-diabetic medication to collect the data on the baseline characteristics and study outcomes. Logistic regressions were employed to measure the quality of care (HbA1c tests, LDL-C tests, eye examinations) and health care services utilization. RESULTS: A total of 3,763 (44%) of the patients was enrolled in capitated plans and 4,818 (56%) in FFS plans. Patients with capitated health plans had 44% more likelihood of receiving at least 2 HbA1c tests (OR: 1.44; 95% CI: 1.29, 1.59) and 76% more likelihood of performing LDL-C tests (OR: 1.76; 95% CI: 1.59, 1.93) compared to those with FFS plans. The type of health plan did not have any significant impact on the likelihood of eye examination. Patients with capitated health plans had 33% more likelihood of getting hospitalized (OR: 1.33; 95% CI: 1.17, 1.49) while 16% more likelihood ER visits (OR: 1.16; 95% CI: 1.06, 1.28) but 27% less number of outpatient visits (β (SE) = -0.24 (0.02), p < 0.001) as compared to those with FFS. CONCLUSIONS: Capitated plans were associated with better quality of care (measured using HEDIS indicators) however; it was not translated into reduced health care utilization.

**PDB63**

**EFFECTS OF DOSING REGIMEN ON RESOURCE UTILIZATION AND COSTS IN MEDICAID ENROLLED TYPE 2 DIABETES MELLITUS PATIENTS**

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OBJECTIVES: This study aimed to assess patients’ medication adherence associated with changes in dosing regimen (monotherapy (MONO), dual therapy (DUAL), and fixed-dose combination therapy (FDCT)) in type 2 diabetics. METHODS: This study utilized a retrospective cohort of Medicaid enrollees from eight states with type 2 diabetes newly starting antidiabetic therapy. Patients were followed for 12 months after initiation of index dosing regimen (MONO, DUAL, or FDCT) and 12 months after early change in dosing regimen (DUAL or FDCT). Demographic characteristics and pharmacy records were extracted for eligible patients. Prescription refill patterns were used to calculate Medication Possession Ratio (MPR). To compare changes in adherence before and after a change in the dosing regimen, Pre- and Post-index MPR were calculated. Differences in MPR and demographics between groups were analyzed using T-tests and ANOVA for continuous variables and chi-squared tests for categorical variables. RESULTS: There were 10,749 patients in the study cohort including 8,528 (79.4%) MONO, 1,558 (14.5%) DUAL, and 663 (6.2%) FDCT patients. No significant different in distribution of age was found across the three groups. Among the 1,319 patients who changed their therapy, 809 (61.4%) had an augmentation to DUAL and 509 (38.6%) switched to FDCT. Patients with higher MPR had lower odd of switching to FDCT (p < 0.001). FDCT patients had 9.2% lower costs than the augmentation to DUAL patients (p < 0.05). Patients who switched to FDCT had 16.5% lower ER visits than those patients who shifted to DUAL (p < 0.01). Age, race, gender, comorbidities, and diabetes-related complications were also significant predictors of the outcomes. Medication adherence was mainly associated with hospitalization and ER visit. CONCLUSIONS: By considering clinical profile and therapy-related issues of the patients, disease management programs can target patients at-risk for poor outcomes and help them gradually reduce the gap between actual adherence and optimal outcomes.

**PDB64**

**EFFECTS OF DOSING REGIMEN ON MEDICATION USE BEHAVIOR IN MEDICAID ENROLLED TYPE 2 DIABETES MELLITUS PATIENTS**

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OBJECTIVES: This study was designed to examine the type 2 diabetic patients’ resource use and costs associated with changes in dosing regimen (monotherapy (MONO), dual therapy (DUAL), and fixed-dose combination therapy (FDCT)) in type 2 diabetics. METHODS: This study utilized a retrospective cohort of Medicaid enrollees from eight states with type 2 diabetes newly starting antidiabetic therapy. Patients were followed for 12 months after initiation of index dosing regimen (MONO, DUAL, or FDCT) and 12 months after early change in dosing regimen (DUAL or FDCT). Demographic characteristics, pharmacy records, economic and utilization-related variables were extracted for eligible patients. Multiple log-linear regression analysis was employed to model health care costs while multiple logistic regression analysis was utilized to study likelihoods of change in therapy, hospitalizations, and ER visits. Zero-inflated negative binomial and negative binomial regressions were employed to model counts of hospitalization and ER visits respectively. RESULTS: There were 10,749 patients in the study cohort including 8,528 (79.4%) MONO, 1,558 (14.5%) DUAL, and 663 (6.2%) FDCT patients. No significant different in distribution of age was found across the three groups. Among the 1,319 patients who changed their therapy, 809 (61.4%) had an augmentation to DUAL and 509 (38.6%) switched to FDCT. Patients with higher MPR had lower odd of switching to FDCT (p < 0.001). FDCT patients had 9.2% lower costs than the augmentation to DUAL patients (p < 0.05). Patients who switched to FDCT had 16.5% lower ER visits than those patients who shifted to DUAL (p < 0.01). Age, race, gender, comorbidities, and diabetes-related complications were also significant predictors of the outcomes. Medication adherence was mainly associated with hospitalization and ER visit. CONCLUSIONS: By considering clinical profile and therapy-related issues of the patients, disease management programs can target patients at-risk for poor outcomes and help them gradually reduce the gap between actual adherence and optimal outcomes.