complication, 2.8% due to a long-term diabetes complication and 1.9% due to uncontrolled diabetes. In logistic regression adjusting for age, sex, race and comorbidities, nonadherence to all three classes of medications (OR = 1.49, 95% CI:1.44–1.55), adherence to any 1 class of medications (OR = 1.41, 95% CI:1.36–1.47), adherence to any 2 classes of medications (OR = 1.26, 95% CI:1.21–1.30) were associated with higher risks for PAs compared to adherence with all three classes of medications.

CONCLUSIONS: Medication adherence is necessary to reduce the risk of PAs. Interventions are needed to improve medication adherence, which will help patients realize the full benefit of hypoglycemic and cardioprotective medications.

NONADHERENCE TO ORAL HYPOGLYCEMIC AGENTS AND POTENTIALLY AVOIDABLE HOSPITALIZATION: An Examination of the Medicare Part D Patients with Diabetes

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OBJECTIVES: To examine the association between nonadherence to oral hypoglycemics and potentially avoidable hospitalizations due to diabetes short-term complications among Medicare Part D enrollees. METHODS: This is a longitudinal retrospective cohort study. Medicare Part D enrollees with diabetes from six states (Alabama, California, Florida, Mississippi, New York, and Ohio) who had filled at least 1 prescription for oral hypoglycemics during the first half of 2006 were included in the study. Medicare Part D claims data for the first 6 months of 2006 were evaluated for adherence with oral hypoglycemics using proportion of days covered (PDC). Patients were classified as adherent (PDC ≥ 0.85), poor adherent (0.5 ≤ PDC ≤ 0.8), and very poor adherent (< PDC < 0.5). Patients' Part A records from July 1, 2006 to March 31, 2007 were evaluated for potentially avoidable hospitalizations due to diabetes short-term complications, one of the diabetes care prevention quality indicators recommended for Healthcare Research and Quality. Associations between adherence and hospitalization outcomes and nonadherence outcomes were assessed using multivariate regression models. RESULTS: Data were available for 1,101,533 patients. Among them, 58.4% were females and the mean age was 71.7 years. About 64.9% were adherent, 11.2% were poor adherent, and 24.0% were very poor adherent with oral hypoglycemics. Of all patients, 1540 had at least one hospital admission due to diabetes short-term complications during the outcome measurement period. After controlling for age, gender, race, and comorbidities (Charlson Comorbidity Index), the odds for hospital admission due to diabetes short-term complications was 25.4% (OR: 1.254, 95% CI: 1.072–1.467) higher for poor adherent patients and 48.0% (OR: 1.480, 95% CI: 1.326–1.653) higher for very poor adherent patients compared to patients who were adherent to oral hypoglycemics. CONCLUSIONS: Nonadherence to oral hypoglycemics is associated with increased risks for potentially avoidable hospitalizations due to diabetes short-term complications. Medicare prescription drug plans should consider developing targeted interventions to improve adherence to oral hypoglycemics.

EFFECT OF CAPITATED MEDICAID HEALTH PLANS ON MEDICATION ADHERENCE AND HEALTH CARE SERVICE UTILIZATIONS IN TYPE-2 DIABETES

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OBJECTIVES: There is a scarcity of the literature evaluating the impact of Medicaid payment mechanisms on adherence and outcomes in diabetes. The objectives of this study was to examine the impact of Capitated vs. Fee-For-Service (FFS) health plans on medication adherence and health care service utilizations in type-2 diabetes Medicaid enrollees. METHODS: A retrospective database study comprised of patients with type-2 diabetes (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, medication adherence and health care service utilizations. Multiple log-linear regression analysis was used to predict medication adherence and logistic regressions were used to examine the health care service utilizations. RESULTS: A total of 3763 (44%) of the patients enrolled in capitated plans and 4818 (56%) in FFS plans. Patients with capitated plans had 5% lower adherence to anti-diabetes medications compared to those with FFS plans (5%; P < 0.05). Patients with capitated health plans had 33% more likelihood of getting hospitalized (OR: 1.33; 95% CI: 1.17, 1.49) and 16% increased odds of having ER visit as compared to those with FFS (OR: 1.16; 95% CI: 1.06, 1.28). Further, 10% increase in medication adherence was associated with 7% decrease in the odds of hospitalizations (OR: 0.95; 95% CI: 0.94, 0.66) and 6% decrease in the odds of ER visits (OR: 0.48; 95% CI: 0.40, 0.55). CONCLUSIONS: Patients with capitated health plans had significant lower medication adherence and also associated with significantly higher health care service utilizations. Capitated managed care plans may not be cost effective for the long term management of chronic conditions such as diabetes.