

METHODS: Secondary analysis of retrospective cohort study database of all chronic drug-treated hypertensives enrolled in Tennessee's statewide Medicaid managed care system for 3–7 years from 1994–2000. Demographic characteristics, comorbidity, health services and medication utilization, and incident stroke and death were evaluated for enrollees in for-profit and not-for-profit MCOs using administrative data linked to vital records during a 2-year baseline period and 1 to 5-year follow-up period. Associations with stroke incidence and death were assessed using Cox Proportional Hazards modeling with the stepwise procedure.

RESULTS: 25,435 subjects (51.4%) were enrolled in for-profit MCOs at baseline and 24,044 (48.6%) in not-for-profit MCOs. The 49,479 subjects followed 4.7 years (on average) experienced 619 incident strokes and 2,055 deaths overall. Baseline demographic characteristics were largely similar in both groups, but comorbidity according to Charlson Index was slightly lower among enrollees of for-profit MCOs (1.60 vs. 1.82). Baseline healthcare and medication utilization were also similar except that for-profit MCO enrollees experienced fewer outpatient visits per year (4.7 vs. 5.6) and there was a trend toward lower antihypertensive refill adherence among for-profit MCO enrollees (65.9% vs. 69.0%). Univariate analysis showed no significant differences in hazards of stroke or death between groups. Multivariate analysis demonstrated no significant difference in hazards of stroke between groups. But for-profit MCO enrollment was independently associated with a hazards ratio for death of 1.217 (95% confidence interval 1.077 – 1.376) indicating that after controlling for potentially confounding factors enrollees in for-profit MCOs are 22% more likely to die (within 5 years after the 2 year baseline) than those in not-for-profit MCOs.

CONCLUSIONS: This study suggests that enrollment in for-profit Medicaid MCOs may be a potent independent risk factor for death for chronic hypertensive patients. The reasons for this difference are unclear but might be related in part to differences in outpatient care and refill adherence. These findings are consistent with previous studies that suggest that for-profit MCOs may be less effective for patients with chronic diseases. Further studies are needed to demonstrate the factors that account for the observed difference in mortality.

IDENTIFYING RISK FACTORS FOR RACIAL DISPARITIES IN DIABETES OUTCOMES: THE TRANSLATING RESEARCH INTO ACTION FOR DIABETES (TRIAD) STUDY O.K. Duru¹; R.B. Gerzoff²; A. Brown¹; J.V. Selby³; R.T. Ackermann⁴; A. Karter⁵; S. Ross⁶; N. Steers¹; W.H. Herman⁷; B. Waitzfelder⁸; C.M. Mangione¹. ¹University of California, Los Angeles, Los Angeles, CA; ²Centers for Disease Control and Prevention (CDC), Atlanta, GA; ³University of California, San Francisco, Oakland, CA; ⁴Indiana University Purdue University Indianapolis, Indianapolis, IN; ⁵Kaiser Permanente Division of Research, Oakland, CA; ⁶University of Medicine and Dentistry at New Jersey, New Brunswick, NJ; ⁷University of Michigan, Ann Arbor, MI; ⁸Pacific Health Research Institute, Honolulu, HI. (Tracking ID # 189610)

BACKGROUND: Compared to whites, African Americans with diabetes have poor control of hemoglobin A1c (HbA1c), systolic blood pressure (SBP), and low-density lipoprotein (LDL) cholesterol, and higher rates of morbidity and microvascular complications. System-level disease management strategies, such as the use of diabetes registries, have not been associated with attenuation of African American-white disparities of intermediate outcomes. Improved understanding of obstacles to self-management at the level of the patient or the patient-provider interaction may hold greater promise in the development of interventions to eliminate these disparities.

METHODS: We used data from the Translating Research into Action for Diabetes (TRIAD) Study, a multicenter study of diabetes care in managed care. TRIAD fielded a case control questionnaire in 2006 that included 559 whites and 208 African Americans. Cases had poor control of at least 2 of 3 intermediate outcomes: HbA1c > 8.0%, systolic blood pressure > 160 mmHg, and/or LDL cholesterol > 130 mg/dl. Controls had good control of all 3 outcomes; HbA1c < 8.0%, SBP < 140 mmHg, and LDL cholesterol < 130 mg/dl. In multivariate logistic regressions adjusted for age, gender, education, income, and study site, we determined whether each of several potentially mutable risk factors (depression, at-risk drinking, low health literacy, low self-efficacy for cardiovascular risk reduction, poor patient-provider communication, missing medication doses, running out of medications) was associated with case or control status. Patients who indicated either running out of

medications or missing medication doses were asked a series of follow-up questions examining medication issues such as lack of knowledge, regimen complexity, lack of perceived benefits, adverse effects, and forgetfulness.

RESULTS: Among white participants, 186 (33%) were classified as cases, while 367 (66%) were classified as controls. Among African American participants 122 (59%) were classified as cases while 86 (41%) were classified as controls. Among African Americans but not whites, depression (OR 2.28, 95% CI 1.09–4.75) and having missed medication doses (OR 1.96, 95% CI 1.01–3.81) were associated with greater odds of being a case rather than a control. None of the other examined risk factors were significant for either African American or white respondents. In unadjusted analyses, African Americans cited 2.3 reasons for missing doses on average, compared to 1.7 reasons provided by whites. African Americans were more likely than whites to cite each of 14 potential reasons for missing medication doses.

CONCLUSIONS: Depression and missing medication doses are more strongly associated with poor diabetes control among African Americans as compared to whites. While the importance of these two modifiable risk factors should be confirmed in population-based samples, they may represent important targets for patient-level interventions to address racial disparities in diabetes outcomes. Intervening to address multiple obstacles to medication adherence simultaneously may be particularly important for African American populations with diabetes.

IDENTIFYING THE QUALITY IMPROVEMENT STRATEGIES USED BY HIGH-PERFORMING PRIMARY CARE PRACTICE SITES. M.W. Friedberg¹; D.G. Safran²; K. Coltin³; M. Dresser⁴; E.C. Schneider⁵. ¹Brigham and Women's Hospital, Boston, MA; ²Tufts University, Boston, MA; ³Massachusetts Health Quality Partners, Waltham, MA; ⁴Massachusetts Health Quality Partners, Watertown, MA; ⁵Harvard University, Boston, MA. (Tracking ID # 190242)

BACKGROUND: Several leading national organizations encourage primary care practices to adopt strategies that may improve quality of care, such as giving physicians feedback on performance, using reminder systems for evidence-based services, and investing in electronic health records (EHRs). However, the relationship between these strategies and performance on publicly reported measures of quality has not been previously studied. We evaluated whether practice sites with higher performance on primary care quality measures were more likely than lower-performing sites to employ recommended quality improvement strategies.

METHODS: Using performance data from the Massachusetts Health Quality Partners, we classified Massachusetts primary care practice sites as higher- or lower-performing (i.e., above or below median) on a composite index of 18 Health Plan Employer Data and Information Set (HEDIS) measures reflecting processes of care delivered to adults during 2005. We designed a physician survey to assess the use of 14 quality improvement strategies in 5 domains (care coordination and integration, quality improvement tools, linguistic capabilities, enhanced access, and EHRs). Between May and October 2007 we administered this survey to 1 randomly-chosen physician from each of the 412 primary care practice sites in Massachusetts with ≥ 2 physicians, obtaining responses from 310 (75%) practice sites. We linked sites' survey and performance data and tested for differences in the prevalence of each quality improvement strategy between higher- and lower-performing sites using Fisher exact tests. We constructed multivariable logistic regression models predicting the presence of each strategy as a function of performance category, adjusting for site size (number of physicians) and affiliation with networks of other sites.

RESULTS: Mean site-level performance scores on the 18 HEDIS measures ranged from 27% for appropriate treatment of bronchitis (interquartile range 19%–32%) to 96% for LDL screening in diabetics (interquartile range 94%–99%). After ranking practices based on the composite index, the mean score on each of the 18 measures was higher among sites designated "higher-performing" than among sites designated "lower-performing." Across all sites, the prevalence of quality improvement strategies ranged from 24% in the enhanced access domain to 66% in the care coordination and integration domain. Compared to lower-performing sites, physicians in higher-performing sites were more likely to frequently use computers in clinical care (81% vs. 70%, P=0.035) and to have highly-functional EHRs (with electronic results, notes, medication and problem lists, and reminders for