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NEED FOR CASE-MIX ADJUSTMENT IN EVALUATING GEOGRAPHIC DISPARITIES IN MEDICATION ADHERENCE TO ORAL HYPOGLYCEMICS

OBJECTIVES: To examine adherence to oral hypoglycemics among Mississippi Medicaid beneficiaries and to evaluate the need for case-mix adjustment when examining disparities among counties.

METHODS: The study was a retrospective analysis of Mississippi Medicaid claims data from 2008-2011. Beneficiaries were included in the analysis if they had at least two claims for oral hypoglycemics, had 90 or more days of therapy, were at least 18 years old, were not dual-eligible, and were not in long term care. Medication adherence was measured using Proportion of Days Covered (PDC) with a gap of 60 days being considered a discontinuation of therapy. PDC was calculated for each drug being taken and an average PDC was computed for each beneficiary for the time on any therapy. Beneficiaries with a PDC greater than 80% were considered to be compliant to therapy. Overall comorbidity was measured with an RxRisk score. Percentage of beneficiaries compliant in each county was calculated. Counties were classified as high, medium and low compliance. A multivariable logistic regression model was used to assess the relationship between compliance and beneficiaries' age, sex, race and comorbidities. The relationships among county compliance level and beneficiary characteristics associated with compliance were evaluated to determine case-mix confounders that need to be adjusted for in evaluating county level disparities.

RESULTS: Percentage of compliant beneficiaries in the counties ranged from 33.3% to 66.7%. Beneficiary characteristics related to compliance were gender (odds ratio for male to female = 0.870), race (odds ratio for African-Americans and Hispanics to Caucasians = 0.647, 0.631, respectively), and RxRisk score (odds ratio for score of 0 to 6+ = 0.717). Race and RxRisk scores were significantly related to county compliance levels.

CONCLUSIONS: Beneficiary characteristics are strong predictors of compliance. Any evaluation of county level disparities in adherence rates must use adjustments for variations in the patient mix among the counties.

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Statement to be included on poster

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