HEALTH CARE RESOURCE UTILIZATION AMONG ADULTS WITH TYPE 2 DIABETES MELLITUS, HYPERTENSION, AND OBESITY
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OBJECTIVES: Individuals with type 2 diabetes mellitus (T2DM) utilize more health care resources than those without diabetes, yet a portion of the increased use may be due to comorbid conditions. This study compared health care resource utilization among adults with T2DM plus hypertension (HTN) and obesity with those with T2DM only.

METHODS: Respondents to the Study to Help Improve Early evaluation and management of risk factors Leading to Diabetes (SHIELD), a large US survey, self-reported their height, weight, comorbid conditions, number of hospitalizations, emergency department (ED) visits, and days of hospitalization. Respondents reporting T2DM and HTN and obesity (body mass index [BMI] ≥30 kg/m2) were identified and compared with a T2DM-only group. RESULTS: T2DM respondents with comorbid HTN and obesity (n = 1,166), were younger, more likely to be men, and had lower income but were similar to T2DM-only respondents (n = 293) in race, education, smoking, and cardiovascular disease history. Respondents with T2DM, HTN, and obesity had significantly more physician visits (mean of 8 vs. 6, p = 0.001), especially 10 or more visits (21% vs. 15%), than respondents with T2DM only (p = 0.03). No significant differences (p = 0.03) were reported for percentage hospitalization (12.7% vs. 12.9%) and number of days hospitalized (mean of 7 vs. 11 days) over the past 12 months. Respondents with comorbid HTN and obesity reported significantly more ED visits (9% with 2–13 visits) compared with T2DM-only group (5% with 2–5 visits, p = 0.02). CONCLUSIONS: Respondents with comorbid conditions of T2DM, HTN, and obesity have greater health care resource utilization in physician office visits and ED visits than those with T2DM only.

OBJECTIVES: To evaluate the level of agreement among three previously validated self-reported medication adherence measures and count of tablets records METHODS: This was a cross-sectional study which included adult patients (40 and older) with hypertension disease enrolled continuously for 6 months in a private medical center. Random sequences of tests (communication of self-compliance (SC), Morisky-Green Test (MG) and knowledge of the illness (KI)) were used to estimate the adherence of antihypertensive medication. Threshold of 80% was used to determine adherence with count of tablets. Convergences were assessed using Cohen’s kappa coefficient and prevalence-adjusted bias-adjusted kappas (PARABAK).

RESULTS: A total of 151 hypertensive patients were included in the study. A total of 65.5% of these patients have other comorbidities and 45.6% took more than 3 drugs per day. The prevalence of non-adherence, using a tablet count as reference rate, was 8%. Due substantial imbalance in the fourfold table’s marginal totals we found high agreement of negative results (SC (0, 94), MG (0.60), KI (0.72)) but low Kappa (SC (k: -0.03), MG (k: 0.06), KI (k: -0.01)). The Kappa values adjusted (PARABAK) were SC (k:0.79), MG (k: -0.06), KI (k:0.15).

CONCLUSIONS: Because of the weak to moderate concordance found among validated measures of adherence, the selection of a useful adherence measure in clinical practice is difficult. These findings underscore the difficulty in both assessing patients’ medication-taking behavior and assessing and comparing the results of adherence research. The development of valid and reliable measures for easily assessing medication adherence behavior in clinical setting is needed.

CARDIOVASCULAR DISORDERS – Patient-Reported Outcomes Studies

PCV94
CONCORDANCE AMONG THREE SELF-REPORTED MEASURES OF MEDICATION ADHERENCE AND COUNT OF TABLETS RECORDS IN COLOMBIAN HYPERTENSIVE PATIENTS
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OBJECTIVES: To develop predictive models for medication compliance in dyslipidemia that will aid health care decision makers in targeting compliance intervention programs. METHODS: Pharmacy and medical claims data from a commercial health plan were analyzed for all currently enrolled members who received their first dyslipidemic medication between May 1, 2007 and April 30, 2008. Percentage of days covered (PDC) defined as days supply of dyslipidemic medication per 365 days. PDC < 80% was used to categorize non-compliant patients. Predictors of non-compliance included patient demographics, pharmacy utilization and medical conditions. Stepwise logistic regression was used to predict the odds of non-compliance. RESULTS: A total of 85,633 patients were included. Sixty-five percent of patients were non-compliant (PDC < 0.83; SD = 0.22). The most significant predictor of non-compliance was treatment with bile acid sequestrants (OR: 6.75; p < 0.0001, compared to statins). Significant predictors of non-compliance also included age category, increasing from an OR = 1.11 for age 45–55 to OR = 3.23 for age <18 (p < 0.0001 for all estimates compared to age group 18–44); prior diabetes diagnosis (OR: 1.11; p < 0.0001) and the number of unique medications used (OR: 1.0969 per additional physician; p < 0.0001) and copayment categories (relative to no copayment). Compliance significantly improved by 12%, 12% and 6% for copay categories $5–$10, $10–$20, and $20–$30, respectively to no copayment. (p < 0.01). CONCLUSIONS: The results may