The total reimbursement for anti-diabetic drugs in U.S. Medicaid programs increased from $90.7 million in 1991 to $1.1 billion in 2005. The number of prescriptions increased dramatically from 4.1 million in 1991 to 18.2 million in 2005. The cost per prescription for brand-name drugs increased over time as well. The relatively expensive drugs in 2005 were Actos ($169), Avandia ($133), Avandamet ($150), Prandini ($113), and Starlix ($103). The total number of prescriptions for the first-generation sulfonylureas dropped from 1.1 million in 1991 to 292,000 in 2005, while the number of prescriptions for other classes increased over the years. For example, the number of prescriptions for biguanides increased from 39,849 in 1995 to 5.7 million in 2005, the number of thiazolidinediones prescriptions increased from 323,581 in 1997 to 4.5 million in 2005, and the number of meglitinide prescriptions increased from 30,790 in 1998 to 425,516 in 2005. CONCLUSION: Increased expenditure for oral anti-diabetic drugs was caused by both increased price and utilization. When the generic drugs metformin, glipizide, and glyburide were introduced to the market, the use of their brand-name counterparts decreased dramatically due to Medicaid’s policies encouraging generic substitution.

OBJECTIVES: The Diabetes Symptom Checklist-Revised (DSC-R) Cognitive Distress, Fatigue, Hyperglycemia, and Hypoglycemia subscales of the Diabetes Symptom Checklist Revised (DSCR) for use in clinical trials involving patients with Type 1 or Type 2 diabetes

PATIENTS WITH TYPE 1 OR TYPE 2 DIABETES

The analysis was based on a subset of those enrolled in the Baltimore Partnership Programs to Reduce CVD Disparities project, with one year of follow-up. Patients and their physicians were randomly assigned to either intervention or control group, in a 2X2 nested case control factorial design. Patients and physicians participated in educational sessions. We calculated the change in HbA1c value, from baseline, to one year follow-up. Multiple regression was used to assess the effects of interventions on HbA1c change adjusting for age, race, gender and hypertension. RESULTS: Out of the study cohort of 114 patients, most were African American (96%) and female (62%). Mean baseline HbA1c values were higher among males vs. females (8.7% vs. 8.6%), African Americans vs. Caucasians (8.7% vs. 8.15%), Intervention patients vs. control patients (9.15% vs. 8.28%), and patients of Intervention vs. control physicians (8.94% vs.8.33%). The drop in the HbA1c values was greater among intervention patients (~0.6 vs. 0.2) and patients of intervention physicians (~0.32 vs. 0.01). After controlling for age, race, gender and hypertension, the drop in HbA1c in the patient intervention group was greater than the control and the drop in HbA1c in the patients of intervention physicians was greater than the control though statistically non-significant. CONCLUSION: In this patient sample, greater drop in HbA1c is seen among the intervention patients and patients of Intervention physicians. These results highlight the influence of patient and physician interventions supporting Diabetes disease management programs.

DIABETES—Methods & Concepts

Preliminary validation of the Cognitive Distress, Fatigue, Hyperglycemia and Hypoglycemia subscales of the Diabetes Symptom Checklist Revised (DCS-R) for use in clinical trials involving patients with Type 1 or Type 2 diabetes

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OBJECTIVES: The Diabetes Symptom Checklist- Revised (DSCR) is a 34-item, 7-subscale instrument designed to provide a comprehensive measure of diabetes-associated symptoms. When evaluating antihyperglycemic medications in a clinical trial however, only those symptoms affected by fluctuations in glycemic control (e.g., hyperglycemia) would be expected to change. Therefore, the objective of this study was to validate the DSC-R Cognitive Distress, Fatigue, Hyperglycemia, and Hypoglycemia subscales as individual measures of symptom groups to be targeted in clinical trials of antihyperglycemic medications.

METHODS: In two clinical trials evaluating antihyperglycemic medications (Study 1: insulin therapy in 137 patients with type 1 diabetes; Study 2: oral therapy in 150 patients with type 2 diabetes), participants were administered the DSC-R at several time periods including screening, baseline and endpoint. To confirm the factorial validity of the subscales, a promax factor analysis