expensive with leuprolide in Commercial plans. If full compliance is achieved, cost of treatment is lower with histrelin implants in both markets. The additional medical cost of non-compliance was not included in this model.

PD3B1 TARGETED COST SAVING STRATEGIES IN DIABETES PREVENTION USING RISK STRATIFICATION

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OBJECTIVES: To estimate the cost per successfully treated patient, to this composite endpoint, in high or moderate-to-low risk groups. Parameters of the screen for at-risk patients were based upon published impaired fasting plasma glucose prevalence of an insured US population. High risk options selectively enter a diabetes prevention program. Parameters for the risk stratification test were based upon published data for a multiple biomarker risk assessment test (PreDx DRS). Cost inputs included direct and indirect medical costs of diabetes and pre-diabetes, and the cost of stratification testing ($250). A range of intervention costs and effectiveness were examined. Model outputs included projected costs, savings, and number of life years and diabetes-free years saved.

RESULTS: At a published annual prevention program cost of $850 and intervention effectiveness of 58%, employers would see a positive ROI by year 2 that increases through year 5. Savings at year 5 represent a return of $1.71 for every $1 spent on diabetes prevention, with 167 life years and 9,731 diabetes-free years saved per 10,000 employees. Payers could achieve cost savings at lower program costs and/or increased effectiveness. The ROI depends strongly on reported intervention effectiveness in the range of 51%-72% and is moderately sensitive to cost variations.

CONCLUSIONS: Cost savings for employers and payers are possible using risk stratification in conjunction with an effective prevention program to reduce diabetes incidence.

PD3B2 IMPACT OF HYPONATREMIA ON HEALTH CARE RESOURCE UTILIZATION IN DECOMPENSATED CIRRHOSIS PATIENTS

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OBJECTIVES: Hypervolemic hyponatremia (HN) is commonly found in patients with decompensated cirrhosis and is associated with increased mortality, morbidity and longer hospital stays. Despite its prevalence in hospitalized patients (15-30%), little is known of the effect of HN on cirrhotic patients in terms of resource utilization. The present study was designed to explore the impact of HN on cost, length of stay (LOS), ICU admission and 30, 90, 180-day readmission in hospitalized cirrhotic patients.

METHODS: The Premier hospital database was utilized to identify U.S. hospitalizations for cirrhosis (ICD-9-CM codes) and were matched to a control group using exact matching on age, gender, provider region and MS-DRG assignment. Matching was further refined using propensity scores based on additional patient and hospital covariates. A total of 6,765 cirrhotic patients were included in this analysis. Risk-adjusted costs and differences in the utilization of health care resources in cirrhotic patients versus controls were compared.

RESULTS: The presence of HN in hospitalized cirrhotic patients was significantly more likely to be admitted to the ICU (OR=2.10, p<0.0001) and readmitted at 30-, 90-, 180-days (OR=1.25, p=0.0026) in comparison with non-hyponatremic cirrhotic patients. In cirrhotic patients, hyponatremia was associated with higher hospitalization rate, mortality (both adjusted), higher hospitalization rate, mortality (both adjusted), and ICU cost and LOS, with univariate and multivariate Monte Carlo sensitivity analysis.

CONCLUSIONS: The presence of HN in hospitalized cirrhotic patients is significantly more likely to be admitted to the ICU and readmitted at 30-, 90-, 180-days in comparison with non-hyponatremic cirrhotic patients.