student), anticonvulsants (2.8 Rx/student), adrenergics/amphetamine (2.4 Rx/student), antidepressants (2.3 Rx), and antipsychotics (1.9 Rx/student). After controlling for demographics and Medicaid enrollment status, ANCOVA indicated a significant SBHC intervention effect (Time*SBHC) for both monthly total cost (F = 8.82, p = 0.003) and monthly mental health service cost (F = 5.06, p = 0.025). CONCLUSION: The SBHC program that provides mental health services for students did not decrease the total Medicaid costs, instead, might increase the health quality and health care accessibility for students with mental illnesses, and this hypothesis should be examined in future research.

PMH57
THE EFFECT OF BEHAVIORAL CARVE-OUTS ON PHARMACEUTICAL USE AND EXPENDITURES
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OBJECTIVE: Case studies of behavioral carve-outs using pre/post designs have found that they result in substantial savings. Prior studies have not, however, examined the impact of behavioral carve-outs on psychotropic medication usage and costs. This study fills this gap. METHODS: Data came from Medstat’s MarketScan claims database. The sample comprised ten large employers with and without behavioral carve-outs. The employers included about 1.4 million employees and their dependents (about 890,000 were enrolled in carve-outs and 521,000 in non-carve-outs). A 2-part model was used to examine differences in the probability of use and the cost of services among users.

Total costs, inpatient, outpatient, and pharmaceutical costs were examined. Independent variables included age, gender, diagnosis, region, plan type, and plan fixed effects (to control for benefit design). Predicted expenditures were calculated using the smearing technique. Inpatient and outpatient behavioral health claims were identified by diagnosis. Psychotropic medications were identified by the Redbook classification system. RESULTS: There was no difference in the probability of using pharmaceuticals or the costs of pharmaceuticals among users between carve-outs and non-carve-outs; although, predicted pharmaceutical expenditures were lower for carve-outs ($4.80 versus $3.90). Carve-outs had a lower probability of using inpatient care and outpatient care. Carve-outs had higher costs for outpatient care among users. The other differences were not statistically significant. Total predicted costs for carve-outs were about 28% lower than for non-carve-outs. CONCLUSIONS: Behavioral carve-outs have an incentive to shift usage away from mental health ambulatory and hospital services and towards pharmaceuticals because pharmaceutical usage is typically off the budget for which they are held accountable. However, without very aggressive utilization review, behavioral carve-outs may not have the tools to influence pharmaceutical usage. This study finds that the main effect of behavioral carve-outs is on the probability of inpatient and outpatient behavioral health service usage.

PMH58
THE RELATIONSHIP BETWEEN MENTAL DISTRESS, HEALTH RISKS AND HEALTH CARE COSTS FROM THE MANAGED CARE HEALTH RISK ASSESSMENT DATABASE
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OBJECTIVES: The association between mental distress and health risks, protective health behavior (in the form of preventive health screenings) and health care costs was evaluated among a commercially insured, adult population. METHODS: The sample contains 10,055 employees age 18-75, which is a sub-set of the managed care, health risk assessment database [MCHRA]. The MCHRA data was collected from 2000-2003. Bi-variable analysis, logistic regression and general linear regression models were performed to evaluate the association between mental distress (low, medium and high) and health risks, health lifestyle, preventive health screenings, and health care costs. RESULTS: Using multi-variable logistic regression models, those with high mental distress were significantly more likely to smoke (adjusted odds ratio [AOR] 1.26, p = 0.0027), drink alcohol (AOR 5.75, p < 0.0001), more likely to not wear a helmet when biking (AOR, 1.37, p = 0.0188), more likely to be overweight (AOR 1.21, p = 0.0350), more likely to feel a loss of self esteem (AOR 8.86, p < 0.0001), more likely to have lost interest in life (AOR 12.23, p < 0.0001), more likely to report depression (AOR 16.53, p < 0.0001), more likely to have sleep problems (AOR, 3.81, p < .0001) and less likely to be tested for colon cancer through FOBT tests (AOR 1.429, p = .0066) or colonoscopy (AOR 1.95, p < 0.0001). Those with mental distress were more likely to have higher health care costs overall ($8,170; F = 20.08, p < 0.0001). Health care cost areas associated with disease classifications showed those with higher distress had higher costs related to treatment of mental disorders ($140; F = 44.50, p < 0.0001), the nervous system ($70; F = 3.34, p = 0.0675) and respiratory system ($120; F = 15.36, p < 0.0001). CONCLUSIONS: The findings indicate a strong association between mental distress, health risk and lifestyle, and preventive health behavior and health care costs.

PMH59
ANTIPSYCHOTIC ADHERENCE AMONG CENTRAL TEXAS VETERANS
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OBJECTIVES: Unlike many other health care organizations, central Texas veterans do not have day supply limits on medications. Thus, the potential for medication over-adherence exists. The objectives of this study were to: 1) examine the adherence rate (AR) and medication possession ratio (MPR) among veterans taking antipsychotics; 2) determine whether over-adherence (AR > 1 or MPR > 1) exists among veterans taking antipsychotics; and 3) evaluate factors related to over-adherence. METHODS: Data were extracted from the Central Texas Veterans Health Care System (CTVHCS) from September 1995—October 2002 for continuously enrolled adult outpatients who were on monotherapy, and had at least two prescriptions within a year. Demographic and relevant clinical information, including age, gender, ethnicity, psychiatric diagnoses, and antipsychotic prescription medication information were collected. Subjects were followed up to 12 months. RESULTS: Among the eligible patients (N = 3252), the mean AR was 1.56 (sd = 2.58) and MPR was 1.23 (sd = 0.75). Over one-half (54.4%) of the subjects were over-adherent with ARs and MPRs > 1. For those over-adherent patients, the mean AR was 2.38 (sd = 3.27) and MPR was 1.70 (sd = 0.71). Multiple logistic analyses revealed that schizophrenic patients (OR = 1.241, p = 0.025) were significantly more likely to be over-adherent (MPR > 1), while nonwhite (OR = 0.801, p = 0.0085) and atypical users (OR = 0.620, p < 0.0001) were significantly less likely to be over-adherent. A second logistic analysis to assess individual antipsychotic agents showed that, compared to haloperidol, quetiapine users (OR = 2.309, p = 0.0073) were significantly more likely to be over-adherent, and olanzapine (OR