antiplatelet therapy, inpatient and outpatient treatment of ischemic stroke, MI, and bleeds, and long-term care for patients with disability. We examined the cost-effectiveness of clopidogrel for subgroups of patients defined on the basis of age at therapy initiation (55, 65, and 75 years) and gender. Cost-effectiveness was assessed using the ratio of the difference (clopidogrel minus aspirin) in expected lifetime medical-care costs to the corresponding difference in life expectancy. A 3% discount rate was used. **RESULTS:** One hundred patients with recent IS, recent MI, or PAD receiving clopidogrel would experience 4.5–6.3 fewer atherothrombotic events and 3.6–8.7 fewer bleeds over their lifetimes in comparison with 100 patients receiving aspirin. The expected gain in life-years ranges from 0.33–0.69 per patient. Expected total lifetime medical-care costs are $9,222–$16,850 higher for clopidogrel patients. Cost-effectiveness of clopidogrel ranges from $40,204–$49,107 per life-year saved, and is sensitive to the assumed risk reduction for clopidogrel. **CONCLUSION:** Clopidogrel is cost-effective versus aspirin in patients with recent IS, recent MI, or PAD.

CV8

CURRENT PATTERNS OF CARE AND TREATMENT COSTS ASSOCIATED WITH VENOUS THROMBOEMBOLIC DISEASE

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OBJECTIVE: This retrospective, observational, health plan administrative claims database study examined treatment patterns, resource utilization, and costs of venous thromboembolic (VTE) disease [deep venous thrombosis (DVT) and pulmonary embolism (PE)] in a managed care setting. **METHODS:** Medical and pharmacy claims of patients with a newly diagnosed VTE event were gathered from 2 US health plan databases from January 1997 through September 2001. Inclusion criteria included a VTE event between January 1, 1998 and December 31, 2000 (no VTE diagnosis or anticoagulation therapy 3 months prior to index VTE event), continuous health plan enrollment 6 months prior and 12 months after index VTE event, and a VTE medication fill after index date. Medical and pharmacy care associated with recurrent VTE or bleeding events were based on each patient's index VTE event, and detailed by type, number, and cost. Costs of recurrent episodes were calculated using general linear model regression and bootstrap techniques. **RESULTS:** A total of 2147 patients (DVT = 1499; PE = 373; DVT&PE = 275) were enrolled (mean age = 61.6 ± 15.9 years, 46.3% male). Median pre- and post-index observation times were 17.1 and 19.2 months, respectively. Mean total medical costs for DVT, PE, and DVT&PE during the index VTE episode were $2293, $7157, and $3963, respectively. Warfarin treatment was administered for a mean 6.3 months at an average cost of $145. The annualized rates and adjusted costs of post-index VTE events were 9.48% and $5331, respectively, for VTE episodes; and 5.52% and $8978, respectively, for bleeding episodes. The rate of recurrent VTE episodes was significantly lower in the DVT group than in the PE group, and the cost of post-index bleed episodes was significantly higher in the PE group. No other recurrent rates or cost differences were significant. **CONCLUSIONS:** Current therapy for VTE patients is associated with high costs and significant recurrent and adverse events. Approaches to therapy that increase effectiveness and decrease risk are needed.

MENTAL HEALTH

MH1

GENDER VARIATION IN QUALITY OF PHARMACOLOGIC CARE OF CHILDREN DIAGNOSED WITH ATTENTIONDEFICIT/HYPERACTIVITY DISORDER (ADHD)

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Gender variation in diagnosis and treatment of ADHD is well documented: boys are more likely to be diagnosed and receive pharmacologic treatment than girls. However, little is known about gender variation in the quality (dosage and persistence) of pharmacologic treatment received by ADHD-diagnosed children. **OBJECTIVE:** To examine gender variation in intensity and persistence of psychostimulant treatment among a national, population-based sample of ADHD-diagnosed children. **METHODS:** We analyzed medical and pharmaceutical claims in the Medical Expenditures Panel Survey (MEPS) from January 1 through December 31, 1998 among all ADHD-diagnosed children (N = 195) aged 4–19 years. Psychostimulant doses were converted to Methylphenidate Equivalent Units (MEU) according to previously published research (MEU: 20 mg Methylphenidate = 10 mg dextroamphetamine = 10 mg amphetamine salts = 56.25 mg Pemoline). Doses were classified as high (>15.0 mg MEU), medium (5.0–15.0 mg MEU), or low (<5.0 mg MEU). Persistence of treatment was determined by number of prescription fills (PF) in a calendar year. Separate weighted logistic and multiple regression analyses were conducted with MEU and PF as dependent variables respectively. **RESULTS:** As has been reported previously in the literature, males were 1.3 (+/–0.004) times more likely to receive a prescription for psychostimulants ($p < 0.001$). However, among those receiving any psychostimulant, females were 1.2 (+/–0.008) times more likely than males to receive high doses ($p < 0.001$). There was no difference in persistence of psychostimulant treatment by gender. **CONCLUSION:** Whereas girls with AD/HD were less likely to be treated with psychostimulants, once treated, they received higher

doses. Further research is required to confirm whether such gender disparities persist, and, if so, whether they are justified. Additional research linking quality with outcomes of care are necessary to determine their effects on the outcomes of children with ADHD. In this way, researchers and clinicians can work together to translate findings into better patient care.

MH2

THE RELATIONSHIP OF ASTHMA AND GENERALIZED ANXIETY DISORDER IN ADULTS

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OBJECTIVE: To determine the association between asthma and generalized anxiety disorder for adults utilizing a PBM. **METHODS:** Adult participants (age 18–65 years) were retrospectively identified in Caremark's PBM database and assessed for asthma and generalized anxiety disorder (GAD) from January 2002–September 2002. Using pharmacy algorithms, asthmatic participants and non-asthmatic participants were identified and compared as having GAD where anxiety medication supply exceeded 27 days. Sub-analysis of the asthma population compared the utilization of specific drug classes to the association of anxiety disorder. All populations were compared using odds ratio analysis. **RESULTS:** A total of 4,238,840 participants (58.5% female) were evaluated over the study period; 205,964 (4.86%) were identified as being asthmatic (60.2% female, mean age 51.5 years, std 15.7 years); 210,972 (4.98%) of the study population were being treated with anti-anxiety medications; and 16,912 (0.4%) of the participants were treated with both. Asthma was associated with a significant increased likelihood of anxiety disorder (OR: 1.77; 95% CI: 1.74 to 1.80). Treatment with steroid inhalants and/or leukotriene modulators was associated with a significant decrease in the likelihood of anxiety disorders among asthmatics (OR: 0.89; 95% CI: 0.87 to 0.92). While treatment with asthma combination medications was associated with a higher significant increased likelihood of GAD among asthmatics (OR: 2.22; 95% CI: 1.72 to 2.86). **CONCLUSION:** These findings are consistent with previously published self-reported data showing an association between asthma and GAD. In this study, participants treated for asthma were found to be 77% more likely to be treated for GAD than the general non-asthmatic population. Participants using steroid inhalants or leukotriene modulators were 11% less likely to be treated for GAD than other asthmatics. The use of asthma combination therapy was associated with 120% increased likelihood of GAD treatment, possibly indicating the severity of the asthma condition is correlated to an increased likelihood of GAD. Increased attention needs to be placed on the management of anxiety as a comorbidity of asthma.

MH3

EVALUATING THE ECONOMIC CONSEQUENCES OF EARLY SSRI DROP-OUTS IN DEPRESSION

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OBJECTIVES: HEDIS guidelines recommend patients with depression remain on antidepressant therapy for a minimum of six months to receive full clinical benefit. This study compared differences in healthcare costs based upon length of SSRI therapy. **METHODS:** Continuously eligible patients >18 years of age receiving SSRI therapy diagnosed as having depression in a managed Medicaid program from July 1, 1999 to December 31, 2000 were eligible for study inclusion. Length of therapy was defined as total SSRI days supply acquired within six months of the index date. Patients were placed into the following cohorts based upon length of therapy or drug utilization patterns: 1) <90 days; 2) 90–179 days; 3) >180 days; or 4) Switched/Augmented (SA). Differences in pharmaceutical, professional, hospital and total healthcare costs were evaluated across the four cohorts over a 1-year follow-up period. **RESULTS:** There were 2250 patients meeting all inclusion criteria. Only 34% of patients received >180 days of therapy. While 24% had <90 days of therapy, 21% had 90–179 days and 21% had evidence of switching/augmentation. Demographic and background covariates were similar across all cohorts. As expected, pharmaceutical charges increased as length of therapy increased, being highest in the SA cohort. However, as length of therapy increased from <90 days to >180 days, professional services and hospital charges decreased by an average of $816 annually per patient. Total monthly healthcare costs in the >180 day cohort remained stable after at least 6 months of SSRI treatment through the full 12-months that patients were followed. **CONCLUSIONS:** Pharmaceutical costs increased as SSRI length of therapy improves. However, healthcare costs decreased due to reductions in hospital and professional service charges for patients maintained on SSRIs for at least the recommended six months of continuous therapy.

MH4

DRUG UTILIZATION ANALYSIS OF THE SSRI CLASS IN A MEDICAID HMO: THE FLUOXETINE EXPERIENCE

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OBJECTIVE: There is little research describing the effects of the introduction of generic fluoxetine to the SSRI market. The purpose of this analysis is to examine utilization of the SSRI class in a Pennsylvania Medicaid HMO before and after the launch of fluoxetine (generic)