petition between brand-name and generic drugs was observed in the US Medicaid marketplace.

**PMH34**

**IMPACT OF RELABEILING ON NEFAZODONE PRESCRIBING: A RISK MINIMIZATION EVALUATION**

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**OBJECTIVE:** In 2002, FDA added a boxed warning to the labeling of the antidepressant nefazodone describing its association with acute liver failure and recommending liver function testing. The aim of this study was to assess the impact of relabeling on nefazodone utilization in community practice. **METHODS:** De-identified prescription claims from PharMetrics, a US medical claims database vendor, were evaluated 45 months pre and 21-months post relabeling for patients with ≥1 nefazodone claim and ≥90 days enrollment history. The average number of unique prescribers and total (TRx) and new-use (NRx) nefazodone prescriptions were calculated by quarter and stratified by physician specialty: primary care (PCP) (general practitioner, family practitioner, internist) vs. psychiatry. New-use was defined as the first nefazodone prescription. Changes in prescribing trends were evaluated with t-tests (unequal variance). **RESULTS:** Relabeling caused a pronounced reversal in TRx prescribing trends (p < 0.001). Prior to relabeling, TRx’s increased 5,676 Rx/quarter (95% CI: 4,592–6,760) peaking at 30,688 (October–December 2001). Immediately following relabeling, TRx’s dropped 28% to 21,994 (January–March, 2002) with a sustained decrease of 13,582 TRx/quarter (95% CI: 8,646–18,518) on average through July–September, 2003. A similar significant reversal was also seen for NRx’s (p < 0.001). PCP prescribing was more sensitive to relabeling than psychiatrist prescribing with an average reversal in prescribing trends of 7,542 TRx’s/quarter (95% CI: 2,91–3,81). The number of unique nefazodone prescribers also changed (p < 0.001) reversing from an average increase of 1,890/quarter (95% CI: 567–2,213) prior to relabeling to a decrease of 3,209/quarter (95% CI: 1,833–4,585). **CONCLUSIONS:** The findings indicate added nefazodone safety warnings had an immediate and sustained impact in decreasing prescribing. While fewer patients appear at risk from nefazodone liver toxicity following relabeling, further studies are needed to determine whether liver enzyme monitoring practices also changed.

**PMH35**

**THE MAIN AND INTERACTION EFFECTS OF PATIENT AND PHYSICIAN CHARACTERISTICS IN INFLUENCING THE PRESCRIBING OF ANTIDEPRESSANTS**

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**OBJECTIVES:** The results of previous studies in examining various factors influenced the prescribing of antidepressants have not been entirely consistent. Some studies, for example, showed older patients were more likely to receive antidepressants, while some showed the opposite. This study aimed to investigate how patient and physician characteristics that might have influenced the prescribing of antidepressants. **METHODS:** The 1997–2001 National Ambulatory Medical Care Survey (NAMCS) data was analyzed with a popular data-mining tool–Exhaustive CHAID classification tree. The dependent variable was whether a patient was prescribed an antidepressant. The candidate explanatory variables were 13 characteristics associated with the patient or the physician. From the candidate explanatory variables, the CHAID algorithm will automatically check both the main and interaction effects, and select the ones that can best differentiate the groups with respect to the likelihood of prescribing an antidepressant. **RESULTS:** In total, 113,128 office visits were included. About 6.7% of them were prescribed at least 1 antidepressant between 1997 and 2000. Eleven significant explanatory variables (diagnosis of depression, reporting depressive symptoms, payment source, duration of visit, patient age, patient gender, physician specialty, whether the physician was the patient primary care physician (PCP), new/old patient, solo practice, the location of the practice, and the region of the practice) and three interaction effects (physician specialty and solo practice, patient age and diagnosis of depression, and whether the physician was the patient PCP and diagnosis of depression) were found by CHAID. The results showed that for those who were diagnosed with depression, younger patients were more likely to receive an antidepressant. In contrast, for those without a diagnosis of depression, older patients were more likely to receive antidepressants. **CONCLUSIONS:** These 11 explanatory variables have influenced the prescribing of antidepressants. The three interaction effects detected by CHAID clarified some of the inconsistencies in the previous studies.

**PMH36**

**RASCH MODEL COMPARISON OF BECK DEPRESSION INDEX AND MOOD AND ANXIETY SYMPTOMS QUESTIONNAIRE IN MEASUREMENT OF DEPRESSION**

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**OBJECTIVES:** Beck Depression Index I and II (BDI) and Mood and Anxiety Symptoms Questionnaire (MASQ) are well-known instruments for clinical assessment of depression. Our objectives were to compare measurement properties of BDI-I and II with MASQ’s depression components and their measurement performance with off-target samples. **METHODS:** Two samples of psychologically healthy college students (sample size of 851 and 433 respectively) were randomly selected to complete BDI-I, MASQ and BDI-II. Partial credit and rating scale model estimation with WINSTEPS software were implemented for BDI-I/II and MASQ respectively. Scale performance criteria included dimensionality, rating scale functioning, separation and reliability, as well as construct definition and convergence. **RESULTS:** All three instruments demonstrated strong measurement properties, although MASQ provided more coherent rating scale use, better person and item separations and reliabilities, as well as slightly broader measurement range. Residual principal components factor analysis of MASQ found positively and negatively worded items forming a structure that accounted for 15% of variance. This factor is highly correlated with the measurement depression dimension and does not present a threat to validity. **CONCLUSIONS:** Certain aspects of item performance in all instruments should be improved. In particular, misfitting items could be removed or revised and several redundant items dropped. It may also be necessary to add items that fill gaps left by scale refinement to maintain precision and reliability. There is a general need to shorten the instruments for better and more efficient depression measurement.

**PMH37**

**A SYSTEMATIC REVIEW OF SUICIDALITY MEASURES IN STUDIES USING SELECTIVE SEROTONIN REUPTAKE INHIBITORS (SSRIS) IN CHILDREN AND ADOLESCENTS WITH MAJOR DEPRESSIVE DISORDER (MDD)**

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OBJECTIVE: Two percent of all children and 4% of all adolescents in the United States have been diagnosed with Major Depressive Disorder (MDD). Unfortunately, many children and adolescents who have MDD never receive proper treatment. Of those who do receive treatment, antidepressants are commonly utilized. In October, 2004 the US Food and Drug Administration (FDA) issued a Public Health Advisory to warn that increased risk of suicidal thoughts and behaviors may be associated with the use of antidepressant medications, including SSRIs, in children and adolescents. Since this warning is based, in part, on the hypothesis that the use of SSRIs may increase the risk of suicidality (thoughts and behaviors), this review examines how suicidality has been measured in randomized controlled trials (RCTs) of SSRI use in children and adolescents with MDD.

METHODS: The tiered search strategy included RCTs published between January 1, 1983 and October 31, 2004. Three electronic bibliographic databases (Medline, PsycINFO, and Dissertation Abstracts) and the Cochrane Libraries were searched for research articles meeting the defined inclusion criteria for children and adolescents. RESULTS: Eight randomized controlled trials met the inclusion criteria. All eight studies had a general recording of adverse events, but only four utilized one or more formalized measure(s) of suicidality. Two of the measures consisted of only one item related to suicidal ideation, and not all measures used had been previously validated. CONCLUSIONS: No consistent methods for defining or measuring suicidality were employed across studies, even those used to rationalize the FDA warning. Furthermore, when suicidality was measured, only a part of suicidality was formally measured. Future research should utilize consistent definitions and validated measurements of suicidality so that the risks associated with SSRIs in children and adolescents with MDD will be accurately understood and effectively compared.

PMH38
COMPARING EXHAUSTIVE CHAID CLASSIFICATION TREE AND FORWARD STEPWISE LOGISTIC REGRESSION (LR) IN EXPLAINING THE PRESCRIBING OF ANTIDEPRESSANTS

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OBJECTIVES: To compare and contrast the Exhaustive CHAID classification tree to forward stepwise LR in explaining the prescribing of antidepressants in terms of identifying explanatory variables and interaction effects, accuracy, sensitivity, specificity, and Receiver Operating Characteristic (ROC) analysis.

METHODS: Throughout 1997–2001, National Ambulatory Medical Care Survey (NAMCS) data was used. The dependent variable was the prescribing of antidepressants and the explanatory variables were 13 variables associated with the patient and physician characteristics. The data was randomly divided by 7: 3 for training set and test set. The training set was used to train the Exhaustive CHAID and forward stepwise LR models and the test set was used to evaluate the performance of both models.

RESULTS: About 6.7% of the 113,128 office visits analyzed had been prescribed at least 1 antidepressant. While the forward stepwise LR resulted to all 13 explanatory variables as significant, the Exhaustive CHAID identified 11 explanatory variables and 3 interactions as significantly associated with the prescribing of antidepressants. The Pearson correlation of the predicted logits from both models was 0.76492 (p < 0.001). At cut point of 0.5, the classification accuracy, sensitivity, and specificity of Exhaustive CHAID were 0.95, 0.51, and 0.98 respectively, and were 0.95, 0.36, and 0.99 correspondingly for forward stepwise LR. The area under the ROC curve of Exhaustive CHAID (0.8610) slightly and significantly outperformed that of forward stepwise LR (0.8507).

CONCLUSIONS: The performance of Exhaustive CHAID was at least as comparable with forward stepwise LR. In addition, Exhaustive CHAID has the capacity to automatically detect interaction effects without having to specify a priori the potential interaction terms. The Exhaustive CHAID produces a more parsimonious model by using fewer variables to explain the dependent variable. The resulting classification tree also provides a visually informative structure on how variables are selected into the model by their relative contributions.

PMH39
THE USEFULNESS OF THE EQ-5D IN DIFFERENTIATING AMONG PERSONS WITH MAJOR DEPRESSIVE EPISODE AND ANXIETY

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OBJECTIVES: Major depressive episodes (MDE) and anxiety are associated with decreased health-related quality of life (HRQoL). The EQ-5D assesses five domains, including the single domain of Anxiety/Depression. Thus, the EQ-5D may be limited in differentiating among subjects with either or both of MDE and anxiety disorders. Our objective was to determine the ability of the EQ-5D to differentiate among persons with MDE or anxiety alone or in combination, compared with neither.

METHODS: Data were collected in 2003 as part of the Alberta Mental Health Survey and were obtained through random digit dialing and computer assisted telephone interviews. MDE and anxiety were defined by DSM-IV using the Mini International Neuropsychiatric Interview. HRQoL was measured with the EQ-5D; responses on the Anxiety/Depression domain were dichotomized to 1) no problem, or 2) moderate/extreme problems. Descriptive and multivariate analyses were used to examine associations between EQ-5D scores and mental health diagnoses.

RESULTS: The average age of the sample (n = 5383) was 40.8 (12.1) years, 61% were female. The prevalence for diagnoses (and proportion within each group reporting problems on the Anxiety/Depression domain) were: MDE alone 2.6% (48.6%); anxiety alone 11.3% (38.7%); MDE and anxiety 5.2% (80.8%); and neither 80.9% (8.2%), respectively. Compared with subjects with neither condition, after adjustment for socio-demographic variables, mean EQ-Index and EQ-VAS scores were significantly lower for subjects with MDE and anxiety (0.70, 64.2), followed by those with MDE alone (0.83, 70.8) and anxiety alone (0.84, 76.7).

CONCLUSIONS: Respondents with MDE or anxiety alone reported similar burden on the EQ-5D, overall and on the Anxiety/Depression domain. Comorbid MDE and anxiety is reflected in substantially lower EQ-5D scores. The EQ-5D performs reasonably well as a measure of general mental health, but more in-depth and specific measures would be required to identify and differentiate the impact of isolated mental health conditions on HRQL.

PMH40
QUALITY-ADJUSTED REMISSION FREE DAYS: AN EXTENDED Q-TWIST APPLICATION IN MAJOR DEPRESSION DISORDER

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OBJECTIVES: Depression-free days (DFD) and quality-adjusted days (QAD) are used to assess the overall effectiveness of antidepressants for patients with major depressive disorder (MDD). Both metrics estimate utility based on fractions from scores on the Hamilton Rating Scale for Depression (HAM-D). The objective of this study was to develop a new patient-preference