risk of suicidal behavior in children and young adults remains controversial. We aimed to quantify the tradeoffs of alternative strategies in treating pediatric major depressive disorder (MDD) with respect to clinical benefit and risk of fatal and non-fatal suicidal behavior over a five-year time horizon. METHODS: We developed a discrete event simulation model integrating epidemiological and clinical data from published literature in order to simulate the effect of three treatment strategies (i.e., selective serotonin reuptake inhibitors (SSRIs), cognitive behavioral therapy (CBT), and a combination of SSRIs and CBT) on a U.S. population of children and young adults with MDD. RESULTS: We compared the implications of different scenarios beyond the time horizon of existing data and of uncertain assumptions about suicide attempt risks and patients’ response to treatment. Main outcome measures were symptom-free weeks, suicide attempts, and suicide deaths. RESULTS: In a cohort of 1,000,000 simulated children and young adults, there were more than twice as many suicide deaths among those started on SSRIs (129), compared to those started on CBT (50) or combination treatment (62) over the first 36 weeks of treatment. Over a five-year time horizon, this hierarchy of suicide risk persisted, even under assumptions most favorable to SSRIs. With respect to symptom-free weeks, combination treatment was superior to both SSRIs and CBT alone, but this difference was marginal over a five-year time horizon. CONCLUSIONS: Considering the risk-benefit profile over a five-year period, CBT appears to offer a safer profile with respect to suicide deaths and attempts than combination treatment or SSRIs alone. While combination treatment maximizes symptom-free weeks, the additional benefit over the five-year time horizon is modest and must be weighed against the clinically meaningful increase in fatal suicides.

PMH64

COMPARISON OF THE RISPERIDONE EQUIVALENT DOSES FOR THE 9 MOST FREQUENT TYPICAL AND ATYPICAL ANTIPSYCHOTICS IN PATIENTS DIAGNOSED WITH SCHIZOPHRENIA BASED ON PRODUCT LABELS WITH ACTUAL DOSAGES PRESCRIBED IN A LARGE NATIONAL DATABASE

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OBJECTIVES: Physicians often make dosage decisions based on experience and knowledge in addition to the product label. This makes it difficult for economists to compare the “real world” costs and benefits of alternative therapeutic choices. We compare a published methodology for calculating therapeutic dose equivalence based on approved labeling for various antipsychotics prescribed for schizophrenia with actual prescription data in that population. METHODS: The sample consisted of a proportional selection of patients that derived from a population of patients of all ages, across all payers, and in all regions of the United States. The information included NDC code sets, quantity, and day of supply and was aggregated from pharmaceutical prescriptions files. The frequency distribution measured the top antipsychotic medications in patients diagnosed with schizophrenia. The therapeutic dose equivalence was determined using the methodology of Woods (2003) as the comparator. RESULTS: A total of 324,724 patients with a diagnosis of schizophrenia were included in the study. Doses equivalent to 1 mg/day of Risperidone were 86.17 mg/day of Fluphenazine, 92.28 mg/day of Clozapine, and 5.25 mg/day of Antipiprazole, 92.28 mg/day of Clozapine, and 33.74 mg/day of Ziprasidone. CONCLUSIONS: With the ever-increasing array of differentially-dosed medications available, it is imperative for physicians and outcomes researchers to utilize a consistent methodology for calculating dose equivalence based on approved labeling for various antipsychotics prescribed for schizophrenia with actual prescription data in that population.

PMH65

EFFECT OF PRESCRIPTION MONITORING PROGRAMS (PMP’s) ON OPIOID OVERDOSE ADMISSION

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OBJECTIVES: Over the past three decades the concept of prescription monitoring programs (PMPs) has developed immensely, however little evidence regarding their effectiveness has been collected. This study focuses on simple difference-in-difference evaluations, comparing the implementation effect of a PMP in Tennessee with Kentucky, which has a well-established PMP, and Missouri, which has not to-date developed a PMP. The effectiveness of a PMP and the effect on hospital admission due to opioid overdose. METHODS: The present study examines a simple difference-in-difference model of a natural experiment caused by the staggered implementation of prescription monitoring programs in Kentucky, Missouri, and Tennessee. We implement a pre-post design with the primary outcome of interest being hospital admission due to opioid overdose. For this evaluation we use all claims from Kentucky, Missouri, and Tennessee in the HCUP-NIS data from 2006 and 2008. The data is separated according to whether the hospital admission was due to opioid overdose. Four models are examined: main effects, individual fixed effects, and the full model, which takes into account both year and state fixed effects and shows the true effect of the Tennessee implementation. Although the findings in the Tennessee models trend positively, there are no significant findings in the full model. RESULTS: We look at various models, including fixed effects and full model, which takes into account both year and state fixed effects and shows the true effect of the Tennessee implementation. Although the findings in the Tennessee models trend positively, there are no significant findings in the full model.

PMH66

RISK-BENEFIT ANALYSIS OF DEPRESSION TREATMENT FOR CHILDREN AND YOUNG ADULTS

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OBJECTIVES: The U.S. Food and Drug Administration’s decision to mandate a black box warning on antidepressants indicating that they are associated with an increased burden experienced by caregivers of individuals with BD-I and BD-II in every-day clinical practice settings. Study funded by AstraZeneca; Clinical Trials Registry.

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