vant articles, the final articles that were considered for review were 82 for treatments with risk factors. Fifty-one studies examined non-genetic factors, serotonin-related genetic factors and variety of genes and polymorphism biomarkers to determine their association with MDD treatment response. Thirty-one studies focused on variables that were found to be associated with some aspect of MDD and their impact on treatment response and included comorbidity (n=12), demographic and socioeconomic (n=6), and depression-related (n=13) variables. Thirteen studies examined the risk factors for MDD. Of these, 2 studies focused on the role of biomarkers in MDD risk. And, 11 studies focused on variables that were found to be associated with some aspect of MDD and their impact on MDD risk, and focused on comorbidity (n=5), demographic and socioeconomic (n=2), depression-related (n=3), and environmental variables (n=11). 

PMH2

LENGTH OF STAY AND OUTCOMES FOR ADOLESCENTS TREATED FOR SUBSTANCE USE DISORDER: AN ANALYSIS OF DOSE RESPONSE USING PROPENSITY SCORES

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OBJECTIVES: This research uses propensity score methods to identify the relationship between duration of treatment and treatment outcome for adolescents with psychoactive substance use disorder (PSUD). The objective is to describe the dose response relationship in terms relevant in economic evaluation. Outcomes studies in this field have shown that treatment outcomes improve to more pronounced levels. The standard for residential programs is a minimum of 21 days of treatment and ideally up to 90 days. METHODS: The subjects are 377 adolescents who successfully completed primary treatment from 2004-2010. All were placed at ASAM level II or III (Clinically-Managed, Medium/High Intensity Residential). The data are from treatment records and a 234-item questionnaire. The questionnaire responses were matched to variables in treatment records creating a rich source of pre-treatment data. The majority of the biomarkers were used to measure comorbidities between the serotonin transporter, genes and polymorphisms in response to various MDD treatments. With respect to correlate studies, younger age of MDD onset (<18 years old) and all kinds of mood disorders, were both associated with a longer duration of MDD illness.

PMH3

CLINICAL OUTCOMES OF PATIENTS WITH MAJOR DEPRESSIVE DISORDER TREATED WITH EITHER DULOXETINE OR SELECTIVE SEROTONIN REUPTAKE INHIBITORS IN MEXICO

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1The first study was designed to determine the dose response relationship in terms relevant to economic evaluation. Outcomes studies in this field have shown that treatment outcomes improve to more pronounced levels. The standard for residential programs is a minimum of 21 days of treatment and ideally up to 90 days. METHODS: The subjects are 377 adolescents who successfully completed primary treatment from 2004-2010. All were placed at ASAM level II or III (Clinically-Managed, Medium/High Intensity Residential). The data are from treatment records and a 234-item questionnaire. The questionnaire responses were matched to variables in treatment records creating a rich source of pre-treatment data. The majority of the biomarkers were used to measure comorbidities between the serotonin transporter, genes and polymorphisms in response to various MDD treatments. With respect to correlate studies, younger age of MDD onset (<18 years old) and all kinds of mood disorders, were both associated with a longer duration of MDD illness.

PMH4

A COMPREHENSIVE REVIEW OF EPIDEMIOLOGY AND ECONOMIC STUDIES FOR PATIENTS DIAGNOSED WITH NON-PSYCHOTIC MAJOR DEPRESSIVE DISORDER

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OBJECTIVES: To conduct a systematic review of literature in on epidemiology and economic studies for patients diagnosed with Non-Psychotic Major Depressive Disorder (MDD). METHODS: The initial search strategy was developed in the PubMed/Medline database, and was then translated for the Cochrane and Embase database searches. Search strings for epidemiology and economics studies for MDD were constructed using varied approaches that included the use of MeSH terms, as well as keywords that would afford the best retrieval. Search statements were then combined to produce a final search set. Additional parameters were placed on the final search strategy to limit the retrieval to articles written in English, involving one or more of 200 and 2010. The search revealed 289 articles for epidemiology and 200 articles for economic studies on MDD from PubMed/Medline/Embase/Cochrane databases. After removing duplicates and non-relevant articles, 17 for epidemiology and 26 for economic studies were eliminated. A total of 264 articles remained for inclusion. The final results revealed a total of 60 studies. These studies examined burden of illness, one study budgetary impact of MDD, 14 studies examined cost effectiveness of MDD treatments, 3 studies examined cost utility analysis and 6 other studies examined retrospective claims analysis. CONCLUSIONS: MDD prevalence was higher in the lifetime estimates, when compared to the estimates reflecting shorter time frames, although there appeared to be greater variability in the lifetime estimates. Overall, the cost of treating MDD varied with type of study, study setting, and income, with the year in which the costs were calculated, and the pharmacotherapy prescribed.

PMH5

EVALUATION OF ASSOCIATIONS AMONG BIOMARKERS, CORRELATES AND TREATMENT EFECTIVITY IN CLINICAL STUDIES IN PATIENTS DIAGNOSED WITH NON-PSYCHOTIC MAJOR DEPRESSIVE DISORDER: A LITERATURE REVIEW

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OBJECTIVES: To perform a systematic review of literature in peer-reviewed journals on clinical biomarkers, correlates and treatment efficacy in clinical studies on patients diagnosed with Non-Psychotic Major Depressive Disorder (MDD). METHODS: The initial search strategy was developed in the PubMed/Medline database and was then translated for the Cochrane and Embase databases. Search strings for biomarkers, correlates and treatment efficacy in patients with MDD were constructed using varied approaches that included the use of MeSH and PMH terms, as well as keywords that would afford the best retrieval. Search statements were then combined to produce a final search set. Additional parameters were placed on the final search strategy to limit the retrieval to articles written in English, involving one or more of 2000 and 2010. The search revealed 871 articles from PubMed/Medline/Embase/Cochrane databases. After removing duplicates and non-relevant articles, the final articles that were included in the review were 124. Each of these articles focused on patients with MDD and primarily focused on the relationship between biomarkers and MDD treatment response. Only 29 of the 48 studies found a significant association between a biomarker and treatment response. Twenty-nine studies examined MDD correlates, such as comorbidity or demographic variables. A poorer response to treatment was found for those patients who experienced comorbid anxiety, irrespective of the type of treatment. Fifty-four studies focused on treatment efficacy and are divided into 3 groups: SSRI only, SNRI only, and a comparison across SSRI, SNRI, and placebo. Overall, the SSRI’s showed comparable efficacy when compared to each other or placebo. CONCLUSIONS: Most of the biomarker studies examined associations between the serotonin transporter and response to various MDD treatments. The majority of efficacy studies found that the treatments that are within the class had comparable efficacy.

MENTAL HEALTH – Cost Studies

PMH6

THE IMPACT OF ANTIPSYCHOTICS POLYPHARMACY ON HEALTH CARE COSTS OF PEOPLE WITH MENTAL DISTURBANCES IN SÃO PAULO CITY, BRAZIL

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OBJECTIVES: Antipsychotics polypharmacy (AP) has been associated with more adverse drug effects, higher treatment costs, worse clinical outcomes and sudden death. Though, the frequency of such practice may reach 50 % in some clinical settings. The objective of this study was to estimate AP costs and direct costs of health care package in a sample of people with mental disorders in São Paulo city, Brazil. METHODS: We used a bottom-up approach for the estimation of direct costs of AP. We used a health services reengineered data in the period 2000 and 2010. RESULTS: AP was studied costs with accommodation (residential service), inpatient, outpatient and emergency services and treatment received in the previous month, in 147 subjects with mental disorders living in 21 residential services during the year 2011. We evaluated quality of life, social and physical performance, sociodemographics characteristics and pattern of health service use. RESULTS: AP was found in 38 % of the sample and it was not related with gender, age, severity of psychiatric symptoms, quality of life and social behavior problems. Antipsychotics monotherapy costs were related with the type of antipsychotic. Atypical antipsychotics-
ics costs were 167.4 times higher than typical antipsychotic costs. AF mean monthly costs per person varied with the type of association between antipsychotics. Typical associations costs were USD257.5x USD28.5, while mean costs between two typical antipsychotics were USD436.4 USD40.0. Polypharmacy added USD300.00 dollars per person per month to direct costs of health care (excluding accommodation). For each additional antipsychotic prescribed, it was observed an additional monthly cost per person of USD75.5 in the total costs of health care package (health services, treatment, and accommodation).

CONCLUSIONS: AP added substantial costs and risks to treatment of the health care system. This should be taken in account in resource allocation in public policies, especially in low-resource settings.

PM107

MODELIZACIÓN ECONÓMICA DEL GENOTIPO DEL CITOCROMO P450 CON EL TEST BRAINCHIP EN EL TRATAMIENTO DE LA DEPRESIÓN MAYOR

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OBJECTIVES: Brainchip is a test genético que predice la respuesta al tratamiento farmacológico de la depresión mayor (DM) determinando los polimorfismos de las isoenzimas CYP450. El objetivo ha sido valorar la eficiencia financiera de la incorporación del test de Brainchip al tratamiento de la depresión mayor en tres diferentes lugares.

MÉTODOS: Se desarrolló un modelo de Markov de ciclos bimensuales para cada farmacoe una cohorte hipotética en pacientes con DM tras fallo en primera línea. La cohorte se dedicó a la distribución del mercado actual ya en su modificación en primera línea. 

MÉTODOS: Se desarrolló un modelo de Markov de ciclos bimensuales para cada farmacoe una cohorte hipotética en pacientes con DM tras fallo en primera línea. La cohorte se dedicó a la distribución del mercado actual ya en su modificación en primera línea. 

RESULTADOS: Brainchip mejora la remisión del 9.5% al 17.7% y la respuesta entre el 5.5% al 10.2%, alcanzando a los 10 años una respuesta del 72% y una remisión del 62% distintas con DM melancólica de vida que el coste de Brainchip a los 2 años resulta siendo coste-eficaz a corto y largo plazo dominante a partir del tercer año, mejorando la QALY de un 13.9% al 13.9%.

CONCLUSIONES: Brainchip en DM es dominante, permite prescribir los tratamientos con menos riesgos y costes y más eficacia. El modelo desarrollado permitirá la adaptación del análisis a cualquier país de Latinoamérica utilizando datos de costos locales.

PM108

COST EFFECTIVENESS OF PALIPERIDONE PALMITATE VERSUS RISPERIDONE LONG-ACTING INJECTION: A QUANTITATIVE ANALYSIS FOR THE TREATMENT OF PATIENTS WITH SCHIZOPHRENIA IN COLOMBIA

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OBJECTIVES: Schizophrenia is a chronic disorder that requires long-term treatment with antipsychotic medication to minimize relapse and provide clinical benefit to patients. For patients with schizophrenia, non-adherence to medication is a risk factor for relapse and re-hospitalization. Long-acting injectable (LA) formulations of atypical antipsychotics provide constant medication delivery and the potential for improved adherence. The objective of this study is to assess the cost-effectiveness of paliperidone palmitate (PP) versus risperidone long-acting injectable (RLA), ilanzapine (O) and quetiapine (QP).

METHODOLOGY: A Markov decision analytic model was developed to simulate multi-episode patients transitioning through different states on monthly basis over a 10 year time horizon was used. All direct medical costs relevant for the third payer and accommodation.

BACKGROUND: Paliperidone palmitate dominated oral quetiapine by being less expensive (14% less) and more effective (44% less relapses and 20% more QALYs). The sensitivity analyses confirmed the robustness of the results. CONCLUSIONS: Paliperidone palmitate appeared to be a cost-saving treatment option in comparison with oral quetiapine for patients with schizophrenia in Guatemala. The model reflected a better compli-