A411



(p<0.001). According to the QLS MCID, 49% of patients receiving AOM were classified as responders vs. 42% of patients receiving PP. For the CGI-S assessment, 52% vs. 34% as responders vs. 42% of patients receiving PP. For the CGI-S assessment, 52% vs. 34% as responders vs. 42% of patients receiving PP. For the CGI-S assessment, 52% vs. 34% as responders vs. 42% of patients receiving PP. For the CGI-S assessment, 52% vs. 34% as responders vs. 42% of patients receiving PP. For the CGI-S assessment, 52% vs. 34% as responders vs. 42% of patients receiving PP. For the CGI-S assessment, 52% vs. 34% as responders vs. 42% of patients receiving PP. For the CGI-S assessment, 52% vs. 34% as responders vs. 42% of patients receiving PP. For the CGI-S assessment, 52% vs. 34% as responders vs. 42% of patients receiving PP. For the CGI-S assessment, 52% vs. 34% as responders vs. 42% of patients receiving PP. For the CGI-S assessment, 52% vs. 34% as responders vs. 42% of patients receiving PP. For the CGI-S assessment, 52% vs. 34% as responders vs. 42% of patients received by the CGI-S as responders vs. 42% of patients received by the CGI-S as responders vs. 42% of patients received by the CGI-S as received by the CGI-S as responders vs. 42% of patients received by the CGI-S as received by the CGI-S were responders for AOM and PP, respectively. In both assessments, AOM was the economically dominant therapeutic option over PP. Univariate sensitivity analyses confirmed these findings, the main drivers being cost of inpatient and outpatient services. CONCLUSIONS: AOM was found to provide superior clinical benefits and cost savings compared to PP in all analyses, representing good economic value in the maintenance treatment of schizophrenia in the UK.

### COST-EFFECTIVENESS ANALYSIS OF OPIOID SUBSTITUTION TREATMENT IN SLOVENIA

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OBJECTIVES: We analyzed cost effectiveness of buprenorphine/naloxone combination and sustained release (SR) morphine when compared to methadone in patients treated for opioid dependence in Slovenia. To compare the expected costs of treatment with buprenorphine/naloxone combination and SR morphine, we also performed cost-minimization analysis. **METHODS:** We adapted a micro-simulation decision model to the real-life conditions in Slovenia by using locally-specific data for maintenance treatment costs of buprenorphine/naloxone, SR morphine, and methadone with the average dose of treatment set at 10.68 mg/day for buprenorphine/naloxone, 592 mg/day for SR morphine, and 82 mg/day for methadone. All other direct costs were based on COBRA (Cost-Benefit and Risk Appraisal of Substitution Treatment in Routine) study and adjusted to conditions of the local jurisdiction. Clinical efficacy data for all three treatment options were derived from published literature; in cost-minimization analysis, we assumed that buprenorphine/naloxone combination and SR morphine were clinically equivalent. Main outcome measures were costs, gains in quality adjusted life years (QALYs), and incremental cost-effectiveness ratios (ICERs). RESULTS: Our model has shown that under the base case scenario, buprenorphine/naloxone dominated methadone (by saving €60 and gaining 0.153 QALY over one year); when comparing SR morphine and methadone, the resulting ICER was  $\ensuremath{\mathfrak{\epsilon}}$ 5,434 per QALY. Cost-minimization analysis revealed lower treatment costs with buprenorphine/naloxone combination than those with SR morphine by 45% (€488 per year), with treatment costs of buprenorphine/naloxone and SR morphine accounting for 28% and 41% of total direct medical costs, respectively. The sensitivity analysis showed robustness of our findings. CONCLUSIONS: Results of our study suggest that treating patients with buprenorphine/naloxone combination instead of methadone or SR morphine appears to be cost-saving in Slovenia. This result is particularly relevant for implementation of treatment guidelines and for those patients who can be prescribed as an intervention of choice either buprenorphine/naloxone combination, SR morphine or methadone.

# PMH28

## A SYSTEMATIC REVIEW OF MODEL-BASED ECONOMIC EVALUATIONS OF DRUG SUBSTITUTION THERAPIES IN MAINTENANCE TREATMENT OF NON-PRESCRIPTION OPIOID DEPENDENCE

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**OBJECTIVES:** Opioid dependence is a serious and costly medical condition that can occur with regular opioid use. We conducted a systematic review of published model-based economic evaluations of drug substitution therapy in treating nonmedical opioid dependence. METHODS: Literature searches were conducted in March 2015 in 8 electronic databases and supplemented by hand-searching reference lists and searches on 6 health technology assessment (HTA) agency websites. The selection criteria included: A population dependent on opioids and receiving opioid substitution therapy or maintenance therapy. The intervention included any pharmacological maintenance therapy and the comparator included any pharmacological maintenance regimen, including placebo or no treatment. The outcomes and study types included health economic models of any type. RESULTS: After removal of duplicates, 2,163 citations were retrieved, of which 63 progressed to full-text review. Of these, 19 publications of 18 unique models were included in the review. These 18 models used a wide range of modelling approaches, including Markov models (n=4), decision tree with Monte Carlo simulations (n=4), decision analysis (n=3), dynamic transmission models (n=3), decision tree (n=1), cohort simulation (n=1), Bayesian (n=1), and Monte Carlo simulations for sensitivity analysis (n=1). Time horizons ranged from 6 months to a lifetime. The most common evaluation was cost-utility analysis reporting cost per quality-adjusted life-year (n=11), followed by cost-effectiveness analysis (n=4), budget impact analysis/cost comparison (n=2) and cost-benefit analysis (n=1). Countries modelled were the US (n=11), UK (n=4), Spain (n=1), Vietnam (n=1) and New Zealand (n=1). A range of perspectives were modelled, including societal and healthcare systems. CONCLUSIONS: This review identified 8 different modelling structures with a range of perspectives, time horizons and inputs, illustrating that there is no single preferred approach. Further research is needed into the advantages and disadvantages of the different modelling approaches in this disease area.

# THE COST EFFECTIVENESS OF AGOMELATINE IN THE TREATMENT OF MAJOR DEPRESSIVE DISORDER

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OBJECTIVES: To evaluate the cost effectiveness of agomelatine versus branded fluoxetine, sertraline and escitalopram for treatment of major depressive disorders in adults in Russia. METHODS: We have adapted published Markov model of major depression disorder. It consisted of 4 different health states (depression, remission, well-being and death). Cycle length was 4 weeks. Transition probabilities and utilities were taken from the international published research data. Direct

costs and productivity losses were calculated. Costs data were derived from Russian cost-of-illness study of depression and registered maximal drug prices list. The outcomes were modelled for 3 years period. Costs were converted to EUROs using the average weighted exchange rate in 2014 (1€=50.815RUR). Sensitivity analysis was performed. RESULTS: Agomelatine appeared to be the dominant therapy in comparison with branded fluoxetine, sertraline and escitalopram, which allowed achieving maximum clinical outcome and utility (2.148 QALY vs 2.097, 2.133 and 2.119 QALY, respectively) at the lowest costs ( $\epsilon$ 1,932 vs  $\epsilon$ 2,485,  $\epsilon$ 2,076 and  $\epsilon$ 2,454). Agomelatine remained dominant strategy even when only direct medical costs were included into analysis ( $\epsilon$ 943 vs  $\epsilon$ 1,172,  $\epsilon$ 1,002 and  $\epsilon$ 1,290). **CONCLUSIONS:** Agomelatine was demonstrated to be the rational choice in comparison with other branded antidepressants routinely used in Russian health care settings.

### PRIMARY CARE DEMENTIA CLINIC REDUCES SOCIETAL COST OF DEMENTIA: A COST-UTILITY ANALYSIS

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OBJECTIVES: The prevalence of dementia in Singapore is expected to increase with an ageing population. With the inclusion of dementia as part of Chronic Disease Management Program, more primary care consultations are expected in the polyclinic. A Primary Care Dementia Clinic (PCDC) was set up in Ang Mo Kio Polyclinic to manage stable patients. The objective of this study is to evaluate the cost-utility of dementia care at PCDC compared with specialists' care at the Memory Clinic (MC) and care at other polyclinics. METHODS: Stable dementia patients with a Clinical Dementia Rating of 1.0 – 3.0 were recruited for the programme. Costs were measured from the societal viewpoint, including both direct and indirect costs. To establish cost-utility, EQ-5D was used to calculate QALYs. Cost and utility were measured at six-months and one-year. The incremental cost-effectiveness ratio was calculated by dividing the difference in costs by the difference in QALYs. RESULTS: A total of 168 dementia patients were recruited for this study. 55 for the PCDC arm and 113 from the two comparator groups (MC = 82 & Other Polyclinics = 31). Compared with care at the Memory Clinic and standard polyclinic care, PCDC was \$2,110 (vs. MC) and \$2,335 (vs. Other Polyclinics) lower respectively at six-months. There were no statistical differences in one-year costs and QALYs across both comparisons. CONCLUSIONS: Our analysis found that dedicated dementia care for stable patients at the primary care setting reduces societal cost. Expansion of PCDC could greatly reduce societal resources without impacting patients' quality of life.

### EVALUATION OF THE BURDEN OF OPIOID ABUSE AMONG US VETERAN PATIENTS

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OBJECTIVES: To examine the economic burden and health care utilization for patients diagnosed with opioid abuse in the U.S. veteran population. METHODS: Patients diagnosed with opioid abuse (International Classification of Diseases, 9th Revision, Clinical Diagnosis codes 965.0x and 965.8x) were identified using the Veterans Health Administration (VHA) Medical SAS Datasets from October 1, 2007 through September 30, 2012. The first diagnosis date was designated as the index date. A comparison cohort was created including patients without opioid abuse using 1:1 propensity score matching to control for age, region, gender, index year and baseline Charlson Comorbidity Index score. The index date was chosen randomly for the comparison cohort to minimize selection bias. Patients in both cohorts were required to be at least age 18 years and have continuous medical and pharmacy benefits 1 year pre- and 1 year post-index date. Study outcomes including health care costs and utilizations were compared between the disease and comparison cohorts based on the matched sample. **RESULTS:** After 1:1 matching, 1,652 patients were included in each cohort, and the baseline characteristics were well-balanced. More patients with opioid abuse had inpatient stays (92.37% vs. 5.08%, p<0.0001) and emergency room (ER) (73.85% vs. 11.38%, p<0.0001), physician office (96.91% vs. 71.91%, p<0.0001), outpatient (97.46% vs. 72.82%, p<0.0001) and pharmacy visits (89.83% vs. 75.00%, p<0.0001). Higher all-cause health care costs were also observed for patients with opioid abuse, including inpatient (\$29,203 vs. \$1,394, p<0.0001), ER (\$1,155 vs. \$112, p<0.0001), outpatient (\$9,193 vs. \$2,665, p<0.0001), pharmacy (\$1,516 vs. \$696, p<0.0001) and total costs (\$39,913 vs. \$4,757, p<0.0001) than for study subjects without opioid abuse. **CONCLUSIONS**: During a period of 12 months, VHA patients diagnosed with opioid abuse reported higher health care utilization and costs than their matched controls.

### ECONOMIC BURDEN IN STUDIES PUBLISHED IN 2014: WHAT TYPE OF MENTAL HEALTH DISORDERS AND OUTCOMES HAVE BEEN MOST COMMONLY ASSESSED?

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OBJECTIVES: To determine which economic burden outcomes were assessed in studies on mental health disorders published in 2014. METHODS: An evidence surveillance process was established based on a systematic search of PubMed, incorporating all studies published from 2010 and updated weekly, with a final search on 1 June 2015. Abstracts identified by the search for costs or resource use outcomes in mental health disorders were identified. Articles were included if they reported results from a primary research study or economic model. Economic outcomes were identified, where possible, from the abstract alone. RESULTS:: The economic burden search identified 1,870 articles published in 2014, with 968 meeting the inclusion criteria for any disease. Of these, 76 (8%) were in mental health disorders. The most commonly researched disorders were drug, tobacco or alcohol abuse (25 articles), followed by depression (17), dementia (7) and schizophrenia (8). The USA was the most common setting, based on abstract text or author affiliations (31 articles), fol-