Resource use (pharmacy claims, outpatient claims, emergency room admission and hospital admission) and corresponding costs over twelve months after index date were compared between groups. **RESULTS:** Each group included 362 patients. Patient characteristics at baseline, resource use, and health care costs before index date were comparable between the two groups. At twelve months after the index date, patients with no pharmacological treatment had higher resource utilization in every category but medication. Total costs over 12 months were $14,983 and $15,692 in groups with and without pharmacological treatment, respectively ($p = 0.67$). Patients with pharmacological treatment had a higher pharmacy cost, but this was offset by the higher cost of outpatient visits in patients with no pharmacological treatment. These visits were mostly related to mental disorders, nervous system, skin and musculoskeletal disorders and injuries and poisonings. **CONCLUSIONS:** While the treatment of opioid dependence with buprenorphine/naloxone is associated with higher medication acquisition cost, it is outweighed by cost savings in other categories, especially outpatient care. Patients without pharmacological treatment use more health care resources and have higher total costs.

PMH59

DRUG UTILIZATION STUDY OF ANTIPSYCHOTICS USED FOR THE HOSPITAL TREATMENT OF SCHIZOPHRENIA IN RUSSIA

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OBJECTIVES: The goal was to examine utilization of typical (TA), atypical antipsychotic (AA) and depot antipsychotic s (DA), used for treatment of patients with schizophrenia in Russian hospital during 1 year. **METHODS:** A retrospective study, carried out in Moscow hospital from January 2012 to December 2012. Patient data on demography (age, sex), medicines used (dose, duration of treatment), length of hospital stay and clinical outcome were recorded and analyzed. Drug consumption was calculated using defined daily dose (DDD) methodology. **RESULTS:** Total 227 patients were included in the study. Among study population 121 (53.3%) patients were male and mean age was 33.2 (male) and 45.5 (female). Out of 227 patients 219 (96.5%) were improved and 1 (0.4%) person were recovery. Mean length of hospitalization was 75.3 days. Total 27 antipsychotic were used for the treatment schizophrenia among these patients. Among used antipsychotic consumption (DDD/100 bed days) was highest for AA clozapine oral (194.25) followed by TA haloperidol oral (52.39), DA fluphenazine parenteral depot (20.04) and DA haloperidol parenteral depot (19.59). However the cost of treatment for AA clozapine was higher, than for TA haloperidol. The total consumption (DDD/100 bed days) in the antipsychotics group was: 224.3 for AA, 73.38 for TA and 39.91 for DA. **CONCLUSIONS:** This study provides estimate of consumptions different antipsychotics used for the hospital treatment of schizophrenia. Atypical antipsychotic clozapine oral is highest consumed among 27 antipsychotics. Total drug utilization for AA was three times higher than for TA and five times higher than DA, however the costs of treatment for AA was substantially higher than for TA.

PMH60

DRUG UTILIZATION PATTERN OF LISDEXAMFETAMINE DIMESYLATE IN GERMANY

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OBJECTIVES: - The objective of the study was to provide utilization data in Germany for the ADHD stimulant medication lisdexamfetamine dimesylate (LDX) in the first six months following its launch in June 2013. **METHODS:** - This drug utilization study (DUS) analysed a longitudinal electronic medical record database (IMS Disease Analyzer - Germany), and was part of a larger DUS providing data for 8 European countries for up to 5 years. The study included records of all patients who had been prescribed LDX from June 2013 to December 2013 in the paediatrician panel (PP) or neurologist/psychiatrist panel (NPP) of the German database. **RESULTS:** - The analysis included 123 patients (348 prescriptions) from the PP and 296 patients (710 prescriptions) from the NPP. In both panels, 91% of patients had a documented diagnosis of ADHD. When initiated on LDX treatment, most patients (PP, 98%; NPP, 91%) were between 6 and 18 years of age; up to 1% of patients in both panels were below 6 years of age and 2% and 8% of patients in the PP and NPP, respectively, were above 18 years of age. The majority of patients in both panels were male (PP, 77%; NPP, 79%). The average prescribed daily dose of LDX was within the recommended range (30–70 mg) for all patients in the NPP and for 98.4% in the PP, with a mean daily dose across patients of 42 mg in both panels. **CONCLUSIONS:** - The findings of this analysis of electronic medical records indicate that, during the first six months after launch, LDX was mainly prescribed in Germany within the EMA-approved Summary of Product Characteristics (SmPC) with regard to the indicated patients, age group and dose regimen.

PMH61

UTILIZATION PATTERNS OF ANTIPSYCHOTICS USAGE IN TERTIARY CARE HOSPITAL PATIENTS WITH SCHIZOPHRENIA

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OBJECTIVES: The main objective of the study was to find the utilization pattern of antipsychotics in schizophrenia patients in a tertiary care teaching hospital South India. **METHODS:** A retrospective study has been carried on schizophrenic patients admitted in a tertiary care teaching hospital for a period of one year. The diagnosis of schizophrenia was based on ICD-10 (Tenth revision) criteria. Patients of both sexes who diagnosed with schizophrenia were included in the study. Other mental illness or drug induced psychosis patients were excluded from the study. All demographical and clinical characteristic including treatment pattern were collected and entered. Data were analyzed in SPSS 20.0. **RESULTS:** Out of 230 patients, 144 (63%) were males and the majority of patients were 65 (28%) in the age group of 21 -30 years. In study population 141 (61.3%) were married and majority of Housewives 57 (24.8%) followed by Govt. service 28 (12.2%). Amongs study population 136 (59.1%) patients received the second generation antipsychotics and 8 (3.5%) patients received first generation antipsychotics Resperidone was the most commonly prescribed antipsychotic given to 36.5% of the patients followed by clozapine 26.5% and olanzapine. Monotherapy was received by 22.2%. 106 (46.08%) patients and 89 (38.69%) received dual drug regimen. **CONCLUSIONS:** The utilization pattern of antipsychotics, revealed that atypical antipsychotics were prescribed more commonly when compare to typical antipsychotics. Among the atypical antipsychotics, Resperidone was commonly used during Schizophrenia as compared to other atypical antipsychotic drugs.

PMH62

COMPARISON OF RESOURCE USE AND HEALTH CARE COSTS IN NEW INITIATORS OF LONG-ACTING INJECTABLE (LAI) AND ORAL SECOND GENERATION ANTIPSYCHOTICS

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OBJECTIVES: To measure health care utilization and costs among new initiators of LAI and oral second generation antipsychotics with schizophrenia or bipolar disorder. **METHODS:** A large database of a commercially insured US population was used to index patients on their first treatment between 1/1/2011 and 12/31/2011. Patients were required to have ≥ 12 months pre-index and ≥ 12 months post-index, were new users of a second generation antipsychotic, and diagnosed with schizophrenia or bipolar disorder during their pre-index period. LAI and oral patients were matched 1: 3 using propensity scores. Mean differences in annual resource use and costs were compared across groups in an unadjusted difference-in-difference analysis: [(LAI post - LAI pre) - (Oral post - Oral pre)]. **RESULTS:** Initial selection identified 250 LAI and 8,356 oral treatment patients. Matching resulted in balanced cohorts of 204 LAI and 612 oral initiators. Annual hospitalizations and ER visits from pre-index to post-index was significantly lower in LAI initiators compared to oral initiators. Mean annual hospitalizations per LAI patient reduced from 1.09 to 0.51 ($p < 0.0001$) while that of the oral cohort reduced from 0.53 to 0.39 ($p = 0.0011$). This resulted in a net reduction of 0.45 annual hospitalizations per patient in the LAI cohort, using the oral cohort as a reference ($p < 0.0001$). Mean annual ER visits reduced from 1.72 to 1.03 per LAI patient compared to no change in the oral cohort, resulting in a net difference of 0.72 ER visits between the two groups ($p < 0.0001$). The unadjusted difference-in-difference analysis showed a relative reduction in total health care costs of $4,997 in the LAI cohort compared to the oral cohort. **CONCLUSIONS:** Initiating treatment with an LAI resulted in greater reductions in hospitalizations and ER visits compared to oral second generation antipsychotic medications in patients with schizophrenia or bipolar disease.

PMH63

ANTIDEPRESSANT USE AND SUICIDE RATE IN ENGLAND: THE GEOGRAPHIC DIVIDE

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OBJECTIVES: Mental illness is widespread, with 1 in 3 people worldwide reporting symptoms indicative of a psychiatric disorder at some point in their lives. The use of antidepressants has risen globally and within Europe has been reported to be correlated with a reduced suicide rate. The aim of this research is to analyse the use of antidepressants in England and identify any trends. **METHODS:** Antidepressant prescribing data for National Health Service (NHS) England from 2003–2012 and from all Primary Care Trusts (2010/11–2012/13) and Clinical Commissioning Groups (2013/14) were obtained from the Health & Social Care Information Centre. Data were collated for the four NHS regional area teams (North, Midlands & East, London, and South) and analysed against population size and suicide rates. **RESULTS:** Antidepressant use in England has increased dramatically in recent years and coincides with a year-on-year drop in ingredient costs, with 27.7 million prescriptions in 2003 and a net ingredient cost of £395.2 million, to 50.2 million prescriptions in 2012 and a net ingredient cost of £211.1 million. From 2010 to 2014, almost £1 billion has been spent on antidepressants by NHS England, of which almost a third is accounted for by the North region. Over 4 years, the average number of prescriptions per 1,000 population was 1,140.7, 987.4, 888.2 and 540.5 in the North, Midlands & East, South and London, respectively. These figures were correlated with a suicide rate of 9.87 and 7.05 per 100,000 people in the North and London, respectively. **CONCLUSIONS:** There is a clear divide within regions of England regarding antidepressant use and suicide rate, and the correlation between these two measures was found to be opposite to that reported for Europe generally. These findings highlight the importance of understanding mental illness and the underlying reasons for the wide disparity in England.

PMH64

ANALYSIS OF PRESCRIBING PATTERNS OF ATYPICAL ANTIPSYCHOTICS IN LHU CASERTA

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OBJECTIVES: The Local Health Unit Caserta has made web-platform (SANIARP) available to specialists and pharmacists to enter the diagnostic and therapeutic information of the patient with each prescription. The advantage provided by this platform is to make available the information on the analysis of the profiles of prescriptive drugs in a large population sample. The aim of study was to evaluate prescribing patterns of atypical antipsychotics in LHU Caserta for the years 2011-2013. **METHODS:** This retrospective cohort study was carried out from the data of pharmaceutical prescriptions and of plans therapeutic in Saniarp in the LHU Caserta in the 2011-2013. Information about users of atypical antipsychotics were analyzed. Information about the diagnosis and treatment plans were obtained through the

linkage between the pharmaceutical database and the SANIARP database, using anonymized patient code. Based on the date of the first prescription (index date) the following prescribing patterns have been defined: continuers (subjects with a gap <30 days between two prescriptions on-going); intermittent (subjects with a gap> 30 days but that receive another prescription at index date); switchers (discontinuation of index drug and prescription of a new antipsychotic); add-on (addition of a new antipsychotic); as-needed (addition of a new antipsychotic for a limited period). **RESULTS:** We identified 2,768 patients (44.5% females) with at least one prescription of atypical antipsychotics and with a diagnosis coded in the study period. Schizophrenia is the most frequent indication (31.1%) the most prescribed drug is olanzapine (29.1%), followed by risperidone (17.7%), quetiapine (13.4%), aripiprazole (12.5%), clozapine (10.3%) and asenapine (3.1%). About 70% of schizophrenic patients is treated with the same drug, 7.9% switch and 23.6% is in polytherapy. **CONCLUSIONS:** The use of SANIARP, web- platform able to allow the systematic monitoring of prescribing patterns of drugs, is of primary importance for better health planning.

PMH65

MAINTENANCE DAILY DOSE OF VENLAFAXINE AND DULOXETINE IN THE MONOTHERAPY OF PATIENTS WITH MAJOR DEPRESSIVE DISORDER RESISTANT TO SELECTIVE-SEROTONIN-REUPTAKE-INHIBITORS IN ROUTINE CLINICAL PRACTICE IN SPAIN

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OBJECTIVES: Major Depressive Disorders (MDD) guidelines recommend using antidepressants with dual mechanism-of-action (venlafaxine, duloxetine) when resistant to a prior course of Selective-Serotonin-Reuptake-Inhibitors (SSRI). Dose to use should be close to the DDD recommended by WHO. Routine clinical practice may be frequently far from guidelines. The aim was to ascertain the average maintenance daily dose (DD) of venlafaxine and duloxetine in the monotherapy of patients with MDD who showed resistance to a previous SSRI in routine medical practice in Spain. **METHODS:** Retrospective analysis extracting consecutively electronic medical records (EMR) of the BSA, a provider which health plan coverage includes near 120,000 inhabitants in Badalona (Spain). EMR of male/female patients, >18 years, included in the chronic prescription follow up program, with a MDD ICD-9-CM code (296.2x/296.3x), and who were resistant to a previous SSRI course, were extracted for analysis. Resistant was defined as persistence of symptoms (score >17 in the Hamilton-Depression scale and/or reduction lower than 30% of the baseline score). Maintenance DD was considered the dose repeated (refills) at least two time consecutively during the study period (years 2012-2013). **RESULTS:** Three-sixty-eight EMR [81% women, 60.3 (15.2) years] were extracted; 160 of duloxetine and 208 of venlafaxine. Average maintenance DD were 65mg/day and 117 mg/day for duloxetine and venlafaxine, respectively. Demographics, number of comorbidities or previous SSRI were not related with average dose. 86% of duloxetine EMR were prescribed the WHO DDD for this drug (60mg), while only 42% of venlafaxine received its WHO DDD (100mg), p<0.001. Number of DDD per day were significantly higher with venlafaxine; 1.17 (1.10-1.23) vs. 1.09 (1.05-1.12), p=0.049. **CONCLUSIONS:** Routine medical practice average maintenance DD of venlafaxine and duloxetine in SSRI resistant subjects with MDD are different in terms of both their recommended doses in labelling or guidelines and in number of DDD per day.

PMH66

THE HEALTH ECONOMIC IMPACT OF RESOURCE USE IN DEMENTIA: THE ERLANGER DEMENTIA REGISTRY (EDR)

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OBJECTIVES: Dementia patients are in need of more extensive personal care compared to other long-term care users. This results in a high economic impact of dementia on patients, families and health care systems. Due to the increasing prevalence of dementia worldwide, combined with limited health care expenditures, a better understanding of resource use in dementia care is needed. Therefore the aim of our study is the assessment of resource use in dementia in the most common setting: home-based care (informal caregivers). **METHODS:** The Erlanger Dementia Registry structure was set up in 2013. Both dementia patients and informal caregivers are interviewed separately with internationally approved valid instruments. Follow-up takes place after 6, 12 months and afterwards annually. Resource use in dementia is assessed via the 'Resource Utilization in Dementia (RUD) instrument'. **RESULTS:** A total number of 50 informal caregivers (mean age=63, 61% female, 23% employed, 72% live together with the patient) were interviewed after the initial dementia diagnosis at baseline, and 22 study participants took part at the 1st follow-up. Informal caregivers were mainly spouses (72%) and children (22%). Main support was provided for instrumental activities of daily living (t0:77%; t6:86%), followed by activities of daily living (t0:37%; t6:52%) and supervision (t0:26%; t6:33%). Average hours for support 6 months after diagnosis were: IADL=4.3h/day (min=1.0, max=16.0), ADL=5,2h/day (min=2.0, max=16.0), and supervision=12.9h/day (min=1.0, max=24.0). The average monthly costs for informal caregivers 6 months after diagnosis (medication; additional disease-related costs) are 76 €. **CONCLUSIONS:** Our results highlight the significant impact of informal costs (time provided for care) in dementia care, occurring early in the disease course. For dementia patients cared for at home, informal costs put an additional economic burden on families. For future health policy planning in dementia, the perspective and inclusion of informal costs is essential. The research is funded by the European Commission, ICT FP7, project ID 287509.

PMH67

ECONOMIC BURDEN OF MAJOR DEPRESSIVE DISORDER (MDD) IN FIVE EUROPEAN COUNTRIES: DESCRIPTION OF RESOURCE USE BY HEALTH STATE

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OBJECTIVES: Estimating resource use [RU] in real life is an important part of health economic evaluations. RU data should reflect how patients are actually treated. In MDD, RU data are mostly obtained from expert opinion. Variability in RU may lead to uncertainty in health economic evaluations, but few published studies report these data in the detail needed. The present analysis reports RU data by depression health state from an observational study. **METHODS:** PERFORM (Prospective Epidemiological Research on Functioning Outcomes Related to Major depressive disorder) is a 2-year prospective observational study conducted in 5 Western-European countries. Two- and six-month RU were estimated by health state: remitters, non-remitters, patients in relapse or not. RU included visits to different health care professionals, hospitalization and sick leave. Results are reported for the whole study population and are also available by country (including the UK, for which EQ5-D-derived utilities are also available) and for subgroups (e. g., patients who switched antidepressants at baseline). **RESULTS:** Of the 819 analysable patients at 2 months, 29% were in remission. Among patients with at least one visit, the frequency of visits to general practitioners, psychiatrists and psychotherapists was consistently lower for remitters *versus* non-remitters (1.8 *vs.* 2.4, 2.2 *vs.* 2.4 and 2.6 *vs.* 3.1 respectively). Fourteen patients had at least one hospitalisation. Sick leave was less frequent (14% *vs.* 27%) and shorter (34 vs. 41 days) for remitters *versus* non-remitters respectively. At 6 months, 19.3% of patients relapsed. RU were higher with more visits to psychiatrists, psychotherapists (4.0 *vs.* 2.7, 7.8 *vs.* 5.5) for relapsed *versus* non-relapsed patients. **CONCLUSIONS:** This first analysis provides European RU data in MDD. More information is expected at completion of the two-year follow-up and this study offers the possibility to describe RU by health states, countries and subgroups and assess their transferability to other countries.

PMH69

THE IMPACT OF ECONOMIC CRISIS ON SUICIDE RATES IN GREECE

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BACKGROUND AND OBJECTIVES: Economic crisis in Greece has several social implications, as unemployment and poverty have largely increased during the past years. Since the onset of the economic crisis, suicides have marked a significant increase. Therefore, aim of this study is to investigate the relationship between suicides and the economic crisis and certain macroeconomic indices. **METHODS:** Annual suicide rates were obtained from the Hellenic Statistical Authority. Multiple linear regression analysis with Newey-West standard errors was carried out in order to examine the relationship between gender and age specific suicide rates and unemployment, GDP per capita and economic crisis (binary variable). Additionally, several statistical tests were conducted in order to examine the properties and the robustness of the model. **RESULTS:** Unemployment appears as the major factor affecting suicides of men and women above the age of 15. However, gender and age-related differences are being observed. Unemployment is positively associated with the suicides of men aged 15-24, 35-44, 55-64 years. Female suicides are also affected by unemployment, excluding the age groups of 35-44 and 45-54 years old. Interestingly, suicides of women aged between 45-54 and 55-64 were negatively associated with economic crisis. In the total population, unemployment has impact on suicides for 15-24, 35-44, 55-64 age groups, while economic crisis affects suicide rate in the age group of 25-34. In addition, GDP per capita is negatively associated with suicide rates for young men (aged under 24). The same effect is also observed for the young population in general. **CONCLUSIONS:** The current economic turmoil in Greece affects suicides deaths. According to this analysis, unemployment is the main factor that determines age-specific rates and essentially point to the direction where measures should be taken in order to control suicides' incidence and lessen the effect of economic crisis on health.

PMH70

POPULATION HEALTH: MENTAL HEALTH OF US VETERANS BY BENEFITS ENROLLMENT STATUS

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OBJECTIVES: Population-based approaches to improving health are critical to controlling rising health care costs. US Veterans represent an identifiable population of significant interest due to their unique occupational exposures. The objectives of this study is to characterize the mental health of a representative US sample specifically comparing: non-Veterans, Veterans receiving VA benefits and Veterans not receiving VA benefits. **METHODS:** A representative (U.S.) sample of 2,000 individuals completed an online survey assessing their mental health (PHQ-2), Veteran status and receipt of Veteran Administration health care benefits. We conducted bivariate analyses among the entire population and multivariate logistic regression among 352 Veterans to assess the relationship between ones mental health (PHQ-2 score >=3) and Veteran benefit enrollment status controlling for ones self-reported physical health, history of combat, awareness of Veteran Crisis Line and sociodemographic factors. **RESULTS:** Overall 28% of Veterans scored positive for depressive symptom based on a score of 3 or greater on the PHQ-2 compared to 11% of non-Veterans. However, breaking Veterans into those enrolled and those not enrolled revealed that 38% of enrolled Veterans were positive compared to just 17% of non-enrolled Veterans. After removing insignificant and/or collinear variables from the logistic regression model, the final set of independent variables included Vets enrolled in VA benefits OR=3.91 (1.93- 8.44), poor/fair physical health OR=4.32 (1.98-9.68), age OR=0.93 (0.91-0.95) and awareness of Veteran crisis line 3.12 (1.69- 5.97). **CONCLUSIONS:** Younger veterans in poorer physical health whom are receiving VA benefits and are aware of the Veteran Crisis line are more likely to have depressive symptoms. Population based approaches to