OBJECTIVES: This study aims to explore physician care-providing behavior in treating children with Attention-deficit/hyperactivity disorder (ADHD).

RESULTS: Among 18,569 children with ADHD, 7,113 (38%) had been diagnosed but not addressed in the first ADHD diagnosis, while 43% (N=35,069) had delayed prescriptions with median time to treatment of 55 days (QQR: 21-171 days). ADHD cases first identified by PCPs were more likely to receive immediate pharmacotherapy, with 48% being prescribed by mental health specialists (OR: 0.001).

CONCLUSIONS: A large proportion of children with ADHD were prescribed medications immediately after diagnosis, indicating a potential benefit from early intervention.

PMH78 USE OF MULTIPLE CONCURRENT ANTIPTSYCHOTICS IN CHILDREN ENROLLED IN THE MISSISSIPPI CICLOPID PROGRAM

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OBJECTIVES: Little evidence exists to support the increasing concurrent use of multiple antipsychotics (AP) among children. Case reports suggest that use of multiple APIs could lead to an increased risk of delirium, serious behavioral changes, cardiac arrhythmias, and death. In 2013, the National Collaborative for Indicators of Quality of Care for Children’s Mental Health (NCQIN) proposed a quality measure of concurrent use of multiple (2+) APIs among children for use in Medicaid and CHIP programs. The Pharmacy Quality Alliance (PQA) has been working on a similar measure using 3+ APIs. The objectives were to analyze the performance in the Mississippi Medicaid program on both the 2+ and 3+ proposed quality measures.

METHODS: A retrospective analysis was conducted using Mississippi Medicaid data for July 2013 through June 2014. For both measures, the denominator contained beneficiaries ages 0 to 21 as of 31 March 2013 and aged 21 and older on 1 July 2013. The numerator contained all children who were continuously enrolled 3+ months and were on any AP for at least 90 days. The denominators contained all who were concurrently on 2+ APIs or 3+ APIs for a period of at least 90 days during the measurement year. RESULTS: The denominator included 4,435 children who were on at least 1 AP. About 464 (10.5%) and 159 (3.6%) beneficiaries were concurrently on 2+ or 3+ APIs, respectively. The performance rates on the two measures did not significantly differ for the fee-for-service and managed care populations. However, uncertainty about optimal duration of buprenorphine treatment may lead to nonadherence because of the high cost of treatment, which may result in reduced treatment duration and nonadherence. In addition, patients in Vermont aged ≥18 years and taking diabetes medication were identified in the IMS Lifelink Plus® database for the years 2006-2013. Cardiovascular events were defined as inpatient discharge diagnosis of heart failure, stroke, and coronary heart disease occurring at least 30 days after initiation of therapy. Patients were continuously enrolled for 6 months prior to 24 months post the date of first antidiabetic prescription ('index-date') with cardiovascular events occurring at least 30 days post the index-date. Patients were followed for 24 months post index-date. Patients with at least 30 days of DPP-4 inhibitor use as their starting therapy were identified as DPP-4 inhibitors users, whereas patients with at least 30 days of any other anti-diabetic therapy and no DPP-4 inhibitors use in the 24-month follow-up period were classified as other anti-diabetic users. Unadjusted and adjusted logistic regression models were employed to estimate the risk of cardiovascular-related hospitalizations for those on DPP-4 inhibitors, compared with those on other antidiabetic agents. The model was adjusted for demographics, comorbidities, and region of residence. RESULTS: The final sample consisted of 45,767 patients with mean age of 50.71 years and 55.1% females. Of these, 1933 patients had DPP-4 inhibitors while 43,794 had other anti-diabetic therapy. At baseline 24.3% patients had hypertension, 36.06% had dyslipidemia and 28.63% had valve disorder. Patients taking DPP-4 inhibitors had an increased risk for having a cardiovascular event as compared with those on other anti-diabetic agents (unadjusted odds ratio 1.524, 95% confidence interval [1.213-1.906], adjusted odds ratio 1.331, 95% CI [1.085-1.799]). CONCLUSIONS: DPP4 inhibitors may increase the risk of cardiovascular events as compared with other anti-diabetic agents, which warrants close monitoring of diabetic patients on DPP-4 inhibitors.

PMH79 TRAJECTORIES OF BUPRENORPHINE TREATMENT AND ASSOCIATED EMERGENCY DEPARTMENT AND INPATIENT USE IN A LARGE MEDICAID PROGRAM

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OBJECTIVES: Buprenorphine is an effective treatment for opioid use disorders. However, uncertainty about optimal duration of buprenorphine treatment may lead to substantial variation in provider decision-making, and patient outcomes. In response to the high cost of treatment, some payers have placed limits on treatment duration although little is known about the impact of these limits. We used group-based trajectory models to identify trajectories and time to first all-cause hospitalization and first emergency department (ED) visits in the following year, compared to those discontinuing between 3-5 months. RESULTS: Six trajectories of buprenorphine treatment were identified: 4 groups discontinued buprenorphine (24.9% discontinued between 3-5 months, 18.7% at 5-8 months, 13.4% at 9-12 months, 9.5% refilled intermittently, and 21.2% refilled persistently for 12 months). Factors associated with treatment discontinuation were minority race, having history of frequent ED visits and hospitalizations, and comorbid psychoses. After adjusting for sociodemographics, health status, and provider-level covariates, patients who refilled persistently had a 20% lower risk of all-cause hospitalizations (hazard ratio [HR]=0.80, 95% CI, 0.68-0.94) and 15% lower risk of an ED visit (HR=0.85, 95% CI, 0.77-0.94) in the subsequent year, compared to those discontinuing between 3-5 months. CONCLUSIONS: Buprenorphine treatment trajectories were highly vari-
cases. Mean BMI was 24.54 ± 5.73 Kg/m². Forty eight patients were given combination therapy and 52 patients were treated with a single drug. A total of 61% cases presented with some forms of ADR whereas 39 responded with no any ADRs. But from Naranjo's Algorithm, only one case had definite ADR, 23 probable, 34 possible and four doubtful ADR. Presence of ADR was not associated with sex (p value 0.997, OR=0.85, CI 0.36-2.00) or whether it was vs. placebo (p value 0.408) although combination therapy was associated with higher risk (OR= 1.96). Thirty three cases presented with cardiovascular complains like dermatitis and rashes, 11 with fatigue and four with gynecomastia. Amiodarone, furosemide, spironolactone, enalapril, losartan were the common drugs causing ADRs. Our above observations would be useful for physicians in rational prescribing of the antihypertensive medicines. Cardiovascular complaints were the most common presented ADRs and amiodarone the most common drug.

PCV3 A DESCRIPTIVE ANALYSIS OF PATIENT CHARACTERISTICS, BLEEDING AND RECURRENT RISK AMONG US VETERAN PATIENTS DIAGNOSED WITH VENOUS THROMBOEMBOLISM

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OBJECTIVES: Patient characteristics and bleeding and recurrence risk of venous thromboembolism (VTE) were assessed among patients in the Veterans Health Administration (VHA) with diagnosis of deep venous thrombosis (DVT) or pulmonary embolism (PE) who were identified from VHA Medical SAS database. The primary outcome was time to first VTE event from diagnosis date (V12.51, V12.52) within 3 weeks and one inpatient stay with a VTE diagnosis, continuous health plan enrollment for 6 months pre-index date and no VTE diagnosis (V12.51, V12.52) in the baseline period. Patient data were assessed until the earliest of death or end of the study period. Outcomes of interest included VTE recurrence, major bleeding and clinically-relevant non-major bleeding (CRNM). The incidence rate (per 100 person-year) was calculated for VTE recurrence and bleeding outcomes. RESULTS: Total 88,280 VTE patients were identified, of which 67.6% had DVT and 24.9% had PE. VTE patients were mean age 66 years, 95.9% were male and mostly resided in the Southern U.S. region (37%). The baseline Charlson comorbidity index score was 3.3 and common comorbid conditions included hypertension (56.0%), respiratory disease (54.3%) and heart disease (54.3%). Non-steroidal anti-inflammatory drugs (60.10%), statins (58.30%) and anticoagulants (36.80%) were also frequently prescribed in the baseline period. During the follow-up period, 37.5% of VTE cases occurred in outpatient settings and 62.50% occurred in inpatient settings. The incidence rate for VTE recurrence (20.7%) was 10.5 per 100 person-years, major bleeding (21.9%) was 10.9 per 100 person-years and CRNM (23.00%) was 12.1 per 100 person-years. CONCLUSIONS: U.S. veteran patients diagnosed with VTE had frequent comorbid conditions and were at high risk for bleeding and VTE recurrence.

PCV4 NOVEL PHARMACIST-GUIDED PHARMACOGENOMIC SERVICE LOWERS WARFARIN DOSING ON CLINICAL OUTCOMES

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OBJECTIVES: Recent studies produced variable results regarding the impact of personal- ized warfarin dosing on clinical outcomes. Personalized warfarin dosing was imple- mented at the University of Illinois Hospital & Health System (UI-Health) with daily dose recommendations provided by a pharmacist-guided pharmacogenetic (PGx) consult service. Our aim was to compare warfarin-related hospitalizations due to bleeding or thromboembolism over 30 and 90 days post therapy initiation. METHODS: This was a prospective cohort study that compared warfarin dosing on clinical outcomes. Personalized warfarin dosing was imple- mented with daily dose recommendations provided by a pharmacist-guided pharmacoge- netic consult service. Our aim was to compare warfarin-related hospitalizations due to bleeding or thromboembolism over 30 and 90 days post therapy initiation. RESULTS: Describe venous thromboembolism (VTE) treatment patterns and clini- cal outcomes among cancer patients in a large commercial data source (CVS Health) with ≥2 VTE diagnosis claims (ICD-9-CM codes) in an outpatient setting or one VTE diagnosis in an inpatient setting were selected from the Humedica database (01JAN2008-31MAR2014). Continuous health plan enrollment 6 months pre-index date was required. Tumor types significantly associated with the type of therapy; monotherapy or combination therapy (p value 0.140) though combination therapy was associ- ated with higher risk (OR= 1.96). Thirty three cases presented with cardiovascular complains like dermatitis and rashes, 11 with fatigue and four with gynecomastia. Amiodarone, furosemide, spironolactone, enalapril, losartan were the common drugs causing ADRs. Our above observations would be useful for physicians in rational prescribing of the antihypertensive medicines. Cardiovascular complaints were the most common presented ADRs and amiodarone the most common drug.

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PCV7 VALIDATION OF HYPERTENSION PATIENT IDENTIFICATION AND EFFECT OF VARYING OBSERVATION TIME FROM ADMINISTRATIVE CLAIMS DATA USING ELECTRONIC MEDICAL RECORDS

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OBJECTIVES: To examine the performance of various administrative claims-based algorithms with varying observation times for identifying patients with hypertension. METHODS: This retrospective analysis utilized administrative claims data linked with electronic medical records (EMR). Patients were included in claims data using two observation time periods, 11/2010 to 12/2013 (EMR data availability) and 07/2006 to 12/2013 (entire claims data availability). Various claims-based hypertension algorithms were defined using ICD-9 diagnosis codes from medical claims and antihypertensive medications from pharmacy claims. Sensitivity and specificity were computed for each of claims-based algorithm and the two obser- vation time periods using hypertension diagnoses from the EMR patient problem list as the gold standard. RESULTS: From a total of 10,864 patients with integrated data, 3,072 were identified with hypertension in EMR. When using claims in the same period as EMR availability, medical claims only based algorithms requiring one, two, or three diagnoses resulted in sensitivities of 83.3%, 75.0%, and 67.8% and specificities of 89.4%, 93.0%, and 94.6%, respectively, while the medical plus pharmacy claims based algorithm requiring one hypertension diagnosis resulted in sensitivities of 83.3%, 75.0%, and 67.8% and specificities of 89.4%, 93.0%, and 94.6%, respectively, while the medical plus pharmacy claims based algorithm requiring two hypertension diagnoses resulted in sensitivities of 74.3%, 69.6%, and 64.0% and specificities of 92.7%, 94.2%, and 95.2%, respectively. By contrast, when using EMR claims data as the gold standard, the two observation time periods for patients identified with hypertension in EMR resulted in sensitivities of 91.9%, 89.4%, and 86.2% and specificities of 77.3%, 81.8%, and 84.1%, respectively, while the same medical plus pharmacy claims based algorithms resulted in sensitivities of 85.6%, 84.3%, and 82.1% and specificities of 85.6%, 84.3%, and 82.1%, respectively. CONCLUSIONS: The choice of claims for identifying hypertensive patients vary on criteria and observation time of the data. Sensitivities are higher with medical claims only algorithms while specificities are higher when pharmacy claims are combined with medical claims. Longer observation time results in increased sensitivities and decreased specificities.