inadequate time windows for identifying non-drug causes, failure to consider laboratory results (e.g., hepatitis serology), incomplete lists of ICD-9 codes for non-drug causes, and inability to extract information from physician progress notes. **Conclusions:** Future work related to the development of an electronic causality assessment tool based on the RUCAM should focus on improving Criteria 5 by using wider time windows to identify non-drug cases, laboratory results, and natural language processing.

Keywords: Drug-Induced Liver Injury; Roussel Uclaf Causality Assessment Method; Electronic Medical Records

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PS3-8:

Identification of Severe Cutaneous Reactions and Genomic Risk Factors in Users of Antiepileptic Drugs

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Background/Aims: Stevens-Johnson syndrome (SJS) and toxic epidermal necrolysis (TEN) are rare, life-threatening cutaneous reactions that may occur following exposure to certain medications, including antiepileptic drugs (AEDs). No reliable incidence estimates of SJS/TEN for US populations have been calculated since the introduction of ICD-9 codes specific for SJS/TEN in October 2008. This study seeks to: 1) investigate the incidence of SJS/TEN using retrospective case identification, 2) test the positive predictive values of ICD-9 codes prior/post-October 2008, and 3) pilot the feasibility of conducting a population-based pharmacogenomic study. **Methods:** With input from dermatologists, pharmacoepidemiologists, and pharmacogeneticists at FDA, HealthCore, and 11 HMORN sites, we validated ICD-9 codes associated with SJS/TEN in 3 cohorts: 1) patients with an inpatient code of 695.1x between 01/01/01–12/31/08; 2) codes 695.12–695.15 from 08/01/08–08/31/12; and 3) codes 279.5, 279.51, 279.53, 695.8, 695.81, 693.0x, 694.8x, 694.4x or diagnosis codes 692.9, E85x.x-E858.9, 693.8, 692.89, 695.89, 695.1x, 692.3x, 695.0 in an inpatient setting plus specific drug exposure between 01/01/01–08/31/12. We extracted a standardized clinical and laboratory dataset. A sample of 265 potential SJS/TEN cases at 5 sites was selected for adjudication by medical chart review. Statistical models will be created to estimate the total number of SJS/TEN cases at all sites based on the positive predictive value of the case identification algorithm. To pilot the feasibility of a pharmacogenomic study, we estimated the number of living cases available, contacted potential cases, and tested 100 random DNA samples from the Marshfield Clinic Personalized Medicine Research Project for HLA-A*3101/HLA-B*1502 alleles to establish a control source. **Results:** A total of 54,049 patients was identified from electronic records: 3,058 in cohort 1; 1,733 in cohort 2; and 49,258 in cohort 3. Potential cases (n = 9) were identified and will be invited to participate in a genetic study. Among the 100 samples genotyped, 5 were positive for HLA-A*3101 and none were positive for HLA-B*1502, consistent with known frequencies. **Conclusions:** We identified a large number of potential SJS/TEN cases using code-based algorithms that will be used to determine the incidence of these events and to plan a larger follow-up study of specific AEDs and genomic factors.

Keywords: Stevens-Johnson Syndrome; Toxic Epidermal Necrolysis; Antiepileptic Drugs

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Prevention and Wellness / Obesity / Behavior Change

A3-4:

Recreational Physical Activity and Gestational Weight Gain in Women with Gestational Diabetes

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Background/Aims: Excess gestational weight gain (GWG) is associated with several adverse perinatal outcomes, including increased infant size at birth and postpartum weight retention. These outcomes are particularly problematic for women with gestational diabetes (GDM), who are already at risk for delivering a large infant and developing type 2 diabetes later in life. Participation in recreational physical activity during pregnancy may mitigate excess GWG, but the association has not been previously examined in a large cohort of women with GDM. **Methods:** This study utilized baseline data from a clustered randomized intervention trial (Gestational Diabetes Effects on Moms – the GEM study) conducted at Kaiser Permanente Northern California (KPNC) to estimate the association between participation in recreational physical activity and GWG among women with GDM. Women with multiple fetuses and those on bed rest were excluded, leaving a final analytic cohort of 790 women. Recreational physical activity (walking quickly for fun or exercise, jogging, exercise classes, swimming, dancing, yoga, pilates, weight lifting/resistance exercises and team sports) in the past 3 months was assessed using the Pregnancy Physical Activity Questionnaire (PPAQ). Data on gestational weight gain per week (kg) up until the time of the oral glucose tolerance test (OGTT) was abstracted from the electronic medical record. **Results:** Compared to those who reported not participating in any recreational physical activity, women who reported participating in some recreational physical activity had a significantly reduced risk of GWG in the upper quartile [GWG >0.39 kg (0.85 lb.) per week]; this association was independent of age, prepregnancy body mass index (BMI), race-ethnicity, and parity [OR = 0.63 (95% CI 0.41-0.97)]. In sensitivity analyses limited to women who completed the PPAQ within 6 weeks (n = 448) and 4 weeks (n = 234) of the OGTT, the associations were more pronounced [OR = 0.42 (95% CI 0.24-0.72) and OR = 0.28 (95% CI 0.12-0.63), respectively]. No dose-response relationship was observed between high (>1.07 MET hours per day) and low (≤1.07 MET hours per day) recreational physical activity. **Conclusions:** Participation in recreational physical activity during pregnancy may mitigate high GWG in women with GDM.

Keywords: Physical Activity; Gestational Weight Gain; Gestational Diabetes
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C4-4:

Prevalence of Hazardous and Harmful Drinking Patterns Among Older US Adults: Data from the 2005-2008 NHANES

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Background/Aims: While heavy drinking and alcohol abuse pose clear health risks, even moderate alcohol consumption may be risky or frankly harmful in older adults with certain co-morbidities, medication use, symptoms, and functional limitations. However, national estimates of the prevalence of risky alcohol use by older adults are presently unavailable. **Methods:** In 2005-2008 National Health and Nutrition Examination Survey respondents 65 years and older, reported alcohol consumption was considered alone and in the context of the individual's co-morbidities, medication use, and physical and psychological functional status to classify their consumption as Harmful (already experiencing alcohol-related health problems), Hazardous (at risk of alcohol-related health problems), or Healthwise, using the classification algorithm of the Alcohol-Related Problems Survey (ARPS), a screening tool for older adults. Weighted national prevalence estimates and adjusted prevalence odds ratios in subgroups defined by sex, age, and race/ethnicity were calculated using survey statistical procedures. **Results:** Among older adult drinkers, 85.5% (14,341,531 of 16,771,716; 95% Confidence Interval [CI]: 83.2%, 87.9%) consumed alcohol within