and positive predictive values (PPVs) were calculated based upon diagnostic criteria by Sampson et al. **Results:** Of the 131 potential available cases, adjudicators determined that 77 were anaphylaxis, 45 were not anaphylaxis, and 9 were determined to have inadequate information to confirm whether or not a case was anaphylaxis. Overall, the PPV was 63.1% (95% confidence interval, 53.9%-71.7%). PPVs ranged from 48.1% to 78.9% across the Data Partners. In comparing different criteria, algorithms which included codes for allergy (ICD-9-CM 995.3) or adverse effects of drug, medicinal and biological substance (ICD-9-CM 995.2, E930-E949) in combination with additional treatment or symptom codes, such as injection of epinephrine, had a lower PPV (PPV = 45.8%) than algorithms that included codes specifically indicating anaphylaxis (ICD-9-CM 995.0, 999.4), although confidence intervals were wide and overlapped. **Conclusions:** While the PPV of the developed algorithm was higher than those reported in previously published studies, the PPV of anaphylaxis remains low. Further evaluation of individual codes and combinations of codes is ongoing as part of the present study.

Keywords: Anaphylaxis; Mini-Sentinel; Adverse Drug Event

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B3-4:

Identification of Adverse Drug Events Post-Hospital Discharge in a Geriatric Population

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Background/Aims: Adverse drug events (ADEs), especially those that may be preventable, are among the most serious concerns regarding medication use in older persons. The purpose of this study was to describe the incidence, severity and preventability of ADEs occurring within 45 days post-hospitalization in an ambulatory geriatric population. **Methods:** We studied 1000 consecutive discharges of patients aged 65 and older who received medical care from a large multispecialty medical group in Central Massachusetts. Discharges were excluded if the discharge diagnosis was psychiatric or if discharges were not to home. Three clinical pharmacist investigators reviewed the ambulatory records of each discharged patient to identify drug-related incidents occurring during the 45-day period post hospital discharge. Drug-related incidents were presented to a pair of physician-reviewers who independently classified incidents as to whether an adverse drug event was present, the severity of the event, and whether the event was preventable. When the physician-reviewers disagreed on the classification of an incident, they met and reached consensus; consensus was reached in all instances where there was initial disagreement. **Results:** There were 242 ADEs identified, of which 35% (n = 84) were considered preventable. Of the preventable ADEs, 63% (n = 53) were categorized as significant, 32% (n = 27) were serious, and 5% (n = 4) were life-threatening. Nearly half of all ADEs occurred within the first two weeks following discharge. **Conclusions:** Adverse drug events are common and often preventable among older persons in the ambulatory setting. The substantial portion of serious events that were considered preventable suggests opportunities for improving care during the post-hospital discharge period.

Keywords: Adverse Drug Event; Geriatrics

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PS3-6:

Blood Safety Continuous Active-Surveillance Network Feasibility Evaluation (Blood-SCAN)

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Background/Aims: In 2011, the US Food and Drug Administration (FDA) created the Blood Safety Continuous Active-Surveillance Network (Blood-

SCAN), the first nationwide active surveillance system for monitoring the safety of FDA-regulated blood components and blood-derived products. Blood-SCAN employs the Mini-Sentinel Distributed Database (MSDD) which contains 126 million individuals within 17 Data Partners. Blood-SCAN is intended to augment the existing safety surveillance system and improve US biovigilance efforts. As a first step in creating Blood-SCAN, we assessed the feasibility of using the current MSDD to evaluate blood component and blood-derived product exposures and related health outcomes.

Methods: The assessment consisted of 4 activities: (1) an expert working group identified 20 blood components and blood-derived products and 10 health outcomes of interest (HOIs) to evaluate the data available in the MSDD, (2) a literature scan was conducted to identify electronic algorithms to capture these product exposures and HOIs, (3) HOI and exposure frequencies were tabulated using established Mini-Sentinel programs, and (4) structured discussions were conducted with all Mini-Sentinel Data Partners to assess the availability, content, and quality of data within their databases. **Results:** Claims codes were available for all of the blood components and blood-derived products, and many of the claims codes for blood-derived products were sufficiently specific to allow analyses by product manufacturer, fulfilling an important regulatory need. Adequate counts of exposures to immunoglobulin products indicate the potential for future surveillance studies on these products. MSDD analyses suggest that blood-derived products are captured effectively in outpatient settings but not in inpatient settings, limiting the scope of therapeutic indications that can be assessed. Blood component exposures are also captured in outpatient settings within the MSDD; however, because most transfusions occur in inpatient settings, these data may not be completely representative of the patient population, reason for transfusion, and dose. Most Data Partners reported no current ability to access inpatient blood component exposures through existing claims data streams. **Conclusions:** The current MSDD supports safety surveillance for a variety of blood components and blood-derived products in the outpatient setting. Expanding the MSDD to include inpatient data streams will ensure that Blood-SCAN achieves its full potential.

Keywords: Blood; Active-Surveillance; Mini-Sentinel

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PS3-7:

Improving the Detection of Drug-Induced Liver Injury with an Electronic Causality Assessment Tool

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Background/Aims: The Roussel Uclaf Causality Assessment Method (RUCAM) is the most commonly used algorithm to evaluate drug-induced liver injury (DILI). It uses 7 criteria to assess causality and provides a total score ranging from -9 to 15, which is stratified into 5 categories describing the likelihood of DILI ranging from 'Highly Probable' to 'Excluded'. An electronic RUCAM (eRUCAM) was previously developed at Kaiser Permanente Southern California (KPSC) with the Observational Medical Outcomes Partnership and GlaxoSmithKline to detect DILI in an electronic medical record. The study aim was to identify areas of improvement for future iterations of the eRUCAM based on results from chart review. **Methods:** The eRUCAM was used to score potential cases of DILI identified in patients taking at least one of 14 drugs commonly associated with DILI. Patients were required to be at least 18 years of age and have 12 months of continuous membership plus drug benefit prior to drug initiation. A random sample of 20 patients without pre-existing liver disease was selected for chart review to perform quality assurance on the programming specifications and identify areas for improvement in the algorithm. A hepatologist manually scored each patient using the paper-based RUCAM. Scores from the hepatologist were compared to those from the eRUCAM using the Wilcoxon signed rank test. Qualitative findings from chart review regarding future improvements to the algorithm were summarized. **Results:** The total score from eRUCAM was identical to those of the hepatologist for 6 cases (30%). The absolute difference between the hepatologist and eRUCAM scores was greatest for Criteria 5, which assesses non-drug causes of liver injury (P = 0.001). Differences in scores were not statistically significant for other remaining criteria. Issues that were identified with Criteria 5 included: