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analysis. The time horizon for each studies ranged from 2-3 months in the RCTs, and 1-24 months in the observational studies. No discounting was reported in any of the articles. Only one article reported sensitivity analysis. **CONCLUSIONS:** All HE studies published were piggy-backed to clinical studies and none utilised HE model-ling. None of the HE studies completely fulfilled the standard HE reporting criteria.

# **RESEARCH ON METHODS - Databases & Management Methods**

#### PRM11

ASSESSMENT OF NEED, DEVELOPMENT AND IMPLEMENTATION OF SUPPORTIVE MANAGEMENT DATABASE FOR THE TREATMENT OF POISONING

CASES IN A TERTIARY CARE HOSPITAL

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OBJECTIVES: The main purpose of the present study was to assess the physicians need for the development of a supportive management database for the treatment of poisoning cases and to implement such a database in the hospital setup based on the need of the physicians. METHODS: A prospective, observational study was conducted in the emergency department of Kasturba Hospital, Manipal. The study was approved by the Institutional Ethics Committee of Kasturba Hospital, Manipal. A 12 item questionnaire was developed, validated and given to 42 physicians who treated acute poisoning cases to assess their need for the development and implementation of a supportive management database. Material for the database was prepared after conducting an electronic literature search of various existing databases. RESULTS: The 12 item questionnaire was given to seven experts for content validation. Out of twelve items, one item was excluded from the final questionnaire as it did not meet the required value. All 42 (100%) of the physicians believed that a supportive management database for poisoning cases in the hospital setup would be really helpful. Over 300 articles were referred in the preparation of the material for the database. CONCLUSIONS: Clinical pharmacists together with physicians who treat poisoning cases must work hand in hand in developing institutional guidelines for the management of poisoning. Development of such guidelines could reduce the complications and mortality which are associated with poisoning cases.

## PRM12

## EVIDENCE FOR VALIDITY OF A NATIONAL PHYSICIAN AND PATIENT-REPORTED SURVEY IN CHINA AND UNITED KINGDOM: THE DISEASE SPECIFIC PROGRAMME Babineaux SM<sup>1</sup>, Curtis BH<sup>1</sup>, Holbrook T<sup>2</sup>, Liu L<sup>3</sup>, Colclough H<sup>4</sup>, Piercy J<sup>4</sup>

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**OBJECTIVES:** Traditional large scale epidemiological surveys used to inform public health decision-making have limitations, notably the cost and time to administer them and the timeliness of the data, sometimes subject to 5 or more years between updates. This analysis aimed to validate a newer survey methodology by comparing output with that from two large scale health surveys. METHODS: Data were drawn from the Adelphi Diabetes Disease Specific Programme (DSP), a cross-sectional survey of physicians and their patients conducted in China (2012) and United Kingdom (UK) (2013). Detailed records for 1662 patients were provided by 200 physicians in China. In the UK, 125 physicians provided records for 1237 patients. Clinical and demographic characteristics of the samples were compared with independent representative national data sources: a 2007/08 Chinese epidemiology study (46,239 patients) and the Health Survey for England 2011 (HSFE), administered to 10,000 individuals. Variables common to both datasets were compared and tested for significant differences. **RESULTS:** Systolic blood pressure (SBP) and low-density lipoprotein (LDL) values from the China DSP were statistically non-different from the national survey. There were differences between fasting plasma glucose (137.8 vs. 158.6); age (56.6 vs. 55.8); male body mass index (BMI) (24.1 vs. 25.2) and highdensity lipoprotein. Comparing the UK DSP with the HSFE, all variables (age, gender, smoking status, age at diagnosis (61.5 vs. 63.9), insulin-treated, BMI (31.6 vs. 32.3), total cholesterol, HBA1C% (7.768 vs. 7.981), and SBP were non-different. Weeks since diagnosis differed - 358 DSP vs. 504 HSFE. CONCLUSIONS: Results demonstrate that the DSP methodology enables up-to-date representative sampling of treated adult patients in Western and Asian populations for national disease burden quantification, and treatment pattern and outcomes assessment. A limitation is that sampled patients are more recently diagnosed, but there are otherwise only minor differences in clinical and demographic characteristics.

#### PRM13

## REAL WORLD EVIDENCE IN MAINLAND CHINA: EXPERIENCE WITH THE USE OF HEALTH CARE CLAIMS DATA

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OBJECTIVES: The China public health insurance system now covers 95% of the population due to efforts to establish universal coverage under three primary government programs (Urban Employee Basic Medical Insurance, Urban Resident Basic Medical Insurance, and New Rural Cooperative Medical Scheme). Data from these insurance programs are combined to create the China Health Insurance Association (CHIRA) database; the only national claims database in China. Use of these data allow research to examine patients, settings, patterns and outcomes that may differ from that of RCTs; advancing China's population-based research and enhancing the opportunity to apply real world evidence (RWE) in local decision making. The use of claims data is relatively uncommon in China. This work explores the current and potential use of local claims data as a source of information for RWE in China. METHODS: The experience of the use of the China Health Insurance

Association (CHIRA) data is explored. The advantages and limitations of the CHIRA data are described. **RESULTS:** Although there have been abstract disclosures in scientific conferences, a search in PubMed (January 8, 2014) found no manuscripts published that presented analyses using CHIRA data. It uses ICD-10 codes and collects cross-sectional data annually from inpatient claims records from sample cities. Advantages include the availability of demographics, institution, diagnoses, medications, service use, hospital stay, insurance type and service cost information for a large, diverse local population. Limitations include the lack of longitudinal patient records, incomplete data, the lack of outpatient data and standardized billing codes, and limited access for research purposes. CONCLUSIONS: At present claims data in China are relatively difficult to access and to use. However the use of claims data for health services research is expected to increase in line with planned enhancements to data availability and quality, and the increasing needs for RWE by decision makers.

## PRM14

### MANAGING CONGENITAL AND PEDIATRIC CARDIAC SURGERY DATA BASE: THE IMPACT ON CLINICAL PRACTICE AND QUALITY OF CARE Furnaz S

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**OBJECTIVES:** To develop a functional and validated database for quality assurance and improving patient outcomes and establishing institutional integrity. METHODS: The Cardiothoracic surgery division at the Aga Khan University Hospital maintains a computerized database of all the patients undergoing cardiac surgery since July 2006. For this study, data of 1236 patients operated between July 2006 and Dec 2013 was analyzed. Major measures of outcomes included in-hospital and 30 day mortality and morbidity outcomes like reopening, sepsis prolong ventilation, arrhythmias low cardiac output syndrome. RESULTS: Out of a total of 1236 heart surgeries, the most common open heart surgeries were VSD 27%, TOF 24% were, and 13% were ASD. In closed heart 51% were Modified BT shunts, 17% were PDA. The overall 30-day mortality in open heart was 7.0%, and in closed heart it was 7.3%. Post-surgery more common complication in open heart surgery was prolong ventilation which was 39%, arrhythmias 14%, reopenings 11% and sepsis 5% total morbidity was 29% while in closed heart most common complication was prolong ventilation which was 31%, total morbidity was 21%. Readmissions after 30 day of Discharge were 8.4% mainly for respiratory infection. Followed with 14% lost to follow-ups 85% patients were alive, 0.6% were died at 30 day patients follow up. CHANGES DEPEND ON DATABASE: VSD: on table extubation or extubation with 4 hours – minimal morbidity and early discharges. ASD: on table extubation. CONCLUSIONS: Updated and stringently maintained database helped to identify deficiencies, strength and trends of the Pediatric and Congenital Cardiac surgery program at our hospital and also to design strategies for continuing improvement in patient care. Also provides scientific evidence for comparing results with other institutions of the region and world.

## DEVELOPMENT OF A LONGITUDINAL NATIONAL FOOTBALL LEAGUE INJURY AND INJURY IMPACTS (L-NFL-III) DATABASE

 $\label{eq:markowitz} \begin{array}{l} Markowitz \ JS^1, \\ \underline{Papadopoulos} \ G^2, \\ Markowitz \ A^3 \\ {}^1 \mbox{Health Data Analytics, Princeton Jct., NJ, USA, } {}^2 \mbox{Emerald Corporate Group P/L, McMahons Point, } \end{array}$ Australia, <sup>3</sup>Consultant, San Salvador, El Salvador

**OBJECTIVES:** Injuries in sports, including professional American football, are a major public health problem affecting millions of young and adult athletes around the world each year. While most injuries are minor, some end seasons, careers, and may even result in long-term disability. No outcomes databases exist that focus on injuries in the National Football League (NFL). We sought to develop a database that's longitudinal and includes key injury impact outcomes. METHODS: Four years of data including information on any player that played 1+ regular season games between 2010 and 2013 were adapted from NFL.com, ESPN.com, TSN.com and several other reputable online sources. Five different and unique data types, all capable of being merged with one another and used in longitudinal analyses, were stored as SAS datasets: Player Background (e.g., age, weight, position), Games Played, NFL Injury Report, Injured Reserve List, and Schedule and Conditions (e.g., field surface, weather conditions, referee). Data from the NFL Injury Report and Injured Reserve List contain every significant injury to NFL players during the 4-year period including concussions, knees, ankles, hamstrings, etc. Injury Impacts include games missed due to injuries as well as season- and career-ending injuries. **RESULTS:** Data on 3,193 unique NFL players are included in the database. About 7,700 playerseasons are captured that cover nearly 91,000 player-games. About 18,500 Injury Reports are recorded on these players resulting in more than 6,000 missed games. In addition, almost all 959 Injured Reserve List injuries are season-ending and significantly raise the risk of ending a player's career. CONCLUSIONS: The L-NFL-III database can be a useful tool for epidemiological and outcomes research related to injuries in the NFL. In 4-year longitudinal analyses, this database was successful in identifying a large number of missed games due to injuries, as well other critical outcomes including season- and career-ending injuries.

#### PRM16

### HEALTH CARE DATABASES APPLIED TO ANTIDEPRESSANTS USE IN ASIA-PACIFIC

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OBJECTIVES: Health care databases represent an optimal tool for conducting large retrospective epidemiological studies and are largely used in Europe and the US. This study is the second phase of an earlier study which qualititatively describes databases in Asia Pacific. In this phase, we focused on several countries that have large health care databases used for administrative functions namely South