SIX YEARS OF CARDIAC DATABASE MANAGEMENT: THE IMPACT ON CLINICAL PRACTICE

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OBJECTIVES: To determine the impact of database development on clinical practice and quality of care. METHODS: We chose the following aspects of patient care to be included in the database form: pre-surgery patient condition and medications, surgery information, recovery information, status of the patient at discharge, 30- and 365-days post-surgery follow-up information. Information was collected through structured forms and entered into Microsoft Access software. RESULTS: From January 2006–May 2011, there was 3418 open heart surgeries performed. The overall 30-daymortality was 3.6% . Post-surgery mortality was 21.5% which includes 3.6% reoperation for bleeding 0.6% neurologic 0.7% dialysis 1.3% heart failure 0.3% sepsis/cia 1.8% prolonged ventilation 0.6% multiorgan failure and 0.9% respiratory complications. 1.7% cardiac arrest, 1.1% deep sternal wound infection 0.1% follow up at 30-days patients alive were 91.6% death 0.1% lost to follow up 3.6% and 365-days showed that alive 93.2% death 0.2% lost to follow up 4.6%. CONCLUSIONS: Before this database, there was no way to monitor the risk factors, mortality and morbidity. Fortunately with the development of database, pre operation risk factors, post-surgery mortality and morbidity rates could easily be generated. Based on the prevalent risk factors coming up in our data we can help prevent the cardiac disease. It also helped in controlling preventable post-surgery complications. It also helps in identification of a gap inpatient knowledge regarding prevention of cardiac disease. It also helped in controlling preventable post-surgery risk factors, mortality and morbidity rates could easily be followed up.

PSU41
DAY OF WEEK OF PROCEDURE AND 30-DAY IN-HOSPITAL MORTALITY FOR ELECTIVE SURGERY

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OBJECTIVES: To investigate whether there is a relationship between the day of the week patients undergo elective surgery and in-hospital death. METHODS: Retrospective analysis of secondary users service data on adjusted odds ratios for day in hospital death within 30 days of procedure using logistic regression modelling. Patients in acute and specialist English public hospitals undergoing elective surgery over the financial years 2006 to 2008. RESULTS: There were 15,230 in-hospital 30-day deaths and adolescents age 14,197/763 all elective inpatient surgical admissions (an overall crude mortality rate 3.6 per 1000). The overall adjusted odds of death for all elective surgical procedures were 33% and respectively 90% higher if the procedures were carried out on Friday or at Weekend compared to Monday (OR 1.33, 95% CI 1.26-1.41 and respectively OR 1.90, 95% CI 1.75-2.05). This equates to a figure of over 700 excess annual deaths from elective surgery, based on applying Monday mortality rates. CONCLUSIONS: The study suggests higher risk of death for patients who have elective surgical procedures carried out closer to the weekend, in particular on Friday. Further research is needed to understand the extent to which the ‘weekend effect’ reflects differences in the quality of surgical care.

DISEASE-SPECIFIC STUDIES

MENTAL HEALTH – Clinical Outcomes Studies

PMH1
PHARMACOTHERAPY AND ASSOCIATED OUTCOMES IN PEDIATRIC BIPOLAR DEPRESSION

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OBJECTIVES: To examine medication utilization pattern among Medicaid enrolled children and adolescents with bipolar depression (BD). METHODS: Medicaid Analytic eXtract (MAX) data from New York, Illinois, California, and Texas, from 2003 to 2007 were used. Cox proportional-hazard survival analysis was performed to obtain the hazard of MDD incidence (Hazard ratio (HR) = 0.66 and 0.22, respectively; both p = 0.01). A unit of increase in CCI was associated with a 14% higher hazard of MDD occurrence within the study period. White patients had the highest hazard of MDD occurrence among all races (p < 0.01). Compared with adult patients, youths and children were less likely to have an MDD occurrence (HRs = 0.66 and 0.22, respectively; both p = 0.01). MDD was less frequent in patients seen by dermatologists, family physicians, or pediatricians (all p < 0.01). Patients whose acne was treated with isotretinoin, oral antibiotics, or topical antibiotics were less likely to have an MDD occurrence (HRs = 0.56, 0.41, and 0.46, respectively; all p < 0.01). Performance of each of the comorbidity measures was compared after adjustment for more than three covariates was estimated. For example, beta-values for the development of comorbid MDD in acne patients treated with drug therapy varied with age and race. Consultation with dermatologists, family physicians, or pediatricians was associated with a lower hazard of MDD. Drug treatment of acne with isonoxitin, oral antibiotics, or topical antibiotics was associated with a reduced incidence of secondary MDD in acne patients, indicating that the treatment of the primary cutaneous indication may reduce the risk of secondary psychiatric comorbidities.

PMH4
COMPARISON OF RISK ADJUSTMENT METHODS IN PREDICTING HEALTH CARE EXPENDITURE AMONG CHILDREN WITH ATTENTION DEFICIT/HYPERACTIVITY DISORDER

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OBJECTIVES: To examine risk adjustment methods in predicting health care expenditures among children with ADHD. METHODS: This study used data from 2008 Medical Expenditure Panel Survey (MEPS) involving children from 5-17 years of age with ADHD. Patients with ADHD were identified using International Classification of Diseases, ninth revision, Clinical Modification (ICD-9-CM) code of ‘314’. Diagnosis based on (D’Hoore version of Charlson comorbidity Index (CCI), Modified Elixhauser comorbidity index (MCI), pharmacy based (Chronic disease score-1 (CDS-1)), and Columbia Impairment scale (CIS) were used to risk adjust total healthcare expenditures. Performance of each of the comorbidity measures was compared after...