adverse events). In a multivariate analysis the variables associated with satisfaction were: ß2 agonist (p = 0.071) and males (p = 0.051). CONCLUSIONS: Patient satisfaction with COPD treatment is high and is related with the low frequency of adverse events. Satisfaction is higher in males receiving treatment with ß2 agonist.

SURGERY

THE SOCIETAL COST OF AUTOLOGOUS, ALLOGENIC AND PERIOPERATIVE RBC TRANSFUSION—THE CASE OF SWEDEN

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OBJECTIVES: To estimate the cost of red blood cell (RBC) transfusion using three different techniques, i.e. allogenic transfusion, autologous transfusion and perioperative auto-transfusion, from a societal perspective for Sweden. METHODS: Data concerning the sequence of procedures involved in the collection, preparation and transfusion of RBCs and perioperative auto-transfusion was collected from the Swedish National Board of Health and Welfare, from other published sources and from interviews with staff at five large Swedish hospitals. Direct hospital costs were derived from the Southern Regional Health Care Board and from Haemonetics Scandinavia AB. Income data on hospital staff was derived from the Swedish federation of county councils. Data for estimating indirect costs have been obtained from Statistics Sweden and the National Tax Board of Sweden.

RESULTS: The cost of a 2-unit transfusion was found to be SEK7144 (£792) for filtered allogenic RBCs and SEK394 (£39) for autologous RBCs for surgery patients. Transfusion reactions accounted for more than 40 percent of the costs of allogenic RBC transfusions. The administration cost was found to be much higher for autologous transfusions compared to allogenic transfusions. The cost of intraoperative erythrocyte salvage was calculated to be SEK2567 (£256) per transfusion (>4 units). Of the three available techniques, allogenic RBC transfusion is the most common method used in Sweden. More than 99% of all donated blood is allogenic in the case of Sweden.

CONCLUSIONS: Patients who suffer from anaemia have the option of treatment with blood transfusion or treatment with erythropoietic stimulating agents. From a societal perspective, allogenic RBC transfusions are considerably more costly than the perceived cost at the hospitals. Allogenic transfusion were found to be more costly than autologous transfusions concerning transfusion reactions but less costly with respect to administration at the blood centres.

PSU2

COST-EFFECTIVENESS OF TWO REGIMENS OF TOTAL INTRAVENOUS ANESTHESIA USING INFUSION PUMP IN MEXICO

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OBJECTIVES: To estimate the cost-effectiveness of remifentanil/propofol versus fentanyl/propofol as regimem of total intravenous anesthesia using infusion pump in Mexican Health Sector. METHODS: An expert panel with anesthesiologists was established to identify the medical and non-medical health resources used to perform a general anesthesia in patients with 65 kg, ASA I (American Society of Anesthesiologists) for a range in the anesthetic time from 60 to 180 minutes and the effective-

ness accomplished with the regimens. The information gathered from the expert panel was completed with a literature review. Official unitary costs for the Mexican Institute of Social Security (IMSS) and Hospitals from The Ministry of Health were used. The expected cost per patient included the costs of drugs, post-anesthetic care unit, labor costs and costs associated with adverse events. Costs were expressed in Mexican Pesos and then converted to US dollars (rate exchange 11 Mexican pesos = 1 USD).

RESULTS: For the remifentanil/propofol regimen the induction doses were 1 mcg/kg remifentanil and 2 mg/kg propofol; the maintenance doses were 0.5 mcg/kg/min remifentanil and 85 mcg/kg/min. For the fentanyl/propofol group the induction doses were 3 mcg/kg fentanyl and 2 mg/kg propofol; the maintenance doses were 3 mcg/kg/hour fentanyl and 120 mcg/kg/min. For the median of anesthetic time, 120 minutes, the costs per anesthesia were $1421 (129 USD) and $1644 (149 USD) for the remifentanil/propofol and fentanyl/propofol regimen, respectively. The average extubation time was 7 minutes for the regimen with remifentanil, and 15 minutes with fentanyl. Using a visual analogue scale, where 0 represents the worst value and 10 the best, the remifentanil/propofol regimen was graded 9.6 and the fentanyl/propofol 8.6.

CONCLUSIONS: Regimens with remifentanil/propofol dominates fentanyl/propofol techniques, since they provide a highly effective and secure anesthesia and also represents a significant saving in total resources used (mainly in use of propofol and post-anesthetic care unit) offsetting its higher acquisition costs.

PSU3

THE COST OF ANTIBIOTIC THERAPY IN PATIENTS UNDERGOING COLORECTAL SURGERY

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OBJECTIVE: To evaluate cost of antibiotic therapy in patients undergoing colorectal surgery and possible influence of post-surgical infections on hospital costs. METHODS: We conducted a naturalistic, retrospective study, collecting data from medical records on patients undergoing surgery in 2002–2004, from two Italian hospitals. Analyses were conducted from the hospital’s point of view: cost of treatment (expressed as €/hospitalization, values of 2005) and length of post-surgical stay as a proxy of hospital cost are reported, with comparisons among the two hospitals (HOSP1 and HOSP2). The bootstrap resampling method (5000 samples) was applied to have more reliable results.

RESULTS: Data of 174 patients (mean age 68.3, 38–93 years, 49.4% men) was collected: 82.8% underwent surgery for malignant cancer, 2.3% for benign cancer, 14.9% for other reasons. Antibiotic therapy was applied by adopting two different guidelines: in HOSP1 patients were treated with 5-nitroimidazole and cefazidime or cefotaxime. If infections occurred, cephalosporins, fluoroquinolones, quinolones, carbapenems, penicillines were used, according to the type of infections. Patients from HOSP2 were preventively treated with: cefotetan or cefoxitine, or 5-nitroimidazole + gentamicine or piperacilline + 5-nitroimidazole. The infected patients were treated with carbapenems, penicillines, cephalosporins, triazoles, amynoglicosides, and fluoroquinolones. Thirty-eight patients (22%) were infected, with similar frequencies in the two hospitals. Therapy cost on average €140.59 (60.0–816.13), with significant difference between non infected and infected patients (97.24 vs. €293.99, p < 0.0001). The average cost was higher in HOSP1 (€182.45 vs. €102.40, p < 0.001) while the median post-surgical