

models of drug preparation and administration. In hospital A' all drugs were diluted in a minibag under aseptic conditions, while in hospital B', nurses diluted the drug on the wards and administered it through a buretrol device. A cost analysis time & motion study was performed to find out the cost of each practise model; 11.3 Euro/unit in hospital A' versus 13 Euro in hospital B'. Hospital A' used PTZ' treatment based on a streaming system & antibiogram assistance, while in B', use was according to physician approval and a system of switching.

Conclusions This survey has several limitations: the difficulty of accurately reflecting prescribing practises, equipment and patient case mix. Nevertheless, the benchmarking exercise provided valuable data, which can be used to target key areas for cost control and performance.

No conflict of interest.

OHP-012 ASSESSMENT OF UNIFIED INHALATION GUIDANCE DOCUMENTS FOR DIFFERENT INHALERS AND THE INFLUENCE OF AGE ON INHALATION TECHNIQUE

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Background When using an inhaler for asthma or chronic obstructive pulmonary disease, the correct inhalation technique is essential for obtaining the desired effect. However, the development of different types of inhalers has led to inhalation techniques that differ greatly among devices. Therefore, we prepared the 'Unified Inhalation Guidance Documents' (UIGDs) in cooperation with hospitals and pharmacies in our region for each available type of inhaler.

Purpose To assess the benefits and problems of the UIGD.

Materials and Methods A total of 165 Japanese patients who received inhalation therapy from June 2011 to September 2012 were enrolled, and 213 points regarding the inhalation technique with 8 types of inhalers were obtained. The inhalation technique of patients who received guidance based on the UIGD for the use of inhalers was assessed by scoring inhalation skill. In addition, we assessed the impact of age on the acquisition of inhalation technique.

Results We found that 86 cases (40.4%) showed problems with inhalation technique. In particular, patients using a Breezhaler (4/5) and Turbuhaler (18/37) had a high rate of problems with their technique. Problems were more frequent in patients aged 65 or over (older) (63/146, 43.2%) compared with other patients (younger) (23/67, 34.3%). In particular, for patients using a Turbuhaler, more older patients (10/14, 71.4%) than younger patients (8/23, 34.8%) had trouble with technique.

Conclusions Around 40% of patients who received guidance based on the UIGD for the use of inhaler devices had trouble with their inhalation technique. Therefore, the UIGDs for the Breezhaler and Turbuhaler should be reassessed. Because the use of some types of inhalers was difficult for older patients, developing an inhaler and guidance specifically for older patients should be considered.

No conflict of interest.

OHP-013 BLEEDING IN CARDIAC SURGERY: USE OF BLOOD COAGULATION FACTORS

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Background There are few references or publications about the management of bleeding during cardiac surgery. Practices are influenced by the availability of drugs and equipment and are team-dependant.

Off-label use of blood coagulation factors (BCFs) has become a major public health and financial concern.

Purpose To explain the increasing use of BCFs, during cardiac surgery under Extracorporeal Circulation (ECC), in a University Hospital setting.

Materials and Methods We assessed the amounts of BCFs and Transfused Blood Products (TBPs) used between 2009 and 2011 and compared these figures to the number of operations using ECC.

Results During this 2 years, the workload, in number of operations requiring ECC, increased by only 3% (with a decrease of 11% in emergencies).

The use of TBP increased 3%.

In the same time, BCF prescriptions increased dramatically (representing a cost of Euro 270,000). The analysis of quantities dispensed shows:

- An increase of over 138% for Prothrombin Complex Concentrates (PCCs)
- Increase of over 586% for fibrinogen (Fg)
- Increase of over 102% for activated factor VII

National figures for the same period were:

- 23% increase for PCC
- 70% increase for Fg
- 4% increase for FVII

Conclusions The increased use of these factors can be explained by changes in local professional practise. In order to standardise and justify the use of these costly products, multidisciplinary meetings (anaesthetists, biologists, cardiac surgeons and pharmacists) are taking place. A procedure for the management of bleeding during cardiac surgery is in development. This document should contribute to the improvement of care in terms of therapeutic efficiency and safety.

No conflict of interest.

OHP-014 CLINICAL AND FINANCIAL EFFECTS OF THE USE OF A THERAPEUTIC EQUIVALENCE PROGRAMME IN A TERTIARY HOSPITAL

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Background A Therapeutic Equivalence Program (TEP) assembles clinically equivalent drugs and defines the best therapeutic alternative included in the hospital's pharmacotherapeutic guide to drugs not included (DNI).

Purpose To measure the clinical and financial impact of a TEP in a tertiary hospital.

Materials and Methods Descriptive observational study conducted between November 2011 and January 2012. During the transcription and validation of the prescriptions of clinical units that work with unit-dose drug distribution system, pharmacist applied the TEP and notified the physician of the substitution in writing. The prescription of an unincorporated was only retained if there was a clinical justification that made substitution impossible.

The variables collected were: rate of substitution proposals accepted and rejected, justifications for not performing the substitution, cost of the DNI, cost of the therapeutic equivalent per hospital stay and percentage of therapeutic equivalents prescribed at discharge.