GRP-155 RECONCILIATION ERRORS ASSOCIATED WITH ANTIRETROVIRAL TREATMENT

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Background Electronic health records systems facilitate reconciliation of patients' medicines. However, chronic medicines prescribed by hospital physicians and dispensed only at hospitals such as HIV treatments, are not yet recorded in primary care records and sometimes the dose and frequency are not correctly recorded in patients' medical histories when they enter hospital.
Purpose To describe and analyse the discrepancies in HIV chronic treatments prescribed by hospital practitioners at admission to hospital.
Materials and Methods From June to October 2012, data of patients admitted with antiretroviral medicines were collected. HIV patients admitted to the Infectious Diseases Service or treated chronically in other hospitals were excluded. The pharmacist compared the computerised prescriptions at admission with the current HIV treatment recorded in the pharmacy chronic prescriptions dispensed programme (Farhos). In the event of discrepancies the pharmacist informed the physician/nurse and corrected the order. Non-justified discrepancies were notified and classified as reconciliation errors.
Results 68 patients' treatments were analysed (Average age: 46 years. 44 men, 24 women). 49 patients were admitted to the emergency ward (E) and 19 to other wards (O). The average HIV drugs per patient were 2.2. In 17 patients (25%) the treatment was not correct (22.5% of E and 31.5% of O).

23 discrepancies were found in 150 medicines (0.33 per patient). 12 of these were associated with darunavir (41.6% of darunavir treatments were wrong). Classified by reconciliation errors: dose/frequency incorrect (16), omission (5), wrong drug (2).
Conclusions Incorrect prescriptions at admission of chronic hospital medicines such as HIV treatments cause a great number of reconciliation errors. Complex regimes, such as those including darunavir, facilitate prescription errors. Until HIV medicines are recorded in patients' primary care records or recording is complete in hospital medical histories, the pharmacy data and pharmacist interventions are needed to guarantee the correct treatment. Due to the results, HIV stock drugs were removed from the Emergency Service.

No conflict of interest.

GRP-156 RECONCILIATION ERRORS AT CARDIOLOGY UNIT ADMISSION

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Background The reconciliation process detects medicines errors and is a key point for improving patient safety.
Purpose To analyse the incidence, type and severity of reconciliation errors at Cardiology Unit admission.
Materials and Methods Descriptive prospective observational study from October-November 2011 in patients admitted to the Cardiology Unit in a tertiary hospital. Demographic data studied: sex and age.

The patient's usual chronic treatment, obtained by comprehensive interview of the patient and by reviewing the clinical history, was compared with the medicines prescribed on admission in order to identify: no discrepancies (ND), intentional discrepancies (ID) (Formulary substitutions/modifications in response to a patient's clinical status) and apparently unexplained discrepancies requiring clarification with the physician (DRCs). After clarification, Reconciliation Errors (REs) (discrepancies resulting in physician order changes) were classified by type and severity.
Results 113 patients were included. The median age was 71.2 ± 10.4 years. 56.2% were male. Only 50 patients were reconciled due to logistical reasons.

528 medicines investigated: 159 ND (30.11%), 256 ID (48.49%) and 113 DRCs (21.40%).

After clarification, 47 (41.59%) DRCs were REs, while 5 discrepancies (4.42%) (2 patients) could not be resolved. 8.91% of prescriptions (47/528) were REs.

REs affected 22 (45.83%) of the 48 real study patients. The average number of REs per patient was 2.14 ± 1.21.

Types of RE were: omissions (n = 31), different dose/route/frequency (n = 7), unnecessary medicines (n = 5), wrong medicine (n = 3) and incomplete prescription (n = 1).

In terms of severity, REs were distributed as follows: No error, but possible (n = 10), error that does not reach the patient (n = 25), error reaching but not harmful (n = 11) and error requiring monitoring (n = 1).
Conclusions The process of taking a pharmacotherapeutic history at hospital admission is inadequate since almost half of the patients showed REs, mostly omissions.

Although most REs caused no harm, if perpetuated at discharge, they might have worse consequences and/or affect the effectiveness of treatment.

The pharmacist's work in hospitalisation units is vital to reduce errors in care transitions and represents an opportunity to develop integral pharmaceutical attention in order to increase patient safety.

No conflict of interest.

GRP-157 REDUCING THE INCIDENCE OF "MISSED DOSES" AT NORTH BRISTOL NHS TRUST (NBT)

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Background In 2010 the National Safety Agency published a report on reducing harm from omitted and delayed medicines in hospital: 'Missed Doses occur when a medicine is not given to a patient when prescribed and may result in harm'.

NBT invested in Patient Safety, including: the Safer Patients Initiative (SPI2) and the Southwest Quality and Patient Safety Improvement Programme (SWQPSI). There are various causes of missed doses, our initial focus was drug unavailability.

NBT was set targets by the local commissioning body of reducing missed doses by 20% by 2010/11, and a further 15% by 2011/12.
Purpose To reduce the incidence of missed doses due to drug unavailability. The objectives were to: Raise awareness of the effects on patients; Understand the reasons for missed doses and to introduce an e-audit tool for ward use.
Materials and Methods Using improvement methodology, tests of change were trialled and spread to 40 wards:

Phase 1: February 2010–July 2010:
We determined the criteria for missed doses and developed an e-audit tool using Plan Do Study Act (PDSA) cycles.

Phase 2: August 2010–April 2011:
The Ward e-audit tool was tested then spread; Wards were given a stock medication location report and Pharmacy prioritised missed doses.

Phase 3: May 2011–September 2011:
A Training package was introduced/spread and Ward Posters and Handover sheet were developed.

Phase 4: October 2011–August 2012:
Monthly run charts of results were shared with senior managers. Pink order slips and orange leaflets were introduced.

Results We achieved our target for 2010/11. The 1.95% target for 2011/2012 was more difficult but was achieved as shown in the table.

Conclusions In achieving our targets we improved communication and changed the culture from staff not unduly concerned with missed doses to staff taking action to reduce missed doses and improve patient care.

Abstract GRP-157 Table 1

Date	% Missed Doses (Target 1.95%)
Nov 2011	2.37%
Jan 2012	1.88%
Feb 2012	1.47%
Mar 2012	1.05%

No conflict of interest.

GRP-158 REPORTING AND ANALYSIS OF ERRORS IN CANCER TREATMENT IN THE ANTIBLASTIC DRUGS LABORATORY OF THE EUROPEAN INSTITUTE OF ONCOLOGY

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Background The lack of management software for patients undergoing chemotherapy suggested to us that we should investigate errors that have occurred at all stages of the process: prescription, transcription, preparation, distribution and administration of treatment.

Purpose To encourage reports and classify the errors, in order to develop a computerised system of internal management of chemotherapy which can reduce the risk of error at all stages.

Materials and Methods Two reporting channels were established: one for major errors, such as prescriptions or preparations containing incorrect drugs or dosages, improper units of measurement, diluents incompatible with the active ingredient, improper administration. These errors are shared in corporate software with the Risk Management Office.

The second concerns minor errors, prescriptions containing compilation errors, incomplete compilation of the treatment regimen, incomplete administration of treatment; these errors are reported in an internal Excel file.

Results From January to September 2012, 73 major errors were reported from a total of 30406 preparations. Some of these were: prescription of paclitaxel instead of docetaxel, vinorelbine written as vinblastine; preparation of a 5-fluorouracil weekly dose in a two-day infusor, administration of paclitaxel bag to the wrong patient. In 85% of these cases the intervention of pharmacist avoided the error. 468 minor errors were reported, including 447 prescription errors, 3 transcription errors, 8 for lack of a cheque of the output treatment and 10 for incomplete delivery of the treatment.

Conclusions This analysis allowed us to draw a picture of the most frequent types of error. Most of them concerned the prescription stage, which we hope to minimise with the implementation of a computerised prescribing system. This will also cut down the transcription and administration errors by reading the barcode of the preparation with a patient wristband. The reduced number of preparation errors can be attributed to the use of an automated system for chemotherapy preparation.

No conflict of interest.

GRP-159 RETROSPECTIVE ANALYSIS OF MOST FREQUENT RISK ERRORS RELATED TO INFORMATIZATION SYSTEM FOR PRESCRIBING AND ADMINISTERING MEDICATION

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Background Although implementing an electronic system shows significant functional effects associated with saving time, reducing costs and contributes to a safe medication process by improving patient safety and quality of service, it can also cause confused actions leading to new types of medication errors (MEs).

Purpose To identify and classify the most frequently observed MEs generated by the computerised tool when prescribing (physician order) and administering drugs (nurses' work).

Materials and Methods In June 2011, Orbis Medical (Agfa-Healthcare) software was introduced in our hospital for the medication process including integrated electronic prescription, pharmaceutical analysis and administration (4 clinical units representing 107 beds). Different risks of error were identified during pharmaceutical interventions (PIs) recorded between June 2011 and October 2012 and classified according to the French Society of Clinical Pharmacy recommendations. The focus is on MEs related to computerisation.

Results 605 PIs were made on 3933 prescriptions supplied over 466 days. Among these notifications, 1/3 were attributable to the use of the electronic system. Most MEs reported were due to: 1-regarding the prescription: incorrect dose regimen due to selecting the wrong units, incorrect schedule for dose administration, misuse of the commentary zone (free full text related to specific information), redundancy of 2 lines of the same prescribed drug, false interpretation of alert message; 2-regarding administration: failure to record administration, wrong drugs selected to be administered, misuse of the philtre function, single validation for different schedules.

It was noticed that MEs decreased after the staff had used the software for a period of time.

Conclusions Introducing an electronic tool may have an impact on professional practise. Although making healthcare processes safer, it generates new types of iatrogenic harm (other studies have revealed 5–35% MEs were attributable to computerisation). The introduction of new technology should be accompanied by regular training and evaluation to prevent misuse and potential adverse events.

No conflict of interest.

GRP-160 REUSE OF STERILE IV LIDOCAINE 2% VIALS IN BERGMANN'S INFUSION IN AN ORTHOPAEDIC DEPARTMENT IN STIP CLINICAL HOSPITAL

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Background Single-use vials should be used clinically only for one dose for one patient and then discarded or reused under strictly controlled conditions. Certain conditions may justify repacking of single-use vials into smaller doses each intended for a single patient. This process must be performed under aseptic conditions by properly trained operators.