management system (SAP®) and compared them with the same period the previous year.

Results During the study 43 non-haematology patients were treated with antifungal agents. In 38 patients (88.4%) the approved treatment guidelines were followed and in 5 patients (11.6%) they were breached.The most significant breaches occurred in internal medicine (22.2%) and in critical care (3.7%).

Regarding avoided costs for the six months of the study, antifungal costs were reduced by 240,616 euros. We observed a 61.9% and 48% increase in use in fluconazole and anidulafungin, and a 42.8% and 41.7% decrease in caspofungin and liposomal amphotericin B use. These results are consistent with the recommendations contained in the guide (first line use of fluconazole in non-immunosuppressed patients and in azole resistance use anidulafungin). Micafungin use was restricted to the paediatric population with consumption equal to that in the previous period.

Conclusions The treatment guideline compliance was excellent at our hospital, resulting in a significant decrease in antifungal expenses. Implementation of these guidelines in the management of high-cost drugs resulted in significant cost reductions and therefore in a more rational use of healthcare budgets.

No conflict of interest.

GRP-029 ASSESSMENT OF THE THERAPEUTIC MANAGEMENT OF PATIENTS ON WEEKEND LEAVE

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[1]A Camerlynck, [1]S Allemon-Dewulf, [2]V Herlin, [1]M Delobel. *[1]HOPITAL MARITIME, Pharmacy, Zuydcoote, France; [2]HOPITAL MARITIME, Quality department, Zuydcoote, France*

Background A patient's suicide attempt with benzodiazepines was reported to our quality department. The patient ingested a bottle of drops given for his weekend leave. According to French regulations, patients are allowed to leave hospital for at most 48 hours but administratively they are still hospitalised and under the director's responsibility. Their medicines must be provided for this period.

Purpose To assess the therapeutic management of patients on weekend leave in order to highlight opportunities for improvement.

Materials and Methods We performed an audit of the medical management of patients on weekend leave. The audit was performed using a form containing open questions. One nurse from each department was audited.

Results Although nurses can't refer to any procedures on this topic, all care units provide medicines by strictly following the prescription. Multidose vials (drops, syrups, etc.) are not unpacked and are given in their entirety. One care unit out of nine mentioned that patients are stated to be on leave in the patient's medical record. Only 22% of audited nurses systematically put the treatment in a pillbox. Several nurses reported that pillboxes weren't available which resulted in treatments being bulk packed in a bag by 66% of wards or in a plastic pot by 11%. 56% of treatments were delivered with the care plan coming from the patient record.

Conclusions The audit highlighted the need to standardise practises (traceability, packaging of treatment and the presence of a care plan) and improve safety, to purchase daily pillboxes for all wards and to solve technical problems for delivering multidose medicines.

The pharmacy, in cooperation with the quality department, wrote a procedure in order to refocus the medical management of patients going on leave. The pharmacy is now responsible for delivering oral syringes for drinkable solutions in order to prevent such an accident from happening again, by delivering the exact amount prescribed.

No conflict of interest.

GRP-030 AUDIT OF PHARMACISTS' INTERVENTIONS WHEN SCREENING ADULT CHEMOTHERAPY PRESCRIPTIONS ON AN ELECTRONIC PRESCRIBING SYSTEM

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[1]N Stoner, [2]S Dhaliwal, [2]C Langran, [1]E Chan. *[1]Oxford University Hospitals NHS Trust, Pharmacy, Oxford, UK; [2]The University of Reading, School of Pharmacy, Reading, UK*

Background The UK Cancer Standards require there to be protocols for chemotherapy treatment. The Thames Valley Cancer Network (TVCN) has developed and maintained network-wide protocols, which are continually updated for each tumour site-specific group. Clinical verification of chemotherapy prescriptions by pharmacists is an essential step to ensure patient safety and compliance with protocols, in line with national standards.

Purpose To audit pharmacists' interventions when clinically screening adult chemotherapy, clinical trial and supportive care prescriptions for oncology and haematology patients in the Oxford University Hospitals NHS Trust (OUH), and to ascertain the level of compliance of these prescriptions with relevant protocols and guidelines. To compare results with the audit undertaken in OUH in 2010.

Materials and Methods Pharmacists clinically screening the prescriptions completed an intervention form at the time of screening to enable prospective data collection over a three-week period. The screening pharmacists graded the intervention at the time of data collection, and interventions were subsequently independently graded by the investigator. The results of this audit are compared to a previous audit carried out for OUH, and the aim was to compare interventions during the two audit years.

Results The OUH had a decrease in the number of interventions made by 24% compared to the audit in 2010. The number of moderate and major interventions made also decreased by 5% and 23% respectively. Time spent on making interventions also decreased. Incorrect frequency/duration/date of treatment, inappropriate dose, confirmation of dose/regimen/prescriptions were prescribed according to guidelines compared to just 68% in 2010.

Conclusions The changes implemented after the OUH audit in 2010 were successful and this is seen in the results. To improve further this audit should be conducted across TVCN hospitals every year so that each hospital can monitor their progress. Having regular training days for clinicians would be beneficial.

No conflict of interest.

GRP-031 BARCODE TECHNOLOGY ON THE SAFETY OF CYTOSTATIC DRUGS ADMINISTRATION, ONE YEAR EVALUATION

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MC Serrano Vicente, A Martínez Crespo, MC Viñuales Armengol, MP Amador Rodríguez, M Cabrero Ciprés. *Hospital San Jorge, Pharmacy, Huesca, Spain*

Background Technology has been developed to verify medicines by incorporating barcode verification technology within an electronic medicines-administration system (eMAR barcode) to prevent serious medicines errors during administration of medicines.

Purpose To evaluate the implementation of an electronic system of validation and control of cytostatic drug administration using barcodes and an electronic medicines-administration system (eMAR).

Materials and Methods To identify patients we used barcoded wristbands and we acquired PDAs as eMAR, which were connected to the e-prescribing programme by the hospital WIFI.

After having received the medicine sent from the Pharmacy Department, the nurse scans the barcodes printed on the patient's wristband, then drug information about the medicines to be administered appears on the screen of the PDA (patient data, route, speed and time of administration, sequence order, components, and number of administrations). After scanning the barcode on the patient's

wristband the nurse scans the barcode on the medicine labels of cytostatic drugs. If the dose being scanned corresponds to a pharmacist-approved medicines order and the patient is due for this dose, administration is automatically documented. However, if the dose does not correspond to a valid order, the application issues a warning. Every action performed with PDAs is recorded in the database.

Results During the first year since its introduction, this system has been used in 709 oncology-haematological and rheumatologic patients (24.8% haematology, 49.1% oncology, 22.6% rheumatology patients), 3995 medicine orders have been scanned (22.2% haematology, 60.2% oncology, 17.6% rheumatology) and 11435 doses identified (12.3% haematology, 80.8% oncology, 6.9% rheumatology).

99.7% of the doses identified with this system were administered while the remaining 0.3% were not administered to patients due to the occurrence of several adverse reactions.

Variables validated by the scan were: patient, drug administration sequence, start and end times. Possible errors detected: incorrect order of administration, drug already administered and drug selected that does not belong to the scanned patient. During the study period we detected 2 cases of selected drug that did not belongs to scanned patient. The system issued a warning that prevented the wrong drug being administered to the patient, probably the worst error with cytostatic drugs administration.

Conclusions The implementation of barcode medicines verification technology embedded in an eMAR in a day hospital acted as an additional safety net in medicines administration and patient safety. This system also improved treatment efficiency and achieved greater interdisciplinary collaboration.

No conflict of interest.

GRP-032 BENEFICIAL EFFECT OF HOSPITAL PHARMACIST PARTICIPATION IN INTENSIVE CARE ROUNDS: REDUCTION IN MEDICINES ERRORS AND HOSPITAL COSTS

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[1]AL de Goede, [1]PMLA van den Bemt, [1]ML Becker, [2]J van Bommel, [3]NGM Hunfeld. *[1]Erasmus MC, Department of Hospital Pharmacy, Rotterdam, The Netherlands; [2]Erasmus MC, Department of Intensive Care, Rotterdam, The Netherlands; [3]Erasmus MC, Department of Hospital Pharmacy and Department of Intensive Care, Rotterdam, The Netherlands*

Background Medicines errors may result in patient harm. Especially in intensive care patients, adverse drug events caused by medicines errors are common. Interventions by hospital pharmacists have been shown to reduce adverse drug events and costs in intensive care units (ICUs).

Purpose To evaluate the effect of active participation of a hospital pharmacist in the ICU on medicines errors and hospital costs.

Materials and Methods A three-month pilot study was performed at the adult 32-bed ICU of the academic hospital Erasmus MC. Four hospital pharmacists were trained in specific aspects and protocols of intensive care. From July to September 2011, each patient's medicines profile was reviewed weekly using a standardised written form and a pharmacist was present on rounds. Potential medicines errors requiring intervention were documented and discussed during the round. In addition, the amount of time spent performing clinical activities at the ICU was recorded.

Results 267 medicines reviews were performed for a total of 169 patients in 51 rounds. 288 interventions for a total of 120 drugs were made. About 60% of the medicines reviews resulted in at least one intervention with an acceptance rate of 56%. Non-acceptance was mainly due to a lack of information at the time the medicines review was performed. 30% of interventions were relating to unnecessary drug use, 24% to drug omission and 17% to a wrong dose. Time spent on medicines reviews and visiting rounds was 7.3 hour per week. Based on these results we developed a business case for structural participation of a hospital pharmacist at the ICU.

Conclusions Participation of a hospital pharmacist in ICU rounds improves medicines safety and can be cost-effective. The pilot study and business case have resulted in the appointment of 0.5 FTE hospital pharmacist in the ICU.

No conflict of interest.

GRP-033 BENZODIAZEPINE DRUG ABUSE AMONG INTRAVENOUS DRUG USERS

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[1]I Bacovich, [2]J Delás, [3]N El Hilali, [3]I Javier, [3]M Aguas, [1]V González, [1]R Kistmacher, [1]O Díaz, [1]L Andreo, [1]J Camí. *[1]SAPS, Creu Roja, Barcelona, Spain; [2]HOSPITAL SAGRAT COR, Internal Medicine, Barcelona, Spain; [3]HOSPITAL SAGRAT COR, Pharmacy, Barcelona, Spain*

Background Benzodiazepine drug abuse is frequent in the general population. The reasons for this could be very diverse.

Purpose To review the role of benzodiazepine in intravenous drug users.

To find out which benzodiazepines are most used in this group and sought after on the black market.

Materials and Methods We interviewed five intravenous drug users of heroin or cocaine in Barcelona about their associated use of benzodiazepine. They were trained to interview other intravenous drug users with the same questionnaire that they had answered. All of them had looked for benzodiazepines on the illegal market at least once.

Results The analysis of the first 25 questionnaires answered showed that the most used benzodiazepine was clonazepam, used by 72% and the drugs used differed in half life and effects.

Conclusions Benzodiazepines selected by this sample of patients did not meet criteria for half-life or the main indications. They may simply be a reflection of which benzodiazepines are most prescribed nowadays by psychiatrists in the community.

Abstract GRP-033 Table 1

	N: 25	%
Clonazepam	18	72
Alprazolam	17	68
Clorazepate dipotassium	5	20
Lorazepam	4	16
Diazepam	4	16
Midazolam	2	8
Lormetazepam	2	8
Zolpidem	1	4

No conflict of interest.

GRP-034 BLOOD PRESSURE CONTROL AND ANTIHYPERTENSIVE PHARMACOTHERAPY PATTERNS IN A HYPERTENSIVE PORTUGUESE POPULATION

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[1]M Morgado, [2]J Soares, [2]A Almeida. *[1]Hospital Centre of Cova da Beira, Pharmaceutical Services, Covilhã, Portugal; [2]University of Beira Interior, Health Sciences Faculty, Covilhã, Portugal*

Background Interventions to improve blood pressure (BP) control in hypertension have had limited success in clinical practise despite evidence of cardiovascular disease prevention in randomised controlled trials.

Purpose To evaluate BP control and patterns of antihypertensive pharmacotherapy in a population in the Central Region of Portugal, attending a hospital outpatient clinic for routine follow-up.