had arisen, 4% reported that they had run out of kits and 2.7% said there was confusion when signing the kits out of the controlled drug (CD) register.

Three weeks out of 25 saw all the kits being used, average usage is 4 intubation kits per week. 97.4% reported the doses used were effective in sedating and paralysing the baby prior to intubation, 2.6% commented that they were somewhat effective but that in one occasion the paralysis had not been optimal, however they questioned whether the cannula had been functioning properly.

Conclusion The implementation of ready to use intubation drug kits has made the process of preparing for an intubation easier and quicker for all involved in the process. Having the dose banding set up on the electronic prescribing system has reduced the chance of prescribing errors and the pre- filled kits have reduced the chances of calculation errors during drug preparation. When the kits run out there are instructions in the guideline detailing how to make the required concentrations. As a result of this study standardised teaching videos were introduced from the beginning of July 18. Further simulations have been completed to ensure that all staff follow a standardised process. Next steps are to ensure that the documentation in the CD register includes all necessary information without any need for amendments. To overcome this, a stamp is being designed to use in the book each time a patient requires a kit, thereby providing a prompt for the nurses.

P048 THE EFFICIENCY OF AN ELECTRONIC PRESCRIBING SYSTEM ON CLINICIAN'S PRESCRIBING THROUGH THE PHARMACIST'S REVIEW FUNCTION

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Aim To assess the efficiency of an electronic prescribing system (EPS) on clinician's prescribing through the implementation and use of the pharmacist's review function.

Introduction An electronic prescribing system, PICS, was launched in one ward, the liver unit, in April 2017. Many features were available on the EPS to support safer prescribing such as clinical decision support and prescribing guidance. One particular feature was the review note function, which was available for pharmacists, to attach a review note to a selected drug, highlighting an intervention, in order for the clinician to review. Once a review note was added, an eye icon appeared next to the selected drug on the drug chart. Once the prescription was reviewed, it could be signed off to signify the note was acknowledged and actioned. Implementing the review function, pharmacists are guiding safer prescribing of clinicians based on their clinical knowledge and expertise.

This is evidenced by the Royal College of Physicians who have highlighted how healthcare professionals should support each other on the safer use of medicines,[1] and The Royal Pharmaceutical Society, that stated 'the pharmacy team provides expertise and advice to support the safe and effective use of medicines by patients'.[2]

Methods An audit was completed, over a two-week period, to assess the type of interventions, the timeliness in which the intervention was noted once the prescription was added and the timeliness in which the clinicians reviewed and actioned a prescription which had a review note attached to it by the pharmacist. Pharmacists annotated all interventions using the review function on PICS. The date and time when the prescription was added, the review note was added and the review note was signed off was recorded. The type of review note (intervention) and the change made, if made, was also noted. It is recognised that there will be a delay from when the pharmacist adds the review note and the clinician views it. For urgent reviews, the clinician was verbally notified.

Results 29 interventions were recorded over the two-week period, with the majority of interventions involving dosing issues (41%), followed by interventions regarding formulation (17%), drug and frequency (both 14%). Most review notes were added 24 hours (34%) after the prescription was added onto the patient's drug chart followed by those noted within an hour (21%) of the prescription being added. 25 prescriptions (86%) were amended upon the advice of the pharmacist whilst 4 prescriptions (14%) were not, due to a clinical requirement or if the patient had been discharged. 21 review notes (72%) did not require the pharmacist to verbally inform the clinician to amend the prescription.

Conclusion The audit highlighted the importance of the pharmacist's review function in highlighting interventions, whether this was related to dosing, formulation, frequency or drug. In addition, it highlighted the value of the pharmacist's interventions via the review function as most review notes were amended as per the pharmacists' advice and the majority did not require verbal notification to the prescriber, stressing the importance of the function.

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P049 PHARMACIST 5PS- POSITIVE PRAISE PRODUCES PLEASING PRESCRIBING

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Aim Learning from Excellence (LfE), a positive reporting initiative, has two main objectives: to capture and learn from episodes of excellent practice and boost morale through positive feedback. The PRAISe project,[2] tests the hypothesis that positive reporting and appreciative inquiry (AI) can be used as interventions to facilitate behavioural change and improvement in antimicrobial stewardship.

Methods LfE was applied as a quality improvement (QI) intervention for antimicrobial use on PICU over a 12 month period: baseline (3 months), intervention (6 months) and post intervention (3 months) phases. 31 PICU charts were screened weekly by PICU research nurses, this included any documentation added by a pharmacist to improve antimicrobial stewardship. Positive reports (IR2) were generated for gold standard prescriptions and excellence in antimicrobial stewardship, followed up by AI. QI suggestions derived from AIs were applied to the antimicrobial stewardship programme of the unit e.g. RAG rating antibiotics to the prescription charts. PICU pharmacists recorded interventions relating to antimicrobials during the data collection period. Pharmacist interventions were split into proactive or reactive: proactive involving

advance confirmation that prescriptions were individualised to best therapy for patients and reactive if a prescription was incorrectly written or no clarification was sought from the pharmacist during ward round. Mini-AI interviews were conducted with the pharmacists at the end of the QI project to assess their opinions on changes to the antimicrobial stewardship programme.

Results The chart reviews by nursing staff highlighted 98 pharmacist interventions at baseline, 275 during the intervention phase and 80 post intervention. The pharmacists recorded an extra 138, 340 and 135 baseline, during and post intervention. Proactive intervening increased during each phase 68 (49.2%), 183 (53.8%) and 84 (62.2%), respectively. Thirty eight out of the 613 (6.2%) extra interventions were not accepted, with 25 (65.7%) of these being reactive.

Gold standard prescribing improved during the intervention stage and was sustained in the post intervention phase. QI interventions brought out from the AIs involving pharmacists included RAG rating antibiotics according to priority to de- escalate to a narrower spectrum and presence at the daily microbiology round to document and communicate decisions to the wider team. AIs held with the pharmacists post project included the following themes: improved antimicrobial knowledge and understanding for directed therapy, greater communication 'as now part of the PICU microbiology team', 'increased confidence to challenge antimicrobial decisions'. The pharmacists perceive there continues to be an increase in antimicrobial discussions on the daily PICU ward round.

Conclusion Positive re-enforcement can improve a prescriber's antimicrobial prescribing and documentation and encourage them to proactively seek pharmacy input to ensure best directed therapy for antimicrobials. This contributes to the overall quality of antimicrobial stewardship and patient care on the unit.

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P050 ANALYSIS OF POSACONAZOLE THERAPEUTIC DRUG MONITORING IN PAEDIATRIC HAEMATOLOGY AND ONCOLOGY PATIENTS

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Posaconazole is a broad spectrum triazole antifungal with activity against a range of invasive fungal pathogens including Candida and Aspergillus species.[1] Due to its range of activity it has been shown, by randomised controlled trials, to be superior to fluconazole and itraconazole for prevention of fungal infection in neutropenic patients,[2] as well as being cost saving.[1] Fungal prophylaxis with posaconazole has become the drug of choice within a paediatric cancer unit due to its broad spectrum of activity however there are significant differences in bioavailability of the suspension and tablet preparations and there is limited data relating to its use in the paediatric population.

Objective To determine if the paediatric cancer unit is undertaking effective dosing and appropriate therapeutic drug monitoring (TDM) of posaconazole in paediatric haematology and oncology patients.

Methods A retrospective analysis of clinical data from 38 paediatric patients treated with posaconazole was undertaken. Patients received either 18–24-mg/kg/day posaconazole suspension in divided doses (maximum 800-mg/day,[3] or 6–8-mg/kg/day posaconazole tablets (maximum 300-mg/day). Compliance with this guidance, initial and subsequent levels, efficacy and tolerability were analysed.

Setting The study was undertaken within the XXXX cancer unit; data for patients treated with posaconazole between January 2016 and August 2017 was reviewed.

Key findings There was good compliance with the dosing advice for liquid and tablet posaconazole with 82% of patients dosed correctly. Due to this, the initial trough level of $\geq$0.7 mg/L was achieved in 82% of patients within 14 days of treatment initiation; there were no significant differences between formulations. Trough levels were monitored on a monthly basis for 71% of patients but dose adjustments were necessary in 34% of patients. Posaconazole had a good tolerability profile during the study with most side effects resolving on continuation of treatment however one patient had to discontinue the drug due to widespread rash. No patients developed a fungal infection whilst on posaconazole.

Conclusion Safe and effective dosing and monitoring of posaconazole suspension and tablet formulations has been undertaken at the XXXX. Trough levels attained the desired target concentration of $\geq$0.7 mg/L in the majority of patients but dose adjustments were required with both formulations emphasising the need for regular TDM. Posaconazole was well tolerated and clinically effective in preventing fungal infection indicating its appropriateness in this patient group. From this review, a guideline for initiation and appropriate TDM of posaconazole can be developed.

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P051 THE BIGGER YOU ARE THE HARDER YOU FALL? SHORT TERM EFFECTS OF LUM/IVA (ORKAMBI) ON LUNG FUNCTION IN CHILDREN WITH CYSTIC FIBROSIS

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Aim Cystic Fibrosis conductance Transmembrane Regulator (CFTR) protein modulators represent a major breakthrough in the pharmacological management of Cystic Fibrosis (CF). Previous studies report acute changes in lung function after first administration of lumacaftor/ivacaftor (LUM/IVA) without a clear underlying mechanism.[1 2] Our aim was to explore links between changes in percent predicted forced expiratory