destruction of expired stock is also time-consuming. When a licensed midazolam 5 mg/ml oral solution single dose preparation became available, the Trust wanted to investigate whether a switch to this product would be beneficial. The new product is supplied as a single dose preparation and is orange flavoured.

Method Pharmacy completed a 'new drug risk assessment' for the product ensuring that the excipients were appropriate for paediatric patients. The risk assessment also identified possible problems associated with the implementation of the new product across the trust (eg different strength, single use bottle, time taken for dispensing of single bottles rather than a stock bottle, storage capacity for multiple bottles, changes to documentation in CD registers) [This hospital stores and records midazolam in CD cupboards]. Any potential cost pressure was also identified and highlighted to the finance department. A pilot was undertaken with 10 patients. Nurses and anaesthetists were asked for feedback regarding a switch to this product prior to implementing a complete switch. The electronic prescribing system was updated, and communications circulated to the hospital to alert all staff of the change of product.

Results All nurses and anaesthetists involved in the pilot were positive in their evaluation of the new product. Comments such as 'the child took this well and then accepted other medicines' were recorded. Since the switch occurred there have not been any clinical incidents reported of issues with running balances or patient safety incidents involving oral midazolam. All areas reported no impact upon department due to storage capacity or increased workload based upon record keeping. Since moving to the new product feedback from clinicians has continued to be positive particularly relating to improved patient compliance due to both flavouring and smaller administrative volumes. The pharmacy has also not had any requests for return for destruction of midazolam as all destructions of remaining liquid is carried out at a ward level. The additional cost was £18,300 but the Trust were happy to offset this against the reduced risk of cancelled operations due to inadequate pre-medication. The nursing staff have noted no increased workload in practice. The has been a neutral impact upon pharmacy workload as although there is increased dispensing times as more bottles are dispensed per order the pharmacy has not been required to destroy expired stocks.

Conclusion The move to the licensed oral midazolam liquid for pre-medication has resulted in better patient compliance, there have been no clinical incidents reported and workload has not been adversely affected.

P27 THE ACCURACY OF TABLET SPLITTING TO PROVIDE APPROPRIATE PAEDIATRIC ENALAPRIL DOSES

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Aim The angiotensin-converting enzyme inhibitor, enalapril, is considered a first-line treatment for chronic heart failure in children. However, there is a lack of an age-appropriate formulation and tablet splitting, although not recommended, is common, in an attempt, to provide suitable doses for paediatric use. An analysis of currently available UK brands explored the accuracy of splitting low-dose tablets of enalapril.

Method Four different commercially available enalapril tablets were evaluated: Innovace® enalapril 2.5 mg and 5 mg, (both Organon Pharma UK), generic enalapril 5 mg (Ria Generics Ltd) and generic enalapril 2.5 mg (Dexcel Pharma Ltd). Five tablets from each brand/dose were split manually where possible. For unscored tablets, a sharp knife or metal spatula was used to replicate the home environment. Tablet fragments were weighed. Using high-performance liquid chromatography, the percentage of the theoretical 1.25 mg or 2.5 mg dose contained within the half-tablet fragments was analysed (percentage label claim [%LC]) and the uniformity of dosage units was calculated (acceptance value [AV]), where an AV of ≤15 is considered to meet the acceptance criteria.

Results Manual splitting proved relatively easy only with the deep-scoring of the Innovace 5 mg tablets; 0.007 to 0.483 mg of material was lost across the five replicates, the mean%LC (SD) was 97.5% (4.3) and the AV was 11.3. The unscored Innovace 2.5 mg tablets split less easily; 0.113 to 0.627 mg of material was lost, mean%LC (SD) was 99.9% (10.7) and the AV was 25.7. The soft 5 mg Ria Generics tablets split with high variability: 0.609 to 13.488 mg of material was lost, mean%LC (SD) was 96.0% (17.9) and AV was 45.5. Dose variation was also high with 2.5 mg Dexcel tablets, with 1.097 to 13.801 mg of material lost, mean%LC (SD) of 95.9% (11.7) and an AV of 30.7.

Conclusion In general, splitting low-dose tablets of enalapril for paediatric use results in inaccurate dosing. Acceptable dosing was only achieved with the scored 5 mg tablets. Accurate doses below 2.5 mg were not achieved. An age-appropriate dosage formulation of enalapril to provide dosing below 2.5 mg is needed.

P28 AN AUDIT OF LIVER FUNCTION TESTING IN PAEDIATRIC PATIENTS NEWLY STARTED ON KAFTRIO®

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Aim To investigate whether the current practice of liver function test (LFT) monitoring within a large tertiary paediatric cystic fibrosis centre adheres to local and national guidelines with respect to baseline monitoring, frequency of monitoring in the first year of treatment and action taken in the event of abnormal results for patients newly started on Kaftrio® treatment.

Method All patients currently receiving Kaftrio® treatment were identified. Patients were excluded if they had not been on treatment for one year, if they had prolonged gaps in treatment or if they had bloods taken at outreach clinics with results not accessible to the investigator. Data was retrieved from each patient's electronic laboratory reports and recorded on a data collection form. Data collected included: date Kaftrio® started; did the patient have baseline LFTs within one year before starting; did the patient have their first LFTs done 3 months after starting; in the first year did the patient have four sets of LFTs at 3-month intervals; were LFTs in range; if LFTs were abnormal was appropriate action taken. A 2-week tolerance was permitted. The data was analysed to assess compliance to guidelines. Assessments of transaminases (ALT and AST) and total bilirubin are recommended prior to initiating treatment then every 3 months during the first year of treatment.[1–3] Elevated ALT/AST two to three times the upper limit

of normal (ULN) with normal serum bilirubin should prompt repeat LFTs within 8 weeks.[1] ALT/AST greater than five times ULN, or greater than three times ULN with high bilirubin warrants treatment being interrupted.[1–3]

Results 31 patients were reviewed. 30 patients (97%) had baseline LFTs. 10 patients (32%) had LFTs at 3 months. Of the 21 patients who did not, 15 of those had their first set of LFTs taken too early at 1 or 2 months and 6 were taken late at 4,5 or 6 months. Zero patients had four sets of LFT results taken at the correct 3-monthly intervals in the first year. 4 patients (13%) had at least one set of abnormal LFTs. 50% of abnormal results were acted upon in accordance with guidelines.

Conclusion The results showed that, other than baseline monitoring, current practice is not in accordance with guidelines both in relation to frequency of LFT monitoring and appropriate action being taken on the finding of abnormal results. Further study is required to investigate the reasons for poor outcomes and how compliance with the guidelines can be improved. Encouragingly, the rate of liver impairment as an adverse drug reaction was low. Trial data should be reviewed to assess the significance of waiting until month 3 to start LFT monitoring (i.e. when do deranged LFTs typically first manifest?) and therefore whether early testing is problematic (in patients with no history of liver impairment). Guideline development should be an area of focus to put measures in place to improve guideline compliance. However, with MDT agreement, consideration should be given to adapting local practice to deviate from national guidance to better fit real-world practice.

REFERENCES

1. Trust guideline. Management of children with Cystic Fibrosis. (local access only).
2. Vertex Pharmaceuticals (Europe) Ltd (2022) Kaftrio 75 mg 50 mg 100 mg film coated tablets. Available at: https://www.medicines.org.uk/emc/product/11724/smpc [Accessed June 2022]
3. MHRA (2022) Drug Safety Update Ivacaftor, tezacaftor, elexacaftor (Kaftrio®) in combination with ivacaftor (Kalydeco): risk of serious liver injury; updated advice on liver function testing. Available at: https://www.gov.uk/drug-safety-update/ivacaftor-tezacaftor-elexacaftor-kaftriov-in-combination-with-ivacaftor-kalydeco-risk-of-serious-liver-injury-updated-advice-on-liver-function-testing [Accessed June 2022]

P29 CREATING A DIGITAL PATIENT HELPLINE FOR MEDICINES INFORMATION AT A SPECIALIST PAEDIATRIC HOSPITAL

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Aim To improve the patient facing aspect of a Medicines Information (MI) service by setting up a patient helpline that meets the needs and expectations of patients and carers at the Trust. The MI team identified a patient helpline as a potential area for improved visibility and growth within the service.[1] To align with other clinical workstreams within the Trust, the MI team decided to develop a virtual helpline within an existing patient facing app, a digital platform used by families to communicate securely with their clinical teams.

Method The MI team and the Trust ICT team worked together to create a contact box within the existing 'Medication' page on the app, through which patients can ask clinical questions about their medicines. All in-app messages arrive directly to an inbox within the EPMA system, ensuring patient confidentiality remains intact.

To limit enquiries unrelated to MI (requests for repeat prescriptions or supply of medication) and to give users an expected turnaround time for answers to enquiries, a brief description of the MI service was added to the Medication homepage. For all urgent enquiries and clinical emergencies, app users are signposted to a more appropriate service via an automatic response. Baseline data (number of enquiries) from patients or carers were retrospectively collated over an 18 month period prior to the intervention using MiDatabank software. Throughout the first 4 weeks of the service launch, all enquiries received via the app were recorded using Microsoft Excel. Relevant clinical enquiries were also inputted into MiDatabank following standard MI practice. The overall number of enquiries received during this time and the percentage answered on time were also recorded as part of standard MI Key Performance Indicators (KPIs).

Preliminary Results The MI team received 78 enquiries from patients or carers in the 18 months prior to the app service launch, 72 of these enquiries were relevant to MI (approximately 4 per calendar month). During the first 4 weeks, 82 enquiries were received via the app alone. Of these, 13 enquiries were relevant to MI with 69 enquiries relating to supply. Full analysis of key themes and trends is ongoing.

Conclusion The data have clearly demonstrated an increase in direct contact from patients and carers to the MI service; within 1 month there has been a 4-fold increase in enquiries compared to baseline data. The main limitation of the data used as a comparison is that it has only been collected over the first month of launch. To mitigate this the MI team will continue to collect data through 'snapshot' audits at months; 3, 6, 9 and 12. This will help identify whether the MI team are making a sustained impact to patient care through a digital patient helpline.

Given the significant increase in workload for the MI team, the data may be used to support additional staffing within the team.

REFERENCE

1. UK Medicines Information, Thames Valley and Wessex Chief Pharmacists Network. Implementing a medicines helpline for hospital patients: a practical guide for hospital pharmacy. January 2017.

P30 PHARMACIST LED ALLERGY CLINIC: IMPROVING PAEDIATRIC PATIENT CARE

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Problem Due to the increase in prevalence and burden of allergic disease, the demand for specialist hospital allergy services is significant,[1] and has given rise to the two main problems. Firstly, increased long waiting times for new and follow-up appointments and secondly patient safety being compromised.[2]

Aim By December 2019, to firstly reduce the outpatient clinic waiting time by 60% for those patients referred to pharmacist clinic for an eczema review after the initiation of topical immunomodulatory therapy. Secondly to complete 100% of medication reviews within 4 weeks for those patients referred to pharmacist clinic on multiple drug regimens with non-adherence issues.

Strategy for change Pharmacist to run one paediatric allergy clinic every two weeks. Plan 1: Eczema review after the