They contributed expert knowledge on formulations and doses, supporting delivery of high-quality treatment and equity of access for children and young people with HCV in England. Education and awareness of new Paediatric formulations for local Pharmacy teams may prevent future dispensing errors.

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P06 EVALUATING THE NOVEL ROLE OF THE PAEDIATRIC ENDOCRINE PHARMACIST

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Context, Situation or Problem The UK clinical standards for paediatric endocrinology stipulate that a designated pharmacist should be a member of the multidisciplinary team at a lead specialist centre.[1] However, the paediatric endocrine pharmacist role remains underutilised and ill-defined nationally. The aim of this quality improvement project was to develop the specialist clinical pharmacist role within a large tertiary paediatric endocrine department, and to evaluate and assess the contribution of the pharmacist to patient care. The project was undertaken from July 2021 to May 2022 and focussed on two newly defined pharmacist-led roles: 1) review and prescribing for day case paediatric patients receiving zoledronate infusions for bone fragility, and 2) steroid medication review clinics for children with adrenal insufficiency. Day case duties were previously undertaken by the specialist registrar, whereas the outpatient duties comprised the development of a new clinical service. The number and type of prescribing interventions were documented. A validated 10-item experience of service questionnaire (ESQ) was offered to patients and parents at the end of appointments to measure their satisfaction of care.[2] The questionnaire outcomes were converted to a standard numerical score and presented as percentage points. During the review period, the pharmacist led on 36 day cases for zoledronate infusions and 60 outpatient clinic appointments for hydrocortisone medication review. For the day case cohort, the pharmacist made changes to the patient's usual calcium formulation in 12 cases (33%), identified the need for vitamin D supplementation or treatment dose for 7 cases (19%), and prescribed off-guideline calcium dosing for 3 cases (8%). For the outpatient cohort, the pharmacist made 44 prescribing decisions. These were classified as changes to hydrocortisone stress doses or emergency injection doses (n=6, 10%), or issuing a prescription via outpatient pharmacy or GP (n=38, 63%). Of the prescriptions issued, the most common interventions involved a change in the oral hydrocortisone formulation (n=11, 18%) or prescribing hydrocortisone sodium phosphate ampoules when it was not being offered by the GP (n=11, 18%). Ten patients/parents in the day case cohort and 20 in the outpatient cohort completed the survey, with the average score of satisfaction of care being 99.7% and 99.6%, respectively.

Conclusion The project demonstrates the positive impact of the clinical pharmacist as part of the evolving specialist practitioner role, encompassing consultation skills and clinical decision-making within the day-case ward and outpatient clinic settings. The above duties relieved registrar time and offered new clinics to further support local and regional paediatric patients. Furthermore, the outcomes revealed a significant need for dedicated review of drug formulations for these patient groups. Expected benefits of formulation reviews include improvement in children's adherence and independence with taking their medicines.[3] The high score obtained by ESQ highlights the quality of pharmacist-led consultations in both the day case and outpatient settings. Together, these outcomes show a promising new model for the clinical paediatric endocrine pharmacist and prompt the need for further developing such specialist roles within the multidisciplinary team.

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P07 DISCHARGE MEDICINE SUPPLY – WOULD A DIFFERENT APPROACH POSITIVELY IMPACT PATIENT FLOW?

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Aims In March 2020, prior to the first national lockdown, as part of escalation planning for the COVID pandemic, clinical areas within the Children's Unit in our District General Hospital were repurposed. This was to increase the number of single rooms to meet stringent social distancing and isolation standards. As a result of this, the overall bed capacity within the unit was reduced. A UK government publication at the time concluded that children who had so far been infected with the SARs-CoV2 virus had mild, or no symptoms and were far less likely than adults to need medical intervention. However, at this very early stage, it acknowledged that there was a lack of good quality data.[1] There was concern within the service that admissions for any indication would need to be accommodated in fewer beds, and in order to maximise patient flow, options to reduce length of stay were examined. One of the pinch points in the patient journey was identified as the waiting time for discharge medication supply via the hospital pharmacy, as there was no paediatric discharge lounge, and the pharmacy team were asked to look at alternative, ward-based medication supply options.

Method Several options were identified and implemented. Changes to the local Code of Practice were effected to allow-

- Selected labelled discharge (TTO) packs for commonly used inhalers, antibiotics and analgesics to be dispensed at ward level against an Immediate Discharge Letter (IDL) 24 hours a day (previously only an out of hours option)
- Hospital HBP forms to be used far more widely for supply, via a community pharmacy

In addition, a small selection of Patient Group Directives (PGDs) which had previously been successfully trialled in the children's department was expanded to include indications for other commonly used drugs. These were used alongside the nurse-led discharge pathway if medical staff were not immediately available to write a discharge prescription. In order to

help staff stratify which discharge medication supply method was most appropriate, a simple algorithm was written and displayed on the wards. Supply through the hospital pharmacy remained an option if required. Regardless of which strategy was used, communication to the GP of medicines supplied was essential.

Results The impact of the new process was assessed as part of a Foundation Trainee Year Pharmacist Audit. The audit sought a subjective opinion from staff. The results of this audit showed that staff were using the discharge pathways regularly, thought the discharge process was faster without compromising safety and patient care, and was undertaken well within their scope of competency. Prescription tracker data showed the number of discharge prescriptions being dispensed in pharmacy more than halved. A concern had been that medicines supplied on discharge would not be well communicated to the GP, but a review of a random sample of electronically transmitted IDLs showed that medications supplied via these new processes were being documented.

Conclusion Discharge medicines can be supplied safely and without delay at ward level, or via Hospital community pharmacy prescriptions, if the correct processes are implemented and followed.

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P08 PRECISION MEDICINES IN PRACTICE: THE CONNECTION BETWEEN CFTR MODULATORS AND DERANGED LIVER ENZYMES

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Background and Aim For most of the 83 years since acknowledging cystic fibrosis (CF) as a separate disease entity, treatment has primarily focused on symptomatic relief.[1] Following the discovery of the CFTR gene, efforts have been made to produce therapies to target the underlying dysfunctions caused by CFTR mutations.[2] Moderate transaminase elevations are commonly observed in CF patients. Severe transaminase elevations have been observed in patients taking CFTR modulators in clinical trials with the initial STRIVE trial revealing that treatment discontinuation was commonly due to an increase in hepatic enzymes.[3] Consequently, liver function test (LFTs) monitoring is recommended for all patients before commencing therapy, every three months for the first year and annually thereafter. This audit aims to assess the compliance of LFT monitoring in clinical practice for paediatric patients initiated on CFTR modulators, evaluate the incidence of liver-related adverse effects, and examine trends between the CFTR modulator used and the clinical significance of LFT derangements, and determine if there are any sex-related correlations.

Methods Patient data, including date and age on treatment initiation, gender, LFT results at baseline (AST, ALT, ALP, GGT and total bilirubin), first derangement since initiation and monitoring frequency were extracted from the clinical system Meditech®, pseudonymised and analysed. There were 91 records of patients being treated with a CFTR modulator. Some patients were on more than one CFTR modulator as treatment can be switched if eligible. For the purpose of the audit after consultation with the local CF clinical team, a two-month deviation outside of the recommended monitoring frequency was considered non-compliant. LFT derangements were classified as clinically significant if the result was higher than 3 times the upper limit of normal (ULN).

Results Our study found that most patients (50/91 – 54.9%) on CFTR modulators in the tertiary centre did not have their LFTs monitored following the recommended guidelines. A statistically significant increase in LFT abnormalities from pre- to post- intervention with a CFTR modulator was observed ($p=0.015$). Kaftrio®/Kalydeco® (3/20 – 15%) and Orkambi® (1/29 – 3.4%) were the only CFTR modulators that led to patients developing clinically significant derangements (>3x ULN). Additionally, a greater proportion of females (24/51 – 47.1%) than males (15/40 – 37.5%) had abnormal LFTs within the tertiary centre contrary to previous epidemiological studies where males have been documented to have a greater risk of abnormal LFTs. However, the strength of this association was negligible ($\phi = 0.096$, $p=0.360$).

Conclusion In conclusion, the tertiary centre's compliance with LFT monitoring guidelines for patients initiated on CFTR modulators was substandard. Most records of treatment initiation occurred during COVID-19, which impacted monitoring as many hospitals suspended routine clinical work to limit the spread of the infection in high-risk groups. Time constraints limited the audit during the data extraction period; therefore, results should be interpreted cautiously. In the absence of the COVID-19 pandemic a re-audit process should include patient lifestyle data and consider other medication regimens that could potentially alter LFTs. Introducing a blood clerk would enable the CF unit to monitor LFT changes more efficiently.

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P10 INITIATION OF BISOPROLOL IN PAEDIATRIC PATIENTS – EXPERIENCE FROM A SPECIALIST PAEDIATRIC CARDIAC CENTRE

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Aim Given the lack of published dosing information to guide the use of bisoprolol in our paediatric cardiology patients, we assessed the safety and tolerability of initiation and maintenance doses of bisoprolol in a cohort of children with congenital structural heart disease, cardiomyopathy, or structural normal heart, to treat heart failure, arrhythmias or hypertension, and prevention of arrhythmias in channelopathies.

Method A retrospective review of hospital records of all children who received bisoprolol between May 2014 and August 2019 in a tertiary paediatric referral centre. Patients were identified via pharmacy records and clinical informatic systems were used to identify the indication, dose at initiation (mg/kg), up-titration dose, and any documented side effects.