medicines administration. A review of the trust and critical care transitioning pathways showed that very little information on medication history, if any, was documented throughout the transitioning process. Adult and paediatric critical care clinical pharmacy teams met to review and improve the transfer of medicines information for transitioning patients. Various paediatric themes were presented and discussed. These included the common use of unlicensed liquid medicines in paediatric patients to facilitate weight- specific doses via feeding tubes and paediatric treatment strategies that would be less familiar to our adult colleagues e.g. ketogenic diets. The significant role of the parent/carers in their child's medicines administration was also highlighted. Furthermore, at the paediatric trust, parents/carers are allowed to administer medicines to their child in hospital but there is no facility for this currently in adult healthcare, which parents may find difficult to accept. The meeting action points were taken to the critical care transitioning meeting which is attended by medical and nursing staff from both the adult and paediatric units along with members of the transitioning team. It was agreed that the critical care transitioning pathway should include a drug history and this has since been added. In addition, a Critical Care Pharmacy Handover will be prepared for transitioning patients to include the patients most recent medicines reconciliation with allergy status, critical care discharge summary and if applicable discharge prescription. This information will be held by the transitioning sister at the adult critical care unit along with the patients transitioning notes.

Conclusion We need to make improvements in patients medicines optimisation when transitioning between paediatric and adult critical care. A minimum standard of information transfer was agreed with our adult colleagues and transitioning documentation was reviewed and updated to include medicines reconciliation in the basic information transfer for all transitioning patients. It is essential however that we continue to work closely with our adult critical care colleagues to ensure continuity and patient/parent/carer engagement.

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P010

## INFLUENCING CHANGE: IMPACTFUL COMMUNICATION - PAEDIATRIC DIABETES PRESCRIPTIONS

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Aim The paediatric wards in two hospital sites within one Trust deal with the supply of newly diagnosed diabetic prescriptions differently and the aim of this project was to have uniformity throughout the Trust with regards the supply of these discharge items, with both hospital pharmacy sites supplying the discharge items. Having completed the Pharmacy Management Clinical Leadership in Pharmacy (CLIP) program I wanted to use new skills learned throughout CLIP to be able to lead on influencing a change of practice on one hospital site and have uniformity across the Trust. I wanted to be able to persuade one site to change their practice of over 20 years and start getting the items dispensed through the hospital pharmacy.

Methods Using the GROW model I ensured I was clear on what my plan was and that my goals were SMARTER. I had to deal with a number of different professionals and was prepared for some conflict as was expecting resistance to change. I met with the key stakeholders with regards the change. I communicated with medical staff, nursing staff and dispensary manager in the relevant hospital, and used the Colours Model1 to help me with this. The Colours Model is a simple and effective way to analyse our own communication preference and also to understand the preference of others. Knowing this I was then able to flex my communication style accordingly to engage with all parties more effectively. I identified what 'colour' I classed each group as and used different styles of communication for each. I also reviewed the records of newly diagnosed diabetic patients discharged from the paediatric ward over a period of one year to determine what discharge letter was given to the patient, and what detail was on it.

Results Of the patients discharged in 2017, only 44% had a discharge on the relevant electronic system with pharmacy items on it, with just one having all required items. I communicated the following way with the different staff, once I had identified their 'colour'. Medical staff (GREEN - Amiables, who are task focused and have indirect style). I focused on whole team and explained the benefit for change across interface. Nursing staff (RED - Drivers, who are task focused and have a direct style). I got straight to the point, explained reasons and results. Dispensary manager (BLUE - Analyticals, who are task focused and have an indirect style). I emailed in advance. Got to the point and gave exact details.

Conclusion All Staff agreed to the change in process in the paediatric ward. All discharges for newly diagnosed diabetic children on both sites will be electronically written and dispensed within the hospital pharmacy. The outcome for patient care is a more seamless transition of care between interface. By undertaking the CLIP programme I acquired a number of important skills to enable me to successfully lead this change. I made my voice heard and led with impactful communication.

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 CLIP workbook Leading with Impactful Communication Chapter 5 The Colours Model January 2018.

P011

# AN EXPERIMENTAL TREATMENT FOR ENTEROVIRAL SEPSIS

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Background A male infant was admitted to the neonatal unit with respiratory distress, following delivery by emergency caesarean section at 36/40 for maternal illness (viraemia). The patient's condition deteriorated with disseminated intravascular coagulation (DIC), abnormal liver function, ascites and pleural effusions. Enteroviral sepsis was diagnosed following positive enterovirus PCR on lumbar puncture and stool sample.

Summary of problem There are no commercially available treatments for enterovirus in the UK. Following an extensive literature search, the neonatology consultant became aware of an experimental treatment with potential action against enterovirus. Pocapavir is an investigational drug candidate developed for poliovirus indications, but also has antiviral activity

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against nonpolio enteroviruses. The consultant was keen to exhaust every option, so reached out to the company in the US. The company (Virodefense) offered to provide the drug on a compassionate use/open label trial basis, asking that regular pharmacokinetics tests be carried out as part of the agreement to supply.

Pharmacy contribution Following the initial contact with Virodefense, there were several challenges for the specialist pharmacist and pharmacy procurement team. Working with IDIS and Virodefense, arrangements were made for shipment of the medication to the pharmacy department. This was complicated by the urgency of the situation and the time differences involved. Pocapavir is in phase 2 clinical trial which required the MHRA to be notified to approve the importing of the drug into the country. The MHRA were quick to give a positive decision which allowed the product to be delivered direct to the hospital while IDIS handled the importing documentation. The advised dose was 25 mg/kg daily, the drug came as 500 mg capsules containing 200 mg of pocapavir (with 300 mg excipients).

The patient (2.7 kg) required 67.5 mg daily. The pharmacy manufacturing unit packed down 170 mg capsule contents (68 mg active ingredient) into individual pots for the neonatal unit to administer. Doses were mixed with EBM and given daily for 14 days.

Outcome The patient recovered from the acute sepsis episode. The patient was also treated with immunoglobulin and standard supportive care so it is impossible to know how much can be attributed to the pocapavir. Pharmacokinetic samples were taken as agreed. After recovering from the initial acute sepsis the patient developed hypoglycaemia between feeds. These were investigated and metabolic causes were excluded. The working diagnosis was a response to the large hit to the liver during the septic episode, although an adverse effect of pocapavir cannot be excluded. Hypoglycaemic episodes continued and the patient was still fed 3 hourly on discharge. The patient is growing and developing well, tolerating longer fasts of 6 hours without hypoglycaemia and reducing risk in the provision of parenteral nutrition for effects that could occur due to opioid toxicity. The patient has been discharged from neonatal follow up.

Lessons to be learned Where there's a will there's a way! There were many barriers to overcome including regulatory, logistical and practical complications but thanks to a concerted effort from a wide variety of teams, co-ordinated by pharmacy, the patient received this treatment. Although the contribution of this experimental drug is unclear the positive outcome for a very unwell infant should be celebrated.

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PRELIMINARY EXPERIENCE OF THE USE OF ORAL POSACONAZOLE AND TERBINAFINE TO TREAT LOMENTOSPORA PROLIFICANS AND SCEDOSPORIUM APIOSPERMUM IN CHILDREN WITH CYSTIC FIBROSIS

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Background Itraconazole and voriconazole are the drugs of choice for Lomentospora prolificans and Scedosporium apio-spermum. Posaconazole, is often substituted when there is intolerance or lack of efficacy to first line agents. Terbinafine, an allylamine antifungal, is recommended with an azole for the treatment of L.prolificans, though there is no published use of this combination in children with cystic fibrosis (CF). Aim To evaluate the safety, tolerability and efficacy of this regimen in CF children.

Methods Retrospective case note review of CF children receiving terbinafine and posaconazole, from Nov 2015 to Nov 2016. Children were identified from pharmacy records and clinical data collected from case notes and laboratory records. Results There were 4 children (all girls), median age 15 years (range 10-16), with a median FEV1% predicted of 70.5% (range 55-88%). 2 children chronically isolated L.prolificans, 2 isolated S.apiospermum. 3 also had CF related diabetes and chronic Pseudomonas aeruginosa infection. 1 child received treatment for 6 weeks. 3 children are taking long- term treatment (median 50 weeks; range 35-59). 2 children improved FEV1% predicted with treatment by 14% and 15%; one was stable. Importantly the trend graphs for lung function in these 3 children appear to stabilise post initiation of treatment. One child did not improve her lung function but also had recurrent MRSA infections and significant nutritional complications. No adverse effects from the combination were reported. Posaconazole levels were therapeutic (>1 mg/l) in all children (range 1.22-3.85 mg/l). Terbinafine levels were not measured. Conclusion In this small case series, combination treatment with posaconazole and terbinafine was well tolerated and a positive clinical effect on lung function was evident. This is the first report on the use of this regimen for this indication in CF children and we will continue to use it, whilst gathering safety and efficacy data.

P013

## DEVELOPING STANDARDISED NEONATAL PARENTERAL NUTRITION ACROSS A NETWORK

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Background and aim Parenteral Nutrition (PN) forms the mainstay of nutritional support for extremely low birth weight (ELBW) infants immediately after birth to promote optimal growth and neurodevelopmental outcomes. The National Confidential Enquiry into Patient Outcome and Death (NCEPOD) published in 2010 indicated that only 24% of neonates received parenteral nutrition that was considered good practice1. NCEPOD, alongside the Paediatric Chief Pharmacists Group Report, highlighted issues with prescribing and administration of PN linked to unnecessary variation in practice between hospitals. 1 2 This encourages use of standardised PN with associated guidelines for use and administration. The aim was to be able to provide nutritionally complete PN for preterm and sick term babies in a ready to use formulation, 24 hours a day, 7 days a week without access to an onsite aseptic service and for the nutrition a baby receives to be consistent across the network regardless of which hospital they are in. Methods There is a robust network neonatal nutrition group,

comprising neonatologists, pharmacists, dietitians and nutrition nurses. The remit of the group was initially to audit their

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