company was informed and a request for reformulation made. Alternative preparations were sought from other specialist manufacturing companies where necessary. Each product was assessed in the same manner. Pharmacy colleagues were consulted throughout the process and provided feedback on alternative preparations available. Concerns around labelling and similarities with other products, cost and reimbursement status, whether tablets could be crushed and dispersed in water as an alternative were highlighted and discussed. Relevant prescribing consultants were also informed. An informed decision was made to switch to an alternative product where indicated.

Results In total, a review of fourteen preparations stocked was conducted. Five out of 14 (36%) were changed to an alternative more appropriate preparation in terms of excipients. Four of the fourteen (29%) were suitable for use in patients across all age groups. Four of the fourteen (29%) exceeded the ADI for a particular excipient for preparations for use in neonates (suitable for all other age groups). Of the four, two were not routinely prescribed in neonates. One preparation was removed from the market. The remaining two products were considered suitable for use for their respective indications and dosing regimens.

Conclusion Unlicensed medicines and medicines that are used in neonate and paediatric patients must be carefully assessed for excipients before use.[1–3] A risk benefit assessment[4] should be conducted to establish if an unlicensed medicine should be used and prescribers notified of any excipients of concern.

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P40 IMPLEMENTATION OF STANDARD PARENTERAL NUTRITION (PN) IN A LARGE TERTIARY NEONATAL SERVICE DURING COVID-19 PANDEMIC – THE CONSIDERATIONS, THE CHALLENGES AND THE LESSONS LEARNT

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The COVID-19 pandemic brought with it many challenges for the NHS; for our neonatal unit, staffing and resource concerns necessitated a review of PN provision to our dual site neonatal managed clinical service. Our service comprises of two sites (and includes neonatal surgical cots) and has a combined capacity of 90 cots. Prior to the pandemic the usual PN requirement was between 12 and 20 patients per day, approximately 75% of the PN was individualised (bespoke) and manufactured on site in our unlicensed aseptics units.

To support the nursing teams in adult critical care areas, pharmacy aseptics unit were asked to manufacture ready to use infusions; the requirement to make new products along with staff shortages challenged our capacity.

Patient individualised parenteral nutrition is highly complex, requiring specific prescriber training of those involved in requesting or ordering, and those involved in ensuring clinical suitability of the prescription. In addition, bespoke compounding or manufacturing is an intricate process requiring appropriately trained staff and specialised equipment.

An MDT approach was adopted to review and improve the resilience of our PN service and reduce the need for aseptics manufacture.

An options appraisal of the following factors was carried out: availability of sufficient product, license status of the products, nutritional content of regimens, lipid and protein sources, time taken to prescribe, time taken to clinically validate, time taken to prepare, storage requirements, stability/shelf life of chosen product, time taken to set up, provision of vitamins and trace elements, total fluid volume required for nutrition, supplementation of electrolytes, composition of the PN (2 phase system vs 1 phase system), pump and equipment provision.

For our neonatal population Baxter Numeta G13E and G16E bags were selected as the most appropriate option.

Moving away from prescribing and administering individualised PN products to using Numeta we were challenged to: design an appropriate prescription chart and regimens, ensure that we were able to prescribe and administer supplementary electrolytes and fluids, review the use of filters for fungi, bacteria and endotoxins on lines used for the administration of PN, ensure that we had sufficient stock of IV lines to enable more frequent line changes, review PN – drug IV compatibility and provide training to prescribers, nurses and pharmacists.

Standard bag PN allows greater flexibility to manage unstable patients and has increased our PN capacity. For the proportion of infants for whom Numeta is not appropriate we prescribe either 'start up potassium and sodium free PN' or individualised PN for infants who require long term PN with specific micro or macronutrient requirements. Audit is required to evaluate hypercalcaemia seen in a proportion of infants less than 2kg in weight. Numeta bags do not provide 100% of normal fluid volume for most patient's, the additional fluid requirement significantly increases the number of infusion pumps required to administer PN. After 15 months, Numeta continues to be used as the primary PN product in approximately 90% of our neonatal population.

P41 EVALUATING PATIENT/CARER SATISFACTION WITH MEDICINES INFORMATION PROVISION WITHIN PAEDIATRIC NEUROLOGY OUTPATIENTS

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Background Providing patients/carers with relevant medicines information (MI) helps adherence and therefore patient outcomes. Improved adherence is particularly important in patients with long term conditions. To provide greater

opportunities for medicines optimisation for paediatric neurology patients it was proposed that greater access to a specialist pharmacist was required to improve MI provision.

Aim To evaluate patient/carer satisfaction with the MI received and assess whether a consultation with a pharmacist may be deemed useful.

Method The Satisfaction with Information about Medicines Scale (SIMS) developed by Horne et al (2003) was adapted for use with paediatric patients.[1] The questionnaire consisted of 15 questions; nine looked at the action and usage (AU) of medication, with a maximum score of 9. Questions 10-15 related to the information provided concerning potential problems with medication (PPM) with a maximum score of 6. The higher the scores, the more satisfied the participants with the level of information received. Parents and their children were invited to attend a consultation with the pharmacist; those that accepted were asked to complete the SIMS questionnaire prior to the appointment and then asked to repeat the questionnaire two months later.

Results 17 families participated, the mean age of the patients was 7.2 years with 47% patients on a combination of three anti-epileptic drugs and 41.2% experiencing daily seizures.

The median total SIMS score was 7, the AU subscale had a median score of 5 and the PPM subscale had a median score of 1. This indicates that participants were only satisfied with 46.7% of the received MI they had been asked about. To account for the different weightings of each subscale the percentage satisfaction for each subscale was calculated. The participants were satisfied with 55.6% of the SIM questions in the AU subscale but only satisfied with 16.6% of the SIM questions in the PPM subscale.

14 families were lost to follow up, the 3 families that repeated the questionnaire indicated that seeing a pharmacist may improve their satisfaction with MI provision. The average total SIMS score increased by 5 after seeing the pharmacist. All 3 families agreed that having an appointment with the pharmacist was very useful.

Conclusion This work has indicated that a pharmacist within paediatric neurology outpatient clinics may increase patient/carer satisfaction with MI provision but further study is required to fully examine the impact in a larger number of patients.

The baseline SIMS survey highlighted a difference between the two subscales with participants more satisfied with information about AU than the very low levels of satisfaction regarding PPM. Studies in adult patients have also found that PPM scores are lower indicating patients do want this additional information.[2 3] Further work is needed to assess and improve satisfaction with MI provision to paediatric patients and their families.

The greatest limitation was the large number lost to follow-up, severely limiting the ability to assess the impact of the pharmacist intervention. Potentially two months between the two surveys was too long although the intention had been to minimise researcher induced bias.

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P42 EVALUATING THE IMPACT OF TRIPLE COMBINATION MODULATORS ON MEDICATION ADHERENCE IN CYSTIC FIBROSIS

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Aim To measure the impact of introduction of triple combination modulator (TCM) therapy on adherence to other cystic fibrosis (CF) therapies.

Method This study is a multi-site non-interventional study of clinical outcomes in CF patients prescribed TCM across 8 clinical sites in Ireland and the UK over 2 years. The study will be conducted over two phases based on TCM approval: 1. 12+ arm (patients 12 years and older), 2. 6+ arm (patients 6-11 years). The effect of the potential drop-off in adherence to TCM is unknown and this knowledge gap will be examined using three methods; self-reported questionnaires (SRQ) [e.g. Treatment adherence questionnaire (TAQ) and Adherence barrier questionnaire (ABQ)]; pharmacy refill data (to calculate Medication Possession Ratio); and electronic devices such as Medication Electronic Monitoring System (MEMS®). Self-report tools and pharmacy refill data will be collated for all participants but due to high cost MEMS will be offered to a subset only (approx. 80 participants).

Results To date, 113 participants have been recruited to the 12+ arm. Recruitment and data collection is ongoing. Preliminary analysis of Medication Possession Ratio (n=5) demonstrated that baseline adherence to hypertonic saline, azithromycin, enzymes and Pulmozyme® was low to moderate, further decreasing after TCM introduction. No change for enzymes was found. Adherence to modulators was high, with further increases seen after TCM introduction. Self-report questionnaires (TAQ and PTP) were reviewed for a random 10% of current recruits (n=11). The mean Overall Adherence Index was 90.2%. At 6-month time point, 100% TCM adherence was reported. Airway clearance was the most frequently overlooked treatment with a 10.6% reduction in adherence from baseline to 6 months. Initial recruitment for MEMS® was high (95% recruitment target met) with 60% of participants remaining on the study. Average 'taking adherence' using MEMS® for was 78.2% and 82% for Kaftrio® (n=11) and Kalydeco® (n=10) respectively. Overall adherence to TCM using MEMS® was 78.9%.

Conclusion These early preliminary results suggest that adherence to TCM is overestimated in SRQs and pharmacy data in comparison to MEMS®. These trends are similar to those shown in previous studies [1-3]. As a result of the high drop-out rate a feedback form has been developed to gain a better insight into the reasons why continued participation is low. Recruitment and data collection is ongoing. 6+ arm is due to commence recruiting in Q4 2021.

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