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P28 PAEDIATRIC COVID TOES AND THE RECOMMENDED CARE MANAGEMENT

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Aim To define COVID toes and fingers in paediatrics, and to explain the aetiology, the assessment and investigation management, the diagnosis, the clinical presentation and the care management including the use of oral nifedipine in this newly found disease during the COVID-19 pandemic. In addition, we will illustrate the process using the multi-disciplinary approach to prepare the Paediatric COVID toes guideline in our Trust, and to cite some examples of the related patient cases seen in our hospital as well as to summarise the total number of patient cases seen to date.

Method To carry out a literature search to find out the latest related articles and clinical studies, and to summarise the findings to prepare for the drafting of the clinical guideline. This guideline was initially prepared by the medical team and was then reviewed using multi-disciplinary team (MDT) approach including the paediatric pharmacists and the consultation from the tertiary paediatric centre. We also summarised the number of paediatric patient cases that were seen in our Trust and categorised them into different age groups, ethnic background, and referral systems.

Results A number of related articles were found after the literature search. The first draft of the Paediatric COVID-toes guideline was prepared in March 2021 and it was then reviewed by the MDT in the Paediatric Clinical Guideline Group of our Trust. The paediatric pharmacist expressed her comments including the drug of choice such as oral nifedipine, the dosages below and above 2 years of age, the evidence to support the dosage recommendations, the different formulations available in the market for oral nifedipine such as oral suspension, capsule, tablet and modified-released (MR) tablet, recommended effective method for oral administration, side effects profile, monitoring such as blood pressure, patient counselling and education, and provision of patient leaflet and video-link to aid patient compliance.

Conclusion The final version of the Paediatric COVID toes guideline was prepared by the multi-disciplinary team in July, 2021, and it was uploaded in the Trust intranet in August 2021. In view of the literature search, there is limited evidence to support the use of oral nifedipine under 2 years of age for this indication. In our guideline, we recommend the dose of nifedipine to be 2.5–10 mg 2–4 times a day for children age 2 to 17 years old, starting with low doses at night and increase gradually by closely monitoring blood pressure and other side effects. The use of oral nifedipine is unlicensed for this indication in children. In our guideline, we recommend the use of oral MR nifedipine tablet after the consultation with the tertiary centre. Oral suspension is not routinely used. During counselling session, the pharmacist will advise the parent/carer to crush and dissolve the MR tablet in water and give appropriate dose accordingly. To date, 15 patients diagnosed with this disease were seen in our clinic. They are mainly referred to the clinic via the Accident and Emergency

Department. The patient ages are all above 8 years old and they are mainly of Asian ethnic background.

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P29 MEDICINE PRESCRIBING ACROSS PRIMARY, SECONDARY AND TERTIARY CARE INTERFACES IN PAEDIATRICS: A RETROSPECTIVE COHORT STUDY

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Aim Shared care agreements, commissioned by local clinical commissioning groups, are formal agreements that set out prescribing arrangements to provide a safe and cost-effective service that covers the prescribing requirements and to allow for the continued involvement of a hospital consultant alongside the provision of care in primary care settings.¹⁻³ However, primary care prescribers have often expressed hesitancy to accept responsibility for prescribing in paediatrics, leaving secondary and tertiary care providers to prescribe these medications instead,¹ resulting in inappropriate pressures on hospital pharmacies and often leaves families with difficulties in securing ongoing supply. This study aimed to investigate the volume, cost and type of hospital outpatient paediatric prescribing associated with items for which prescribing responsibility could be transferred to primary care. As well as to identify whether the current shared care agreements; traffic light rating (TLR) system and associated guidelines, encompass these medications.

Method A retrospective cohort study, involving descriptive and inferential statistical analysis, was conducted on prescription items prescribed and dispensed for paediatric patients. Prescriptions were identified by dispensary staff over a six-month period (October 2019-March 2020), at one tertiary care level hospital in southeast London. The prescription items were classified according to the TLR system defined in the South East London Joint Medicines formulary⁴ as red (specialist/hospital prescribing only); amber-1 (primary care initiation after a recommendation from a specialist); amber-2 (specialist initiation followed by maintenance prescribing in primary care); amber-3 (specialist initiation with ongoing monitoring using shared care agreement documentation); green (specialist or non-specialist prescribing).

Data were analysed using Statistical Package for the Social Sciences (IBM SPSS) Software (V27).

Results In total 217 prescribed items prescribed and dispensed for 35 children were included in the study, and all of them had the potential to be prescribed in primary care. Of these, 93.1% (202/217) were rated 'green' with most of them prescribed for children aged 6-11 years (32.2%, 65/202).

Only 3.2% (7/217) items had an 'amber-3' rating and required shared care agreements to initiate prescribing in primary care, many of them (85.7%, 6/7) had shared care

agreements in place, assigned for their use in primary care. Only one item from the 'amber-3' category (melatonin 2 mg modified-relates tablets) had no shared agreement in place. None of the included items was classified as 'red'.

The highest volume of prescribing was for paediatric renal (62.2%, 135/217). The total cost incurred to the hospital for all items included in the study was £35,331.

Conclusion There is still hesitancy among general practitioners to prescribe medications for paediatrics in primary care that they can be clinically responsible for despite the emergence of new guidelines and resources to support primary care in taking on prescribing. This has a significant impact on hospital pharmacies both in terms of activity and finance and it is also making it more complex for arranging medication supplies. If those medicines were prescribed appropriately, considerable cost savings could occur in secondary/tertiary care which could be used to provide other important specialist paediatric services.

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P30 IMPROVING THE DOCUMENTATION OF PAEDIATRIC HEIGHT/LENGTH FOR INPATIENTS

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Aim Pharmacists and dieticians are among the health care professionals who have identified a problem relating to the inconsistent recording of heights in paediatric patient notes. The Trust's guideline 'Growth – Standard for the measurement of weight and height/length in children identifies that 'all children attending hospital must have their weight and height/length measured'.¹ Height is required to calculate a number of parameters, including renal function and risk of malnutrition. It is necessary for the calculation of adjusted prescribing weights for overweight or obese patients.

This project aimed to improve the percentage of heights being recorded in an appropriate place by introducing a poster to all wards within the hospital.

Method All wards in the hospital were included in the audit. Baseline data was collected 8-9th February 2021. The poster was implemented from the 2nd March 2021 and a patient safety alert was circulated to staff during the week beginning 1st March 2021. Data was then recollected on 22nd March 2021.

As outlined in the trust guideline, data was collected from: the front of the drug chart; the 'Core Screening Tools for Children and Young People for inpatients' document; and the World Health Organisation (WHO) Growth Chart recorded on our electronic record 'Evolve'.

Results The percentage of patients with height recorded on the drug chart at baseline was 8.3%. This increased to 16% post-implementation. The percentage of patients with height recorded on the Core Screening Tool was 33.3%. This increased to 42.5% post-implementation. The percentage of patients with height recorded on Evolve at baseline was 22.2%. This decreased to 20.8% post-implementation.

Conclusion The post-implementation data collected would suggest that the poster has had a positive effect on improving the number of heights recorded for paediatric inpatients. There was a 93% increase in the number of patients with height recorded on their drug charts and a 28% increase in the number of patients with height recorded on the Core Screening Tool following implementation of the intervention.

This shows an overall improvement in the recording of heights on drug charts and core screening tools, although there was a decrease in the percentage of patients with height recorded on Evolve. The use of Evolve was investigated during the data collection and it was identified that there is a lack of training on how to enter heights on the Evolve system and this may explain the low numbers of heights recorded using this system. Further Evolve training for staff would help to correct this issue and after consultation with the nurse education team, this has been added to the training programme for new nurses starting in the hospital.

Improvement has been shown over this short period of time, with the increase in the percentage of heights documented for inpatients, although we are still a long way from the target of 100%. Further work is being carried out within the hospital with the aim that this information is consistently provided, thereby improving patient care.

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P31 OPTIMISATION OF SMART-PUMP DRUG LIBRARY FUNCTIONALITY – SUPPORTING NATIONAL STANDARDISATION

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Aim To optimise smart-pump functionality as part of an ongoing multi-phase project to develop a national smart-pump drug library of standard concentration infusions (SCIs) suitable for paediatric and neonatal patients in paediatric, maternity and adult hospitals.

Method Multidisciplinary working groups with representation from paediatric, neonatal and adult intensive care units (ICUs) were established. Agreed lists of SCIs for separate neonatal and paediatric drug libraries were developed. A paediatric SCI drug library, originally developed by the lead site in 2012 containing 42 drug lines (primarily continuous infusions) within a single care-unit, was used as the primary reference source. A Microsoft Excel® SCI flow rate calculator was developed which allowed comparison of traditional infusion practices against hypothetical SCIs. Acquisition of drug library content management system (CMS) by the lead site facilitated exploration and optimisation of CMS functionality and library architecture supporting comprehensive drug library