area of practice. The data that is available has been deemed sufficient to support the use of allopurinol when other options have been exhausted. This series of patients demonstrates allopurinol can reduce side effects some cases, although some patients may remain symptomatic.

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P11 MULTIPLE ORGANISATIONS IMPLEMENT ELECTRONIC PRESCRIBING ACROSS NEONATAL UNITS ON A SHARED CERNER DOMAIN

[1]Penny Fletcher*, [2]Nicola Vosser. [1]*Imperial College Healthcare NHS Trust, London*; [2]*Chelsea and Westminster Hospital, London*

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Aim To design, build and implement Cerner EPMA for all drugs and infusions required in neonatal units across a regional Integrated Care Service (ICS).

Situation The ICS comprises four NHS Trusts, two of which already shared the Cerner domain with the remaining trusts joining in autumn 2023. Cerner was in use in adult and paediatric areas, with neonatal units the last to join due to complexities of prescribing.

The multi-disciplinary approach from all four trusts included nurses, consultants and pharmacy (EPMA and Women and Children's). The teams collaborated over an 18 month period in order to align prescribing practices and to design and build neonatal medication order sentences, powerplans for continuous infusions (such as inotropes and sedation), intravenous fluids and parenteral nutrition.

Key prescribing guidelines were shared between trusts and the teams worked together to identify and harmonise differences in local practice. The trusts use the 'standard flow rate, variable concentration' system of prescribing drug infusions, some with different calculation 'factors'. Sharing the Cerner domain required alignment of these. All sites were prepared to make changes. One site used both 25 mL and 50 mL syringe volumes (depending on weight). However, this contributed to variation in practice and it was agreed to use the 25 mL volume, with the benefit of reducing drug wastage in certain situations.

Stakeholders from the two trusts with level 3 neonatal units, (already live with adults and paediatrics), met in person in late spring 2021 to harbour professional relationships that continued to develop through virtual collaborative working on Microsoft Teams®. One senior pharmacist had experience of working at both trusts, further strengthening collaboration.

Sharing the Cerner domain between four trusts and six neonatal units required compromise. The neonatal medicine build was standardised but as with the adult and paediatric build, excluded dose range checking and no guidelines were embedded. Optimisation of the existing Cerner build for paediatrics included adding order sentences for many drugs with options for neonatal 'units of measure' (such as micrograms) and 'frequencies'. Governance around each build was approved from representatives of all disciplines from each trust.

The neonatal medications build involved creation of approximately 200 new order sentences and 30 specific neonatal intensive care unit (NICU) 'powerplans' (for example, continuous variable rate infusions specifying dose range, concentration and diluents).

Continuous variable rate infusions allow the weight-based dose to be prescribed in a choice of diluents as well as documentation of dose (rate) changes (x-y microgram/kg/hour or minute) without a new prescription which reflects previous practice on paper.

In autumn 2022, the two trusts already sharing the Cerner domain went live with EPMA on all four neonatal units with the rest of the region joining in autumn 2023.

Conclusion The successful implementation of a complex Cerner EPMA neonatal build, with complexities and intricacies of level 3 neonatal unit settings, as well as level 1 and 2 units was attributed to successful stakeholder engagement, multidisciplinary collaborative working and negotiation. The benefits of sharing a Cerner domain should lead to greater standardisation of care across the ICS.

P12 AN AUDIT EVALUATING THE ACCURACY OF OXYGEN PRESCRIBING AT GREAT ORMOND STREET HOSPITAL

Kate Burch, Nikesh Gudka*. *Great Ormond Street Hospital, London*

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Oxygen is recognised as a drug by the British National Formulary,[1] necessitating accurate prescribing to ensure patient safety. Poor oxygen prescribing practices have been observed within UK clinical settings, with previous reports of 40% of inpatient oxygen administration lacking appropriate prescriptions.[2] Inaccurate documentation of escalation plans around oxygen delivery during an acute event prompted oxygen prescribing being added to the local risk register. A multidisciplinary team was formed, who worked together with our electronic prescribing and health records (EPIC) analysts to configure a prescribable oxygen therapy prescription. This was launched on the respiratory wards. This audit aimed to evaluate the accuracy of oxygen prescriptions and assess the effectiveness of the new prescribing tool for our patients.

Data was collected using EPIC to review the patient's oxygen usage and cross-referenced with their prescription to ensure active oxygen therapy. The accuracy of prescribed oxygen therapy was verified with the patient's bedside nurse. Inconsistencies between the prescription and administration were reported to the prescriber for updates to maintain accurate medical records. Data collection occurred during medicines reconciliation for new admissions, while established patients' oxygen therapy prescriptions were reviewed three times a week from January to March 2023. The collected data was then analysed, focusing on identifying common themes related to prescription errors.

Results showed that initially, 50% of patients admitted on oxygen did not have a prescription, and 18% had an inaccurate prescription. Clinical reviews resulted in improvements, with subsequent prescriptions being accurate for 87% of patients. However, this improvement was also because many patients' parameters did not change, during their admission,

meaning their prescription remained accurate for the remainder of the audit. Common prescription errors included incorrect flow rate, lack of escalation plan documentation, and failure to prescribe oxygen therapy altogether. Recommendations were proposed to enhance oxygen prescription accuracy and patient safety.

We suggested to prescribe target saturations for all patients upon admission, following the British Thoracic Society adult guidelines. It is worth noting that there are no national recommendations for oxygen prescribing for paediatric patients in hospital. This could cause confusion and it would be difficult to identify which patients were receiving oxygen and which patients were not. Additionally, the current oxygen therapy prescription details more around the administration and flow rate of the oxygen therapy, which the target saturation prescribing does not cover. Therefore, this may not be a suitable implementation within a paediatric setting.

Secondly, we recommended that all patients on a non-invasive/invasive ventilator receiving oxygen should have a ventilator and an oxygen therapy prescription. While this involves duplication of work, the oxygen therapy prescription provides more detailed parameters for accurate oxygen administration. Improving oxygen prescription is crucial for patient safety and aligns with global initiatives, such as the World Health Organization's Medication Without Harm campaign. Accurate prescriptions ensure patients receive oxygen therapy at the appropriate parameters, promoting effective communication and continuity of care. By implementing these recommendations, hospitals can enhance the accuracy and safety of oxygen prescribing practices, ensuring optimal patient care.

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P13 DEVELOPMENT OF A NEONATAL DRUG FORMULARY

Ruth Harrison*. *Manchester University Hospital Foundation Trust*

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Background In 2022, An EPR system was rolled out across a multi-site NHS trust including a level three and two level two neonatal units. This created a need to provide clear and accessible prescribing and administration information for all neonatal medicines to reduce the risk of error from incorrect doses, formulations, or concentrations.

Aim To establish a neonatal formulary that could be used as a reliable reference source for safe and timely prescribing and administration of all neonatal medication.

Method A neonatal formulary multidisciplinary group was established consisting of neonatal consultants, neonatal matrons and pharmacists with representation from each hospital site. A standardised drug monograph template was created, and a suitable platform was selected to hold the neonatal formulary. Established practice was reviewed and harmonised across three hospital sites and aligned to include standard paediatric concentrations.[1] A monograph was written for each medication routinely used on the neonatal units. Each monograph was discussed and ratified at the neonatal multidisciplinary group. Necessary amendments were made before final validation and publishing on the formulary.

Results A neonatal formulary consisting of 170 different monographs was published. This is accessible via a mobile phone app, the internet, the hospital intranet, or at the point of prescribing or administration from the electronic patient record. A 3-month snapshot audit of medication incidents from 2021 and 2022 after implementation of the formulary demonstrated an overall 4% reduction in reported medication incidents. 10% reduction in prescribing incidents and 5% increase in administration incidents.

Conclusion The neonatal formulary multidisciplinary group is ongoing with several new monographs currently awaiting review. While the audit provides a snapshot of the reported medication incidents over the selected 3-month period from 2021 and 2022. A significant amount of change to practice occurred on the unit due to the implementation of neonatal standard concentrations and EPR at the same time. Future work includes seeking feedback from users of the neonatal formulary across each hospital site to optimise the monographs further and to continually promote and educate new staff on the neonatal unit to the formulary.

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P14 ARE WE TREATING PATIENTS ON HYDROXYCARBAMIDE FOR SICKLE CELL APPROPRIATELY AGAINST NATIONAL BRITISH SOCIETY FOR HAEMATOLOGY GUIDANCE

Letisha Brown, Ghazala Javid*. *University Hospitals Leicester NHS Trust*

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Aim Sickle cell disease (SCD) is an inherited condition which causes the haemoglobin-S subunit to become mis-shaped, this results in abnormal RBC function and blockages of small blood vessels which commonly leads to vaso-occlusive crisis.[1 2] Historically, sickle cell disease had a substantial mortality rate, however, over recent years, life expectancy has increased to 67 years old in 2016 where the local population was 82.[2 3] This improvement in life expectancy is due to better diagnosis and medical care, one of which being hydroxycarbamide (HU).

HU has multiple modes of action, with the most clinically relevant being its ability to increase HbF%. HU is currently the only medication licensed in the UK for SCD. The 2011 Baby HUG study published in the Lancet HU is a safe and effective treatment and should be considered for all young children with SCD to reduce number of attacks, as well as long-term organ damage.[4] Despite the reduction in morbidly and mortality with use of HU, initiation of HU has to be done with care due risk of myelosuppression which could be fatal, due to this baseline and routine monitoring are a mandatory requirement of treatment.

As of November 2019, University Hospitals guidelines were updated to recommend that all patients who met initiation requirement be started on HU at on, following base line tests, at a dose of 20 mg/kg/day with this up titrated by 5 mg/kg/day every 8–12 weeks following routine monitoring to the maximum tolerated dose, or maximal dose of 35 mg/kg/day.

This audit will review compliance to the British society for haematology (BSH) guidance detailed in the University