- percentage of patients that had received input from the ID team
- percentage of patients that had received input from microbiology
- the prevalence of antimicrobials prescribed
- the location of the patient's home residence
- patient/parent willingness to go home on OPAT.

The data for patient numbers and bed day savings was then extrapolated to 52 weeks in order to be indicative of one year.

Results Over the five days, 66 patients were identified that met the exclusion criteria to be referred for OPAT or IVOST. After clinical consideration the consultant deemed 4 patients to be suitable for OPAT and 19 for IVOST and discharge which generated a potential bed day saving of 38 bed days. This was comprised of 17 days through providing IVAs via OPAT and 21 days from timelier IVOST and discharge of patients. Extrapolated to be representative of one year, this would be a bed saving to the Trust of 1, 976 bed days.

Conclusion The potential has been identified for the hospital to make considerable bed day savings through the investment in an extended antimicrobial stewardship programme and establishment of a paediatric OPAT service. A business case has been submitted to the hospital board for consideration, with the hope that the service will be funded for a six month probationary period in order to assess its impact over the winter months, when demand for beds and pressures on PICU and theatres are highest.

REFERENCES

1. Patel S, et al. 2015. Good practice recommendations for paediatric outpatient parenteral antibiotic therapy (p-OPAT) in the UK: a consensus statement. *Journal of Antimicrobial Chemotherapy* 2015;702:360–373.
2. Carter B, et al. Delivery, setting and outcomes of paediatric outpatient parenteral antimicrobial therapy (OPAT): a scoping review. *BMJ Open*, 2018;8:e021603.
3. Hodgson KA, et al. The use, appropriateness and outcomes of outpatient parenteral antimicrobial therapy. *Archives of Disease in Childhood*, 2016;10:886–893.
4. Knackstedt ED, et al. Outpatient parenteral antimicrobial therapy in pediatrics: an opportunity to expand antimicrobial stewardship. *Infection Control & Hospital Epidemiology* 2015;36:222–224.

P65

ADVANCED NEONATAL NURSE PRACTITIONER (ANNP) REVIEW OF NEONATAL ANTIBIOTICS IN 36HOURS TO IMPROVE ANTIBIOTICS STEWARDSHIP

Charon Bilkhoo*, Jim Gray, Mitul Patel, Gemma Holder, Michelle Perry. *Birmingham Women's and Children's Hospital*

10.1136/archdischild-2020-NPPG.73

Aim To ensure neonates in transitional care and postnatal wards are receiving antibiotics appropriately. NICE CG149¹ advises to consider stopping antibiotics at 36 hours in babies given antibiotics because of risk factors for infection or clinical indicators of possible infection where:

- the blood culture is negative,
- the levels and trends of C-reactive protein (crp) concentration are reassuring and
- no clinical indicators of possible infection

Neonatal unit was excluded from this study; since daily clinician led ward rounds to review antibiotics already occur. Antibiotics not reviewed in the 36 hour time frame were due to delays in receiving the second crp level. Daily ward rounds to review antibiotics in neonates were not happening on

transitional care and postnatal wards, thus to ensure regular care, advanced neonatal nurse practitioner led reviews were implemented.

Method A crp sample should be taken after delivery and in babies given antibiotics because of possible infection, the crp concentration is measured again 18–24 hours after presentation. The role of the ANNP is to ensure both crp levels are checked and the blood culture is negative, with the aim of stopping antibiotics at 36 hours before the second dose of gentamicin is due. In summary neonates that do not need antibiotics should have only had approximately 3 doses of benzylpenicillin and 1 dose of gentamicin. Audits were carried out on neonates in transitional care and postnatal wards who were receiving antibiotics. The initial base line audit was done over 3 months to assess if antibiotics were reviewed in 36 hours. This was deduced by a signature from the ANNP either stating on the drug chart that antibiotics would continue for 5 days until crp has decreased or the antibiotic would be discontinued if the crp was low. This audit was repeated a year later.

Results During the first 3 months audit the proportion of babies having their antibiotics reviewed within 36 hour time frame rose from 3% in month 1 to 25% and 50% in months 2 and 3 consecutively. During the second 3 month audit, the proportion of babies having their antibiotics reviewed was 78% in month 1 and 80% in the following two months. The first audit showed a rapid improvement, whereas the second audit showed a significant improvement compared to the end of the first audit, which was sustained throughout the full three months.

Conclusion The ANNP was a simple and no cost solution in ensuring antibiotic stewardship was consistent throughout neonates, reducing the length of stay of neonates and their mothers. The 20% of babies who are still not having a 36 hour review may be because of delays in blood cultures reaching the laboratories to commence incubation.

REFERENCE

1. Neonatal infection (early onset): antibiotics for prevention and treatment. NICE CCG149 2012.

P66

STANDARDISING STRENGTHS OF UNLICENSED MEDICINES IN A LARGE LONDON HOSPITAL TRUST

Alice Lo, Chloe Benn*. *Barts Health NHS Trust*

10.1136/archdischild-2020-NPPG.74

Background A UK national position statement on standardised strengths of unlicensed liquid medicines recommend that when children require unlicensed liquid medications, they should receive the recommended strength. By standardising strengths of these medicines, the risk of errors being made in the doses given to children will be reduced and prevent accidental under and overdoses.¹ Our Trust has 4 hospital sites since merging in 2012, we found the process of switching to a standard strength far from simple.

Methods The strengths of unlicensed liquid medicines listed in the position statement available on the pharmacy dispensing system (JAC) were identified, along with the speciality users. Pharmacy and clinical leads were consulted for agreement to switching to the standardised strengths. Pharmacy procurement identified new products in standardised strengths and products were reviewed for suitability by paediatric pharmacist. A cost

impact analysis was carried out. Communication was sent to stakeholders including, doctors, nurses, pharmacy and primary care.

Results and Discussion We found the standardised strengths of azathioprine, clonazepam, ethambutol, isoniazid, melatonin, omeprazole, phenobarbitone and pyrazinamide strengths were on formulary. Clopidogrel, hydrocortisone, sertraline and tacrolimus liquids are not used. Different strengths of the listed unlicensed liquid medicines were used by different sites and specialties. Lead speciality pharmacists agreed with the standardisation. We identified use of unlicensed products where licensed products are available (sildenafil 20 mg/5 mL and furosemide 5 mg/5 mL). We added the use of these items to our review. We were not able to agree on a single standard strength for some items; the neonatal intensive care unit (NICU) have babies under 500 g who may require furosemide, spironolactone and sildenafil in doses that measure less than 0.1 mL using the recommended strengths. This volume is deemed less than satisfactory to be measured safely¹. It has been agreed with the neonatal lead pharmacist that additional strengths of the sildenafil (unlicensed 20 mg/5 mL), spironolactone (unlicensed 10 mg/5 mL) and furosemide (20 mg/5 mL) be available for inpatient NICU use only. The potential for patients to be discharged on the non-standard strength is reduced by specifying 'Not for discharge - inpatient use only'

on the pharmacy system as well as having them only as NICU stock from medicines distribution. Patients admitted on other strengths will be switched (with consent); to minimise risk pharmacists will ensure carers are aware of the change & correct dose volume to administer and endorse TTAs noting the change in concentration for the GP. Primary care have been engaged with the switch and invited the consultant pharmacist to discuss this at the interface meeting. We were not able to source the recommended midazolam 10 mg/5 mL. The switch to chloral hydrate to 1 g/5 mL was calculated to have a significant cost pressure therefore it was agreed that that we would not change from chloral hydrate 500 mg/5 mL at this time as it is mainly used in the in-patient setting within our Trust. Based on current usage there is an estimated cost saving of over £5 k based on the switch of sodium chloride, sildenafil, furosemide and spironolactone. The impact will be reviewed in 6 months.

Conclusion A successful switch requires a team approach but will benefit patient safety and save money.

REFERENCE

1. The Neonatal and Paediatric Pharmacists Group (NPPG) and Royal College of Paediatric and Child Health (RCPCH). Position statement 18-01 Using Standardised Strengths of Unlicensed Liquid Medicines in Children. Version 2. May 2019.