

Further research is necessary to provide more evidence that primary care pharmacists could be further utilised in supporting young people with their medications.

REFERENCES

1. Koster E, Philbert D, Winters N, *et al.* Medication adherence in adolescents in current practice: community pharmacy staff's opinions. *International Journal of Pharmacy Practice*, 2015;**23**(3):221–224.
2. Gray N, Shaw K, Smith F, *et al.* The Role of Pharmacists in Caring for Young People With Chronic Illness. *Journal of Adolescent Health*, 2017;**60**(2):219–225.

P035 PATIENT FACING PHARMACIST REDUCES LENGTH OF STAY FOR PAEDIATRIC SHORT STAY PATIENTS

Joanne Crook, Ivan Lam. *Chelsea and Westminster Hospital Foundation Trust*

10.1136/archdischild-2019-nppc.45

Aim To reduce the average length of stay (LoS) of paediatric inpatients requiring discharge medication (TTO's) on the short stay pathway (Comet).

Methods A paediatric multi-disciplinary team (MDT) used the model for improvement to identify stakeholders and key drivers for change. The Comet patient journey was mapped from A&E to discharge. Plan-Do-Study-Act (PDSA) cycles were used to reduce LoS, targeting the addition of a paediatric pharmacist to the morning ward round and use of over-label packs to facilitate nurse-led discharge for simple TTO's required within 2 hours. Data was collected over a two week period in summer; PDSA 1 baseline data, one week prior to change; PDSA 2, one week after implementation. Baseline measurements included time taken to write, screen and dispense TTO and the average LoS. Data was collected via the electronic prescribing system (Lastword). Patients eligible for the Comet pathway were included for analysis. Results were analysed using Microsoft Excel. Ethics approval was not required for this study.

Results PDSA one; 15 patients admitted onto the Comet pathway. 67% patients were admitted outside working hours. Six patients needed TTOs, 33% were written out of hours and all dispensed by pharmacy. Average time to writing TTO 14.6 hours (16minutes-44hours); time to pharmacist clinical screen 19.4 hours (6 minutes – 21 hours); average time for pharmacy to dispense TTO after screening 2 hours (69–203 minutes); average LoS for all Comet patients 17.6 hours (8–44) and 26 hours (14–44) for those needing TTO's. Post implementation 12 patients were eligible for the Comet pathway. 83% patients were admitted outside of hours. Six patients needed TTO's, 16% were written out of hours and 33% were dispensed by the nursing team. Average time to writing TTO increased to 20.2 hours (14–26), average time to pharmacist clinical screen was reduced to 10 minutes (1–98) and average time for pharmacy to dispense TTO reduced to 57 minutes (47–74). Average LoS for Comet patients was similar to PDSA 1 at 17.7 hours (3–27) but reduced to 20.8 hours (5–27) for those needing TTO's.

Conclusion Increasing patient-facing time of pharmacists to improve outcomes is recommended by the Carter report.

(1) Pressures in emergency-care to free up beds for patients means we need to look for creative solutions. (2) This study found the addition of a paediatric pharmacist to the ward round increased efficiency of writing, screening and dispensing TTO's - dramatically reducing time to screening TTO's; and the average LoS by 5 hours. The pharmacist was aware of Comet discharges at the time of decision to discharge and

was on hand to resolve medication related issues. New doctors in August could explain the increased time to writing TTO's in the second week. Promotion of nurse-led discharge via over-label packs reduced the number of TTO's sent to pharmacy. Limitations include 2 weeks of data over summer were analysed and non-paediatric hospital activity would impact pharmacy dispensing time. Future work will test how pharmacist transcribing TTO's on the ward round affect LoS and to review pharmacist clinical interventions to assess impact on outcomes.

REFERENCES

1. Department of Health. Carter report: Unwarranted variation: A review of operational productivity and performance in English NHS acute hospitals. 5th February 2016.
2. Royal College of Paediatrics and Child Health. Standards for Short-Stay Paediatric Assessment Units (SSPAU). March 2017.

P036 PATIENTS WITH LEARNING DISABILITY, VIEWS ON THE USE OF A PATIENT-HELD MEDICATION PASSPORT

¹Joanne Crook, ¹Deepa Patel, ¹Vanessa Marvin, ²Barry Jubraj. ¹Chelsea and Westminster Hospital Foundation Trust; ²King's College, London

10.1136/archdischild-2019-nppc.46

Aim To establish the views of adolescent patients with learning disabilities and their carers, of the patient-held medication passport (My Medication Passport-MMP).

Methods A questionnaire was devised to find out if patients/carers thought a patient-held record of their medications (the MMP) was useful and to suggest improvements as appropriate. The MMP is a patient-held record of medicines use available as a passport sized booklet.¹ MMPs were distributed to patients and carers for them to read and review at a patient focus group. Ethics approval was not required for this study.

Results 20 questionnaires were sent and a total of 17 completed questionnaires were returned (85% response rate). 70% (n=12) of the questionnaires were completed by carers, 24% (n=4) by family members and 1% (n=1) by a patient. 100% (n=17) of carers/patients who reviewed the MMP found it useful. When asked about features they liked about MMP; Seven carers noted the MMP was easy to use; four carers felt MMP was a good way to keep (personal) medicines information up to date; with three further clarifying that it could be used as a 'concise way of keep track (of medicines)' and two specified they liked that 'all the information is in one book'. When Patients/carers were asked for ways MMP could be improved; two carers asked for more space to document past medication, including an area to 'keep track of the behaviours and how it is exhibited because of the medication'; one carer noted that 'some youngsters would benefit from more visual learning' and one asked for a version to be made available via app on smart phone. Limitations included a small sample with limited exposure to MMP. The patient group sampled may not be representative.

Conclusion Passports as tools aim to help patients better manage their medicines and have been successfully used in a patient with learning disability.² It is encouraging to see that this small group of patients with learning disability find the MMP useful. Suggested adaptations to MMP for this patient group included it being more visual, and having areas for past medication. Other trials of MMP have suggested that it may require a section surrounding medicines administration. Patients have since been directed to the MMP app which can

be downloaded onto a smartphone. There are many opportunities for future work including conducting an evaluation of the MMP in use over time and across different sectors, and to determine what patients actually record in the MMP.

REFERENCES

1. Barber S, *et al.* Evaluation of My Medication Passport: a patient-completed aide-memoire designed by patients, for patients, to help towards medicines optimisation. *BMJ Open* 4(8). <https://bmjopen.bmj.com/content/4/8/e005608>
2. Jubraj B. Use of a medication passport in a disabled child seen across many care settings. *BMJ Case Reports*. 25 February 2015; <http://casereports.bmj.com/content/2015/bcr-2014-208033>Save

P037

EVALUATING THE INTRODUCTION OF DOSE BANDED CEFOTAXIME USING PRE- FILLED SYRINGES, FOR EARLY ONSET SEPSIS ON A NEONATAL UNIT

Suzannah Hibberd. *Southampton Children's Hospital*

10.1136/archdischild-2019-nppc.47

Background In December 2017, cefotaxime doses for treatment of early onset sepsis were banded according to weight. The dose-banding only applies to neonates <7 days old. The implementation of pre-filled syringes (PFS) supplied by the Pharmacy Technical Services Unit coincided with the introduction of cefotaxime dose-banding.

Aim To assess whether cefotaxime is prescribed according to the dose-banding guideline. To establish if batch numbers of PFS are reconciled on the electronic prescribing system (EPS). To determine whether introducing PFS has resulted in more neonates receiving the first dose of antibiotics within 1 hour of the decision to treat.

Methods An EPS report was generated for 2 groups of patients. Group A received cefotaxime from April to June 2018, group B received cefotaxime from September to November 2017, before dose-banding was introduced. Data collected included: weight; dose; time of prescribing and time of administration for the first dose; whether a PFS was used and if the batch number was reconciled electronically. Patients transferred into the unit were excluded as they had started their antibiotics prior to transfer.

Results 95.3% of group A, (n=85), received doses in accordance with the guideline, two doses were prescribed according to weight. Out of the 95.3% eligible to receive PFS, 91.4% of PFS were documented on the EPS. It was unknown whether PFS were used for the remaining patients. 90.5% of the PFS batch numbers were reconciled, 8.1% were not reconciled and 1.4% had incomplete records. 81.2% of group A received the first dose of antibiotics ≤60 minutes from the point of prescribing in comparison to 76.6% in group B (n=94). 58.8% of group A and 42.6% of group B had doses administered ≤30 minutes after prescribing. Both groups had 5 patients that did not receive their first dose until >2 hours after prescribing.

Conclusion The majority of prescribers are using the dose-banding guideline. 91.4% of doses have been administered using PFS, thereby reducing nursing time used for IV drug preparation. In 8.6% it could not be determined whether a PFS was used although prescription templates had been used. The template includes a mandatory box to say if a PFS has been used, nurses cannot sign the drug administration if it is empty. An outcome from this study is that this discrepancy will be investigated by the electronic prescribing team. Nurses are recording batch numbers onto the EPS in 90.5% of cases.

Nurses will be reminded to reconcile batch numbers and making it a mandatory requirement on the EPS will be investigated. Having PFS available has led to more patients receiving their dose within 30 minutes and slightly more receiving their doses within 60 minutes. However similar numbers are still receiving their doses >60 minutes after prescribing. Next steps will be to examine cases where antibiotics are delayed and identify causes. A limitation of this study is that it does not take into account how long it takes the prescriber to write the prescription after making the decision to treat.

REFERENCE

1. National Institute for Health and Clinical Excellence. (2012) Neonatal Infection (early onset): antibiotics for prevention and treatment. NICE Guideline (CG149)

P038

HAS THE INTRODUCTION OF PLASMA- LYTE AS THE ROUTINE IV MAINTENANCE FLUID THERAPY REDUCED THE RISK OF IATROGENIC METABOLIC DISTURBANCES

Helen Walker. *Alder Hey Children's NHS Foundation Trust*

10.1136/archdischild-2019-nppc.48

Aim Prior to July 2017, the hospital Trust had over twelve different IV fluid choices and there was no 'standard' fluid. This often led to confusion with prescribers and stock issues. The Trust made the decision to switch their routine maintenance fluid choice to Plasma-Lyte in July 2017. This was to simplify, standardise and streamline IV fluid choice, reduce the risk of iatrogenic metabolic disturbances, especially hyponatraemia associated with the current IV fluid use and to bring the Trust up to date with NICE guidelines.¹ An audit was carried out to investigate whether using Plasma-Lyte as the standard maintenance fluid has reduced the risk of hyponatraemia and hyperchloraemia in patients prescribed maintenance fluids. The objectives were to identify patients prescribed maintenance fluids, check their electrolytes and check that the new IV fluid guideline had been followed appropriately.

Methods Data on patients receiving IV fluids were collected twice a week for 6 weeks, beginning in the first week of December 2017. All ward pharmacists working during the data collection period received guidance on the method of data collection. Once the appropriate details were collected on each chosen day, the forms were passed onto the investigator to process. The electronic prescribing system at the hospital trust enables access to all patients' blood results and medical notes, therefore, a separate data collection form could be completed with anonymised data retrospectively following the completion of the data collection period.

Results 145 patients were identified as having IV fluid prescribed, 68 of these had been prescribed Plasma-Lyte according to the Trust guidelines, however guidelines were only adhered to 68% of the time, with the other 32% comprising of patients either not having the correct fluid prescribed or patients having the correct fluid prescribed but not having the necessary monitoring required when receiving IV maintenance fluids. There was a marked reduction of patients experiencing hyponatraemia and hyperchloraemia since the introduction of Plasma-Lyte. Only 3% of patients audited experienced hyponatraemia when receiving Plasma-Lyte, compared to 14% from a previous audit of other maintenance fluids.

Conclusion The results shown are not surprising when the actual composition of Plasma-Lyte is evaluated. For example; Plasma-Lyte ± glucose contains 140 mmol/L of sodium and