reasons why prescription errors occur. ChemoCare treatment data was retrospectively reviewed in order to determine how many prescribed cycles had been marked as 'completed'.
Results 143 prescriptions were analysed. 34.4%(n=21) of written prescriptions contained errors, compared with 11.4% (n=5) of electronic orders. Two of the error types measured

- 'wrong calculation' and 'wrong drug prescribed for cycle'
- occurred significantly more frequently in written than electronic prescriptions.

The Fisher's Exact test produced p values of 0.017 and 0.008 respectively. Of the 409 treatment cycles prescribed and administered on the electronic system, 56.5% (n=231) had not been marked as 'completed', so would not be returned to SACT as administered chemotherapy. Failure to communicate accurate chemotherapy data to SACT not only limits research opportunities to progress safety aspects of delivering chemotherapy, but also has significant cost implications for the Trust, as chemotherapy treatment costs are not recovered.
Conclusion This study supports the use of an electronic prescribing system for ordering paediatric chemotherapy, given the significant reduction in errors compared with written prescriptions. The introduction of a chemotherapy-specific safe prescribing poster is suggested in order to improve compliance with ChemoCare. Further studies analysing national compliance with data return to SACT, are required to identify cost implications for the NHS and subsequent areas for quality improvement.

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P008 MEASURING MEDICINES ADHERENCE IN CHILDREN: A SYSTEMATIC REVIEW

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Aim 30–70% of children prescribed long-term medicines have poor adherence.[1] Knowing the degree of adherence is important to understand the consequences of nonadherence and to develop strategies to improve medication adherence in children. We therefore performed a systematic review to identify measures of medication adherence used in children and the strengths and weaknesses of those measures.
Methods A systematic literature search was performed using PubMed, EMBASE, Medline, CINAHL, IPA and Cochrane library databases covering the period March 2008 to March 2018 in order to focus on the methods recently used to assess adherence. Inclusion criteria were original research studies measuring medication adherence in children (aged 0–18 years) and included all countries and languages. To be included, the assessment tool used to measure adherence in each study needed to be described in detail. Exclusion criteria included: review articles, editorials, conference papers, reports, and studies reporting only adherence outcomes/rates without reporting measurement methods. As a reliability measure, 5% of titles and abstracts were assessed independently by a second researcher.
Results Of 9,747 papers identified by the search, only 31 articles met the inclusion criteria. Most studies were conducted in the US (14) with four in South Africa, three in Kenya and the remaining ten studies in various countries including one in the UK. Diseases studied included: HIV/AIDS (13), asthma (5), inflammatory bowel disease (3), epilepsy (2), type 1 diabetes (2), others (6). In the commonest disease studied, HIV, self-report, Medication Event Monitoring Systems (MEMS), dose counting, pharmacy refill data and medication plasma levels were used to assess adherence. In patients with diabetes, mobile phone, medication plasma levels and self-report were used. Canister weight and MEMS were used to assess adherence in patients with asthma. Self- reporting was the most commonly used method to assess adherence and was reported to be flexible, inexpensive, and time saving but it was the least accurate and overestimated adherence rates. MEMS was the most accurate method but was also the most expensive. Dose counting was easy to use and inexpensive but adherence was also overestimated with this method. Measuring medication plasma levels was more precise than self-reporting and dose counting but was costly, time consuming and difficult to perform. Pharmacy refill data was more accurate than self-reporting and less accurate than MEMS and medication plasma levels. Mobile phone methods were reported to be very expensive and difficult to perform. Canister weight had the same efficacy as using MEMS and was less expensive, but was only applicable to inhalation devices.
Conclusion Currently, no gold standard method to measure adherence to medicines in children exists as each method has its own advantages and disadvantages. Overall, the MEMS method was the most accurate but most expensive, while self-reporting was the least accurate but least costly.

None of these measures were reported to be highly accurate in the assessment of adherence, so it is important to use a combination of multiple measures in order to gain a true picture of adherence.

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P009 MEDICINES OPTIMISATION WHEN TRANSITIONING FROM PAEDIATRIC TO ADULT CRITICAL CARE

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Introduction Transitioning is the process of preparing, planning and moving from children's to adult services.[1] More young people are surviving with long-term conditions and it is therefore inevitable that more patients will require specialist care into adulthood.[2] Effective transition requires effective communication and planning between paediatric and adult multidisciplinary teams and must engage both the patient and their parents/carers.[1] A trust critical care transition pathway was developed in 2016 by the adult and paediatric critical care teams.
Case summary A 17-year-old transitioning patient required an urgent transfer from paediatric to adult critical care to receive treatment that was unavailable at the paediatric trust. On arrival at the adult trust, it became apparent that patients' previous and current drug history and allergy status was poorly documented resulting in confusion and delay in

medicines administration. A review of the trust and critical care transitioning pathways showed that very little information on medication history, if any, was documented throughout the transitioning process. Adult and paediatric critical care clinical pharmacy teams met to review and improve the transfer of medicines information for transitioning patients. Various paediatric themes were presented and discussed. These included the common use of unlicensed liquid medicines in paediatric patients to facilitate weight- specific doses via feeding tubes and paediatric treatment strategies that would be less familiar to our adult colleagues e.g. ketogenic diets. The significant role of the parent/carers in their child's medicines administration was also highlighted. Furthermore, at the paediatric trust, parents/carers are allowed to administer medicines to their child in hospital but there is no facility for this currently in adult healthcare, which parents may find difficult to accept. The meeting action points were taken to the critical care transitioning meeting which is attended by medical and nursing staff from both the adult and paediatric units along with members of the transitioning team. It was agreed that the critical care transitioning pathway should include a drug history and this has since been added. In addition, a Critical Care Pharmacy Handover will be prepared for transitioning patients to include the patients most recent medicines reconciliation with allergy status, critical care discharge summary and if applicable discharge prescription. This information will be held by the transitioning sister at the adult critical care unit along with the patients transitioning notes.

Conclusion We need to make improvements in patients medicines optimisation when transitioning between paediatric and adult critical care. A minimum standard of information transfer was agreed with our adult colleagues and transitioning documentation was reviewed and updated to include medicines reconciliation in the basic information transfer for all transitioning patients. It is essential however that we continue to work closely with our adult critical care colleagues to ensure continuity and patient/parent/carer engagement.

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P010 INFLUENCING CHANGE: IMPACTFUL COMMUNICATION – PAEDIATRIC DIABETES PRESCRIPTIONS

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Aim The paediatric wards in two hospital sites within one Trust deal with the supply of newly diagnosed diabetic prescriptions differently and the aim of this project was to have uniformity throughout the Trust with regards the supply of these discharge items, with both hospital pharmacy sites supplying the discharge items. Having completed the Pharmacy Management Clinical Leadership in Pharmacy (CLIP) program I wanted to use new skills learned throughout CLIP to be able to lead on influencing a change of practice on one hospital site and have uniformity across the Trust. I wanted to be able to persuade one site to change their practice of over 20 years and start getting the items dispensed through the hospital pharmacy.

Methods Using the GROW model I ensured I was clear on what my plan was and that my goals were SMARTER. I had to deal with a number of different professionals and was prepared for some conflict as was expecting resistance to change. I met with the key stakeholders with regards the change. I communicated with medical staff, nursing staff and dispensary manager in the relevant hospital, and used the Colours Model1 to help me with this. The Colours Model is a simple and effective way to analyse our own communication preference and also to understand the preference of others. Knowing this I was then able to flex my communication style accordingly to engage with all parties more effectively. I identified what 'colour' I classed each group as and used different styles of communication for each. I also reviewed the records of newly diagnosed diabetic patients discharged from the paediatric ward over a period of one year to determine what discharge letter was given to the patient, and what detail was on it.

Results Of the patients discharged in 2017, only 44% had a discharge on the relevant electronic system with pharmacy items on it, with just one having all required items. I communicated the following way with the different staff, once I had identified their 'colour'. Medical staff (GREEN - Amiables, who are task focused and have indirect style). I focused on whole team and explained the benefit for change across interface. Nursing staff (RED - Drivers, who are task focused and have a direct style). I got straight to the point, explained reasons and results. Dispensary manager (BLUE - Analyticals, who are task focused and have an indirect style). I emailed in advance. Got to the point and gave exact details.

Conclusion All Staff agreed to the change in process in the paediatric ward. All discharges for newly diagnosed diabetic children on both sites will be electronically written and dispensed within the hospital pharmacy. The outcome for patient care is a more seamless transition of care between interface. By undertaking the CLIP programme I acquired a number of important skills to enable me to successfully lead this change. I made my voice heard and led with impactful communication.

REFERENCE

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P011 AN EXPERIMENTAL TREATMENT FOR ENTEROVIRAL SEPSIS

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Background A male infant was admitted to the neonatal unit with respiratory distress, following delivery by emergency caesarean section at 36/40 for maternal illness (viraemia). The patient's condition deteriorated with disseminated intravascular coagulation (DIC), abnormal liver function, ascites and pleural effusions. Enteroviral sepsis was diagnosed following positive enterovirus PCR on lumbar puncture and stool sample.

Summary of problem There are no commercially available treatments for enterovirus in the UK. Following an extensive literature search, the neonatology consultant became aware of an experimental treatment with potential action against enterovirus.[1 2] Pocapavir is an investigational drug candidate developed for poliovirus indications, but also has antiviral activity