Vancomycin therapeutic levels were reached on day 5. The dose remained unchanged for the remainder of the course and levels taken every 3 days were appropriate. The pharmacist prepared a weaning plan for morphine and clonidine. The pharmacist advised reducing dexamethasone and stopping when no longer required due to raised blood glucose measurements.

**Lessons learned**
How to obtain and administer diphtheria antitoxin. What chemoprophylaxis to provide to family and staff, the difficulties of supplying this to so many adults in a children’s hospital and the pressure the hospital faced having 34 staff members excluded for 48 hours while cultures were taken. The importance of personal protective equipment to protect staff and other patients. Monitoring parameters: vancomycin levels, renal function, cardiac function, blood sugars. Importance of encouraging parents to have their children vaccinated with all the primary immunisations to protect their children and others.

**REFERENCE**

**P006**
HOW CAN ELECTRONIC ORDER SETS REDUCE TIME TO PRESCRIBE MEDICATIONS ON ADMISSION TO PICU?

Jenny Gray, Jane Hutchinson. Bristol Royal Hospital for Children

10.1136/archdischild-2019-nppc.16

**Aim**
Our paediatric intensive care unit (PICU) has been using the Phillips ICCA electronic prescribing system since 2016. This system has an ‘order set’ function that allows a pre-populated list of medications to be created for use in certain situations. Potential benefits include reduced time to prescribe medications, reduced medication error rate and improved prescribing efficiency. The PICU quality improvement group and Pharmacy Informatics team created an order set for patients under 1 year of age admitted from theatre following cardiac surgery, which was implemented in June 2017. Our theatres do not use the ICCA system so as the patients are transferred with infusions running, there is a time gap where the patient has infusions running on PICU without a live prescription on ICCA. The aim of this project was to establish a reduction in the time taken for all 13 medications to be prescribed. In turn, this would reduce the risk of running infusions without a live prescription.

**Methods**
Data was collected retrospectively from the ICCA system on 15 patients pre and 15 patients post the introduction of the order set. Time of admission was set when the patient was allocated a bed on ICCA. The times at which each medication was prescribed were taken directly from ICCA. A user satisfaction survey was also sent out to the order set implementation phase.

**Results**
The time taken to prescribe all 13 medications was reduced on average by 9.4 hours per patient. The average time saved per medication was 43 minutes. Pre implementation, the average time to prescribe the medications was 11.4 hours (95% CI [5.5, 17.3]). Post implementation, the time taken to prescribe the same medications was 2 hours (95% CI [0.5, 3.5]). Pre implementation, prescriptions were started at least 30 minutes (average) after the patient arrived on PICU. Post implementation, prescriptions were started 30 minutes before patient admission and completed within 30 minutes of arrival. 20 staff members completed the user satisfaction survey. The survey had a 13% return rate. 70% of users agreed or strongly agreed that using the order set function improved prescribing efficiency and 55% of users agreed or strongly agreed that the order set helped ensure appropriate doses.

**Conclusion**
Implementation of an order set for this patient group removed the risk of running infusions without a live prescription. This project is an example of how prescribing support functions within electronic prescribing packages can reduce the time taken to write up medications within our unit, allowing prescribers to spend more time on other duties. Following the success of this intervention, further order sets will be created for use on our unit. A high level of clinical knowledge from the pharmacy support team and strong engagement with the clinical team was essential in creating a product that was fit for purpose. Limitations of this project are that we did not have the capability to assess a reduction in medication error. We now have increased support within the Pharmacy Informatics team to enable this for future projects.
MEASURING MEDICINES ADHERENCE IN CHILDREN: A SYSTEMATIC REVIEW

Mohammed Aldosari, Sharon Conroy, Ana Oliveira. Nottingham University

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.

REFERENCE

P008 MEASURING MEDICINES ADHERENCE IN CHILDREN: A SYSTEMATIC REVIEW

Mohammed Aldosari, Sharon Conroy, Ana Oliveira. Nottingham University

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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.

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