

**NIMC-PAED**  
**FREQUENTLY ASKED QUESTIONS (FAQs)**

Paediatric Therapeutics Program UNSW & SCH .

*updated June 2008*

**1. Why have a National Chart and how do we know that the NIMC-Paed is better than our old chart?**

The NIMC is here to stay. It is a part of the standardisation of medication charts across the nation in order to reduce errors in prescribing and interpretation of medication orders. The paediatric NIMC is slightly different to the adult NIMC (see Fact sheet). A national Paed-NIMC has been developed based on user feedback, audit data and expert input. Local audit will be carried out to determine both adherence to and outcomes with the use of the chart as part of the hospital's on-going medication safety program. It is anticipated that optimal use of the NIMC-Paed will further enhance key improvements in medication safety that have been achieved at SCH in recent years.

**2. Who should fill out the ADR/allergy box?**

It is the primary responsibility of the prescriber as part of the patient's admission and prescription of medicine to clarify and document known ADRs/allergies. However, if the prescriber has not completed the red allergy/ADR box, then a nurse or pharmacist may do so, after finding out the appropriate information. For information about appropriate ADR documentation and list of ADR types and examples see the Paediatric-NIMC educational resources on the Paed-NIMC website.

**• Where do I find an ALLERGY/ADR STICKER?**

As the chart has been developed for all hospitals to use nationally, many other hospitals use stickers to identify patients with ADRs/allergies. This Campus does not have any stickers at present, so disregard this instruction.

**• Is a red pen allowed to be used in the allergies section?**

Use a black or blue pen.

**3. Do I need to enter the INDICATION for each order?**

Yes. The indication is important for the double-checking process for;

**Dose:** e.g. Erythromycin dose is different depending on indication; pro-kinetic or antimicrobial?

**Duration of treatment:** e.g. Cefazolin is used for short-term post-operative prophylaxis or may be prescribed for on-going treatment of infection;

**Maximum daily dose:** Paracetamol maximum daily dose is lower when used for fever (60 mg/kg/day) than for pain relief (90 mg/kg/day).

**Off-label indication:** dose which is not found in standard references, e.g. medication dosed according to a clinical trial protocol or used as an approved individual patient use (IPU) medicine

**To decrease drug name confusion:** e.g. azathioprine (immunosuppression) should not be confused with azithromycin (antimicrobial/anti-inflammatory) if the indication is clearly stated.

**4. Do I need to enter the BASIS FOR DOSE CALCULATION for each order?**

Yes. The basis for the dose calculation should be entered for all paediatric medicines where dose is based on mg/kg or mg/m<sup>2</sup>. Dosing errors are the most common type of medication error in paediatrics. Showing the basis for dose calculation on the chart allows a double-check (by nurses, pharmacists +/- other prescribers) to verify that the correct dose has been chosen and correctly calculated. The recommended "standard" dosing reference at SCH is the RCH Pharmacopoeia ('red book') so check dose here when ordering. However, there are some local exceptions which should be checked first (see insert in red book issued annually; and SCH DURC guidelines).

- *This is one of the most important NEW features of the NIMC-paed to help reduce important dosing errors and related harm in paediatric patients*

- **What happens if the indication or dose calculation is not entered?**

The nurse can still administer the medication. If there is any uncertainty, contact the prescriber. After consultation with the team, the pharmacist may enter the indication if clarification is required.

## 5. THE ADMINISTRATION TIMES RULE

- **Why do doctors have to write in administration times?**

Misinterpretation of the intended frequency of a medication order can cause medication errors resulting in potential adverse patient outcomes. Prescribers entering times at the time of writing the prescription is designed to more clearly communicate the prescriber's intention and to decrease these types of errors, and potential patient harm. Data from the national pilot implementation of the NIMC showed a 7.6% increase in correlation between actual administration times and prescribed frequency when administration times were entered by the prescriber. This represents a reduction from 10 errors per 100 orders to 3 errors per 100 orders, i.e. a large number of potential adverse events averted. Several critical incidents, with significant clinical consequences (including one in a neonate), have also been reported to IIMS resulting from misinterpretation of frequency. Although there has been some controversy about this change in practice initially, many sites (eg most Queensland hospitals, including paediatric) now have this as standard practice, and report high levels of compliance and substantial reductions in frequency related errors. For more information on the rationale for this feature, please see...

<http://sesiweb.lan.sesahs.nsw.gov.au/clinical%20governance%20unit/learning%20sharing/nimc/Resources/Prescriber%20admin%20times.pdf>

For paediatric patients, additional considerations may need to be taken into account (see below). Doctors and nurses are urged to use common sense, flexibility and good communication to ensure that patient care is not compromised at any time.

- **Are there any exceptions to the rule?**

Yes. Two areas have been identified, where the nurse should enter the administration times:

- i. The sick 'high dependency' child on multiple drugs (eg a child undergoing a bone marrow transplant), where prescribed administration times are not always achievable, due to IV drug incompatibilities, blood product infusions etc.
- ii. Salbutamol (Ventolin) inhaler is often prescribed as every 2-4 hours, as per SCH protocol. The frequency of administration is determined by nursing staff and based on the child's clinical condition.

There may be other clinical situations you may encounter that are similar. Please let us know if you identify any and we will consider adding them to the list of "exceptions"

- **What happens if the Dr does not enter the times?**

Nurses should not enter times routinely (see exceptions). However, the patient must still be administered the medication. An important part of safe prescribing is communicating orders clearly. For new orders, prescribers should ensure nurses are aware that a new medication has been prescribed, to ensure its availability and safe administration at the correct dose interval. The Paed-NIMC should foster discussion between Drs and nurses as to how and when a new medicine is administered. Getting this right at the time of writing the prescription is ideal and should ultimately save considerable time for all staff (eg in seeking clarification about or changing times if not appropriate).

**If the prescriber has not entered times, the nurse may do so. If there is uncertainty regarding the interpretation of the times, the nurse should contact the prescriber to seek clarification first.**

- **What happens if the doctor does not write the most *appropriate* administration time?**

The administration time is not considered part of the legal prescription, so the nurse may change the time to suit meal times, scans etc without breaching legislation. However, if there is any uncertainty regarding the intended frequency, the nurse should contact the prescriber to seek clarification first. It is also important to note that LEGIBILITY is a very important safety feature. The current version of the NIMC-paed has very little space to allow crossing out and writing new times clearly. Drs and nurses should keep this in mind and make every effort to ensure that any changes are CLEAR.

- **What happens if the Dr prescribes tds times at 8am 2pm and 8pm but the first dose needs to be given now at 11am.**

The answer to this FAQ depends on the type of medicine being given, the child's clinical condition and the route of administration. In general, the first dose can be written on the 'once only' section and then the next dose is ordered on the regular med chart- the prescriber can decide whether to give 'early' at 2pm or later at 8pm, depending on the clinical circumstances. For IV meds, the times in this example may have to be changed from the recommended ones to reflect 8 hourly dosing.

- **What should be done if an IV tissues?**

This is not just a problem with the new chart, but a general medication administration issue. Options include recharting with new times, or omitting dose altogether and giving the next dose when due. As a general principle, nurses should try to stick to standard times. Which option is chosen, depends on the drug administered, time the IV line was out and the child's clinical condition. Being a complex problem, there is no standard answer that is appropriate for all circumstances. The individual case should be discussed with the Team doctor/s: e.g. in an unstable patient with an acute infection, an antibiotic should be given straight away once IV resited, whereas for a prophylactic antibiotic, a dose could probably be missed without compromising patient well-being.

- **How about medicines started in the ED or ICU? Do you play 'catch up' to get the meds around to standard times?**

Medicine to treat acute illnesses should be started straight away. Regular medicines such as vitamins etc can be started the next day or at the recommended time. Emergency Department prescribers should write in the standard times, after noting the time the first dose was given. Depending on the drug, the doses could be gradually changed to standard times once transferred from ICU or ED eg daily gentamicin started at 2am could be gradually moved up to 8am.

- **What happens when you take a drug level e.g. gentamicin, anticonvulsants?**

This FAQ pops up a lot and is not particular to the NIMC. The dose should be administered at the usual time (i.e. do NOT wait for the result) UNLESS:

- otherwise instructed by the prescriber (eg by telling the nurse or writing a note in the "additional information" part of chart to wait for the result before administering the drug); OR
- if there are clinical reasons to suspect toxicity (e.g. if the child is ataxic and taking phenytoin, the phenytoin levels may be toxic and so waiting for the drug levels to come back before administering that dose is appropriate).

In most instances of routine monitoring (eg trough levels for TDS gentamicin), there is no need to wait for the level to come back to administer that dose. However, the level should definitely be checked before the following dose is given.

## **6. Where are weaning doses charted?**

The adult NIMC has a variable dose section, which is NOT on the Paediatric NIMC. Decreasing/weaning doses can be charted on the Regular Medications section eg Prednisolone mane as charted. 0800hr On each day chart the dose in the administration section...50mg 50mg 50mg 40mg 40mg 40mg etc.

## **7. Why is there such a large space dedicated to TELEPHONE ORDERS?**

As the chart is a national one, the telephone order section is included to ensure safe prescribing in rural hospitals, which need to use telephone orders more often than larger hospitals. The use of telephone orders is restricted at SCH to emergencies and some insulin orders (consult SCH protocols).

## **8. Can we use ID stickers in the new chart?**

Yes. When using ID stickers, the prescriber must confirm the patient ID by writing **the child's name** [*not* the prescribers!] in the "1st prescriber" section under the ID sticker. Ideally, stickers should then be applied to all yellows in the chart. Don't forget to place an ID sticker also on the back of the chart ("PRN" section) at the same time

- **Can nursing staff stick MRN stickers on the chart?**

No. Part of safe prescribing practice is for the prescriber to identify the patient for whom they are prescribing.

## **9. If the regular medication section runs out can the PRN orders remain active?**

No. When the regular medications need to be re-charted, re-chart the PRN medications at the same time, as the old charts are filed away in the medical record.

## **10. How do I safely prescribe a medication that is both PRN and Regular, now that the sections are on different pages?**

Some medications such as paracetamol, morphine, diazepam can be both regular and PRN. Order the medications in the two sections as per instructions and in the "additional comments" section write "see PRN order" and "see regular order" to ensure all staff are aware. Everyone should be vigilant to make sure that the SAFE MAXIMUM daily dose is not exceeded.

## **11. What does 'pharmaceutical review' mean at the bottom of each set of orders?**

Although this is not consistently defined among hospitals, at SCH the pharmacists will initial the bottom of each column to indicate that a pharmacist has reviewed medications on their ward round on a particular day.