

The Paediatric National Inpatient Medication Chart

Implementation and evaluation resources

- Optimal implementation of the paediatric National Inpatient Medication Chart (NIMC) will involve use of **multi-faceted strategies** as part of a **co-ordinated implementation program**, suited to the needs of local settings.
- Appropriate **education** will form part of an effective implementation program. A range of resources (TRIM 16687) is available to support education about safe prescribing and administration of medicines to paediatric patients and optimal use of the paediatric NIMC.
- **Evaluation** using clinically meaningful outcomes is strongly recommended. Selected indicators from the Quality Use of Medicines Indicators in Australian Hospitals (developed by the NSW Therapeutic Advisory Group and Clinical Excellence Commission) are well suited to this purpose. Children's Hospitals Australasia Medication Safety Expert Reference Group recommends using the following indicators as a minimum set to form part of a more comprehensive evaluation of the paediatric NIMC nationally.

3.2 *Percentage of patients whose known adverse drug reactions are documented on the current medication chart*

<http://www.ciap.health.nsw.gov.au/nswtag/publications/QUMIndicators/3.2.pdf>

3.3 *Percentage of medications that include error-prone abbreviations*

<http://www.ciap.health.nsw.gov.au/nswtag/publications/QUMIndicators/3.3.pdf>

3.4 *Percentage of paediatric medication orders that include correct dose per kg (or body surface area) and a safe total dose*

<http://www.ciap.health.nsw.gov.au/nswtag/publications/QUMIndicators/3.3.pdf>

Click here <http://www.ciap.health.nsw.gov.au/nswtag/QUMIndicators.html> for the whole indicator set.

Ideally, evaluation of impact on clinically meaningful outcomes should include reliable measures of medication errors and harm events. However, nationally standardised tools are not yet available to measure these outcomes.

- **Auditing appropriate use of the paediatric NIMC** is also recommended at regular intervals to inform optimal implementation locally. A short audit tool (TRIM 16689) and a long audit tool (TRIM 15251) were developed by Queensland Health and are provided as examples.

Meaningful national comparisons, both locally (across time) and nationally (at any point in time and longitudinally), will only be obtained by standardising audit parameter definitions and by standardising how and by whom data is collected.

It is strongly encouraged that, as a minimum, all facilities using the paediatric NIMC endeavour to achieve maximum adherence with the following core parameters.

- Accurate patient identification
- Accurate weight +/- height documentation
- Complete and accurate information about Adverse Drug Reactions (ADRs)
- Documentation of indication (regular and prn medicines)
- Correct dose (including documentation of the relevant mg/kg or mg/m² basis for dose calculation and correct actual dose; as well as maximum daily dose for prn medicines being specified and correct)
- Use of approved abbreviations and avoidance of dangerous ones.
- Scheduled medicines administration times correlating with frequency ordered by prescriber and actual administration times medicines given

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