National In-patient Medication Chart

Using the Chart

Safer prescribing, dispensing and administration of medicines to minimise patient harm
Objectives

- Understand the features of the chart
- Understand why the features, prompts and alerts have been incorporated into the chart
General Requirements

- Medical Officers must order medicines in accordance with legislative requirements (Poisons Act and Regulations)

- Chart to be completed for all admitted patients

- All medications should be reviewed regularly

- Specific charts are required for specialised medications such as insulin, intravenous fluids, anticoagulants etc
General Instructions

- Write legibly in ink. Water-soluble ink should not be used (eg fountain pens)
- “Black” ink is preferred, except for clinical pharmacists “Purple”
- Medication order valid only if prescribing medical officer enters all required items
- All information is to be PRINTED
- Only acceptable abbreviations to be used
- Separate order required for each drug
- No erasers or “whiteout”
Chart Layout

- ‘Once off orders’ on front page
- ‘Regular orders’ on middle two pages
- ‘PRN orders’ on last page
- Variable Dose medication separate section
- Warfarin separate section
Patient Identification

- Affix patient ID label on pages 3 and 4
- Check labels are correct
- HANDWRITE patient name on pages 3 and 4
Rationale

- Attachment of ID label is an ‘automatic’ task that is subject to slip/lapse type error

- Printing the patient’s name below their ID label on the medication chart is a checking mechanism to minimise the risk of ordering for the wrong patient
**Allergies & Adverse Reactions**

- Attach ADR sticker to pages 3 and 4
- Ask about allergies including drugs, food, topical (e.g. Dyes/Lotions), sticking plasters, latex etc
- Document information, sign, print name and date
- Affix ADR alert sticker to front of patient record and complete
- Attach red ADR Alert Bracelet to patient’s wrist
Rationale

- Often this information is located in other parts of the patient’s medical record.
- Information about a previous ADR or allergy can assist staff in making decisions about medication therapy and avoid re-prescribing, dispensing and administering a medication involved in a previous ADR.
- Signing of ADR histories by the clinician helps to assign accountability for the information obtained.
- Alerts provide a physical reminder to help prevent ADRs.
Patient Age and Weight

☑ Document patient weight and height
Rationale

- Facilitate accurate dosing

- Many high-risk and paediatric medication doses are calculated using bodyweight
Numbering of Medication Chart

✓ HANDWRITE number of charts in use
For example:

MEDICATION Chart No. ....1...... of ....2......
Additional Specialised Charts

- Indicate use of a specialised chart by placing a ✓ or ✗ against the appropriate chart/s.
Drugs Taken Prior to Admission

Need to record:

- Over-the-counter and complementary medications
- Whether own medications brought in
- Administration aids
- GP and community pharmacist contact details
- Information available when discharging patient

<table>
<thead>
<tr>
<th>Medication</th>
<th>Dose &amp; frequency</th>
<th>Duration</th>
<th>Medication</th>
<th>Dose &amp; frequency</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

GP: ____________________________
Community Pharmacy: ________________

Documented by: ________________________ (Sign) (Date) Medicines usually administered by: ____________________________
Rationale

- Medication history provides an essential source of information for staff when making decisions about appropriate medication therapy.
- Current processes are disjointed and information often located in various parts of the record or with pharmacy staff.
- Facilitates communication back to the GP of changes made to a patient’s medications during admission.
## Once Only, Pre-Medication and Nurse Initiated

For **nurse initiated medicines**, document:

<table>
<thead>
<tr>
<th>Date Prescribed</th>
<th>Medication (Print Generic Name)</th>
<th>Route</th>
<th>Dose</th>
<th>Date/Time of administration</th>
<th>Prescriber/Nurse Initiator’s signature and name</th>
<th>Time Given</th>
<th>Pharmacy</th>
</tr>
</thead>
</table>

Remember.....Check your medication order against “Drugs Taken Prior to Admission”
Note

Nurse initiated medications must be in accordance with the Poisons Act and Regulation and hospital policies related to nurse initiated drugs
Telephone Orders

Remember..... Check your medication order against “Drugs Taken Prior to Admission”

- Must be countered signed by **SECOND** nurse, confirming verbal order heard and correct
- Must by countersigned by prescribing doctor within **24 HOURS**

**Warning: High Error Prone Activity**
Rationale

- To reduce risk, telephone order countersigned by second nurse

TELEPHONE ORDERS ARE NOT ENCOURAGED, UNLESS ESSENTIAL FOR WORK PRACTICES I.E. RURAL SETTINGS / NO RESIDENT MEDICAL OFFICERS
Variable Dose Medication

Remember….. Check your medication order against “Drugs Taken Prior to Admission”

- Test results to be documented prior to determining the next dose
Rationale

- Variable dose medication section reduces risk of confusion when variable dose is written in regular section
- Structured to allow daily dosing of medications based on lab results or as a reducing protocol e.g. gentamicin and steroids
- Prompts for test results required to determine the next dose
Warfarin

- Specify the Brand
  
  *Note. Marevan is the preferred brand for WA*

- Complete ‘Indication’ and ‘Target INR’

- Standardised dosing time of 4pm (1600) to enable review by day medical shift

- “mg” pre-printed and different colour to prevent confusion

Warning: High Risk Medication
Warfarin

- Modified Warfarin section for hospitals with specialised anticoagulation chart
- Check box if Warfarin is prescribed
- All prescription details to go on anticoagulation chart

Warning: High Risk Medication
Rationale

- A separate section for Warfarin has been included, as:
  - Nearly 10% of adult population on Warfarin
  - Drug that regularly causes adverse events
  - Enables staff to make informed decisions about a patient’s dose based the prescriber’s indication for Warfarin, INR targets and INR results
WAMSG currently developing a Warfarin Chart to be implemented in WA public hospitals

Further information about the WA Warfarin Chart will be available shortly on the NIMC website

Warfarin Education

✓ Document that the patient has received counselling about Warfarin
Rationale

- Because of well documented risks associated with use of Warfarin, all patients should receive counselling and be provided with a Warfarin fact sheet
**Regular Medicines**

- Clearly document dose use whole numbers, not decimals (eg 500mg instead of 0.5g)

  Never use a terminal zero (0.0) as it may be misread if the decimal point is missed (eg 1.0 misread as 10).

- Date when medication started (not chart)

- Use the **GENERIC DRUG NAME**, unless combination product

- Administration times to be completed by **doctor**

- Use only acceptable abbreviations for Route, Dose and Frequency

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**REGULAR MEDICATIONS**

<table>
<thead>
<tr>
<th>YEAR 20</th>
<th>DATE &amp; MONTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOCTORS MUST ENTER administration times</td>
<td></td>
</tr>
</tbody>
</table>

- **Date**
- **Medication (PrintGeneric Name)**
- **Route**
- **Dose**
- **Frequency & NOW enter times**
- **Prescriptions**
- **Pharmacy**
- **Prescriber Signature**
- **Contact**

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Remember..... Check your medication order against “Drugs Taken Prior to Admission”
Who is responsible?

Doctors ‘Bit’

Nurses ‘Bit’

Medication order valid only if the prescribing doctor completes this ‘bit’
Rationale

- Medication errors can occur
  - when the medication dosage ordered by the prescriber is not correctly interpreted
  - when the frequency ordered by the prescriber is not correctly interpreted and administration times do not correspond with frequency prescribed

- Use of the generic name reduces the risk of confusion between trade names that sound alike or look alike
Slow Release Box

 Tick if Slow release

SR= Sustained or modified release formulation. If scored tablet, then half can be given. Dose must be swallowed without crushing.

✓ Prompt to prescribers to indicate a sustained or modified release form of an oral drug (Eg. Verapamil SR)
✓ Explanation of ‘SR’ in margins of medication chart
Limited Duration Medicines

<table>
<thead>
<tr>
<th>Date</th>
<th>Medication (use Generic Name)</th>
<th>Print</th>
</tr>
</thead>
<tbody>
<tr>
<td>13/9/04</td>
<td>Naproxen</td>
<td></td>
</tr>
</tbody>
</table>

| Route | Dose | Frequency & NOW enter times | 0 | 0/000 | 0/000 |

<table>
<thead>
<tr>
<th>Pharmacy</th>
<th>Indication</th>
<th>Print Name</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pain</td>
<td>Bob</td>
<td></td>
</tr>
</tbody>
</table>

- Indicate end of administration with ✗
- Put a line through days/times when NOT to be given
Ceased Medicines

- Doctor to put single line through prescription section
- Doctor to put single line through administration section
- Write “cease”, date and reason
Enter code and circle to ensure that it is not mistaken for someone's initials.
Pharmacists Review

- Two components
- Drug Order: document source, date checked, initials
- Clinical pharmacists review: confirms they have reviewed the medication chart
Rationale

- Process of review ensures:
  - orders are clear, safe and appropriate for patients
  - risk of adverse drug events are minimised
- Part of the evidence to support the Australian Health Ministers’ pharmaceutical review initiative (Joint Communiqué, April 2004)

“To also help safer use of medicines, by the end of 2006, every hospital will have in place a process of pharmaceutical review of medication prescribing, dispensing, administration and documenting processes for the use of medicines”
Discharge Supply

<table>
<thead>
<tr>
<th>Regular Medications</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Continue on discharge? Yes / No</td>
<td>Continue on discharge? Yes / No</td>
</tr>
<tr>
<td>Dispense? Yes / No</td>
<td>Dispense? Yes / No</td>
</tr>
<tr>
<td>Duration? daysQty?</td>
<td>Duration? daysQty?</td>
</tr>
<tr>
<td>Continue on discharge? Yes / No</td>
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<tr>
<td>Duration? daysQty?</td>
<td>Duration? daysQty?</td>
</tr>
</tbody>
</table>

Prescriber’s Signature  
Print Your Name  
Date  
Pharmacist  
Date

- Completed by prescribing medical officer

Remember..... Compare discharge supply with all information on NIMC
Rationale

- Significant transcription errors (5-17%) on generation of discharge prescription
- Number of sites do not check discharge prescriptions vs in patient medication chart
- Use of medication chart to indicate what is required to be dispensed
PRN Medicines (when required)

- Doctor **MUST** write
  - Dose
  - Hourly frequency
  - Maximum daily does (24 hour period)

- Person administering **MUST** write
  - Dose and route given
Rationale

- Separated from “Regular Medicine” section to reduce risk of giving regularly

- Includes additional information to prevent overdose
  - dose with minimum hourly frequency to be administered
  - maximum dose to be given in 24 hours
Key to success

- Print legibly
  - “what is this?”
- Enter Frequency and then enter administration times
- Use only Generic Drug Names, except combination products
- Use “accepted” abbreviations, leave the rest
- Avoid decimal points (write 500mg instead of 0.5g)
- Never use terminal zeros (1mg instead of 1.0mg)
- Reconcile your medication orders

![Image of handwritten text: 2 x 1/2 500mg syrup 1.0 mg 500mg]
Errors and Changes

- For medication errors you believe are a result of the NIMC, complete an AIMS form and include the phrase ‘National Medication Chart’

- Recommendations for change should be lodged on the Change Register. Visit www.health.wa.gov.au/nimc
For Further Information

The full set of guidelines for the use of the NIMC explains all sections of the chart with illustrated step by step instructions.

The guidelines are available on the NIMC Website

Questions?
Comments?
Queries?