Government of Western Australia
Department of Health

National Inpatient Medication Chart (NIMC) Audit 2014

Train the Trainer Workshop

National Inpatient Medication Chart (NIMC) Audit

- Nationally coordinated NIMC audit that occurs every 2 years, starting from 1 Aug – 30 Sep 2012
- Using and auditing the NIMC are activities that can be used to demonstrate compliance with the NSQHS Standards for accreditation.

NIMC Audit

- Auditing the NIMC:
  - Provides baseline data for NIMC use and future quality improvement activities
  - Improves the safety of medication charting in hospitals
  - Evaluates the effect of NIMC safety features in hospitals.

NIMC Audit

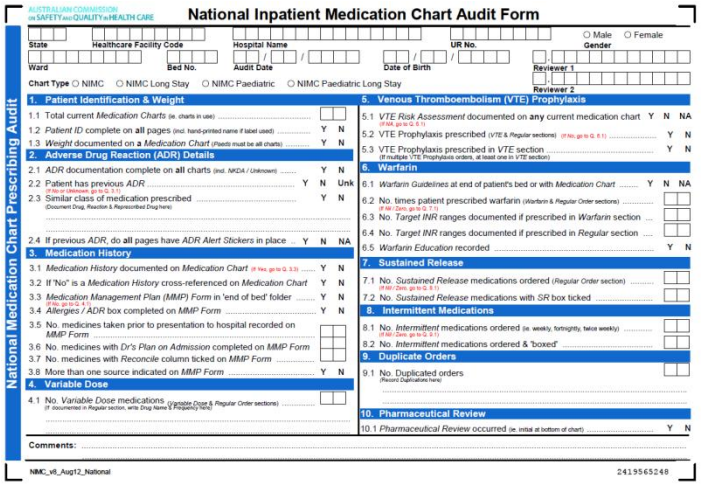
- Objectives:
  - Evaluate the effect of the NIMC safety features
  - Evaluate the implementation process on the safety and quality of
    - prescribing
    - medication documentation
  - Identify further areas for improvement in medication management.

NIMC Audit

- Frequency of auditing will depend on:
  - staff changes,
  - risk of medication errors
  - other local factors.
- If significant non-compliance is identified: audit occur more frequently within a quality improvement cycle (PDSA), until compliance improves.

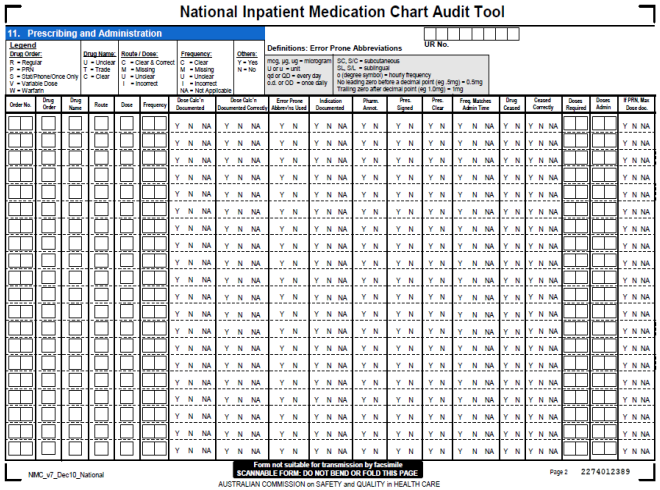
NIMC Audit Tools

- Paper based form, available at:
  - www.safetyandquality.gov.au/wp-content/uploads/2012/02/NIMC-Audit-Form.pdf


National Inpatient Medication Chart Audit Form

National Medication Chart Prescribing Audit

1. Patient Identification & Weight
2. Adverse Drug Reaction (ADR) Details
3. Medication History
4. Variable Dose
5. Venous Thromboembolism (VTE) Prophylaxis
6. Warfarin
7. Sustained Release
8. Intermittent Medications
9. Duplicate Orders
10. Pharmaceutical Review


National Inpatient Medication Chart Audit Tool

11. Prescribing and Administration

- Electronic versions (*NIMC Audit Spreadsheet*) and web based (*NIMC Audit System*) also available on Commission website.

NIMC Audit Reports

Four types of audit reports can be generated:

- **Audit Summary**
- **Audit Statistics**
- **Patient Audit Report**
- **Medication Report**

Preparing for the NIMC Audit

- Refer to Commission's:
  - *Guide to Auditing the NIMC 2014*
  - *NIMC User Guide*
- Read local medication related procedures and guidelines, e.g. approved list of tradenames, list of acceptable abbreviations
- Decide on the number of charts to audit
- Decide how data will be entered

Preparing for the NIMC Audit

- Some of the audit criteria require subjective judgement and interpretation:
  - determining unclear orders
  - assessing completeness of documentation.
- It is important that auditors meet up prior to the audit to discuss the parameters for these areas, as they are defined in the *Guide to Auditing the NIMC*.
- Conducting a pilot may be beneficial
  - Small sample of medication charts from different wards

Number and type of charts to audit

Initial audit

- Ideally all available active NIMC should be reviewed – allows identification of errors that occur infrequently and in different patient types.
- As many medication charts as possible should be reviewed to evaluate any significant changes to medication safety.
- To enable a large number of patient charts to be reviewed, data collection may take place over a number of weeks, e.g. 5 charts for each ward per week for one month.

Number and types of chart to audit

- Suggested initial audit sample size:

Hospital bed numbers	Sample size
150 or more	20% of current inpatients
30-149	30 current inpatients
Less than 30	All current inpatients

Subsequent audits

- Where possible, these should be identical to the initial audit to ensure a comparison of similar wards, patients and numbers.

Partial audits

- Hospitals may wish to target specific areas of concern where performance is suboptimal.

Audit teams

- Should be conducted by 2 people together:
  - To minimise observer bias
  - A registered nurse – interpretation of the prescription and administration information.
  - A pharmacist (or medical officer, or another nurse)
- The teams should be allocated and maintained for the audit period, to ensure consistency in the data collected.

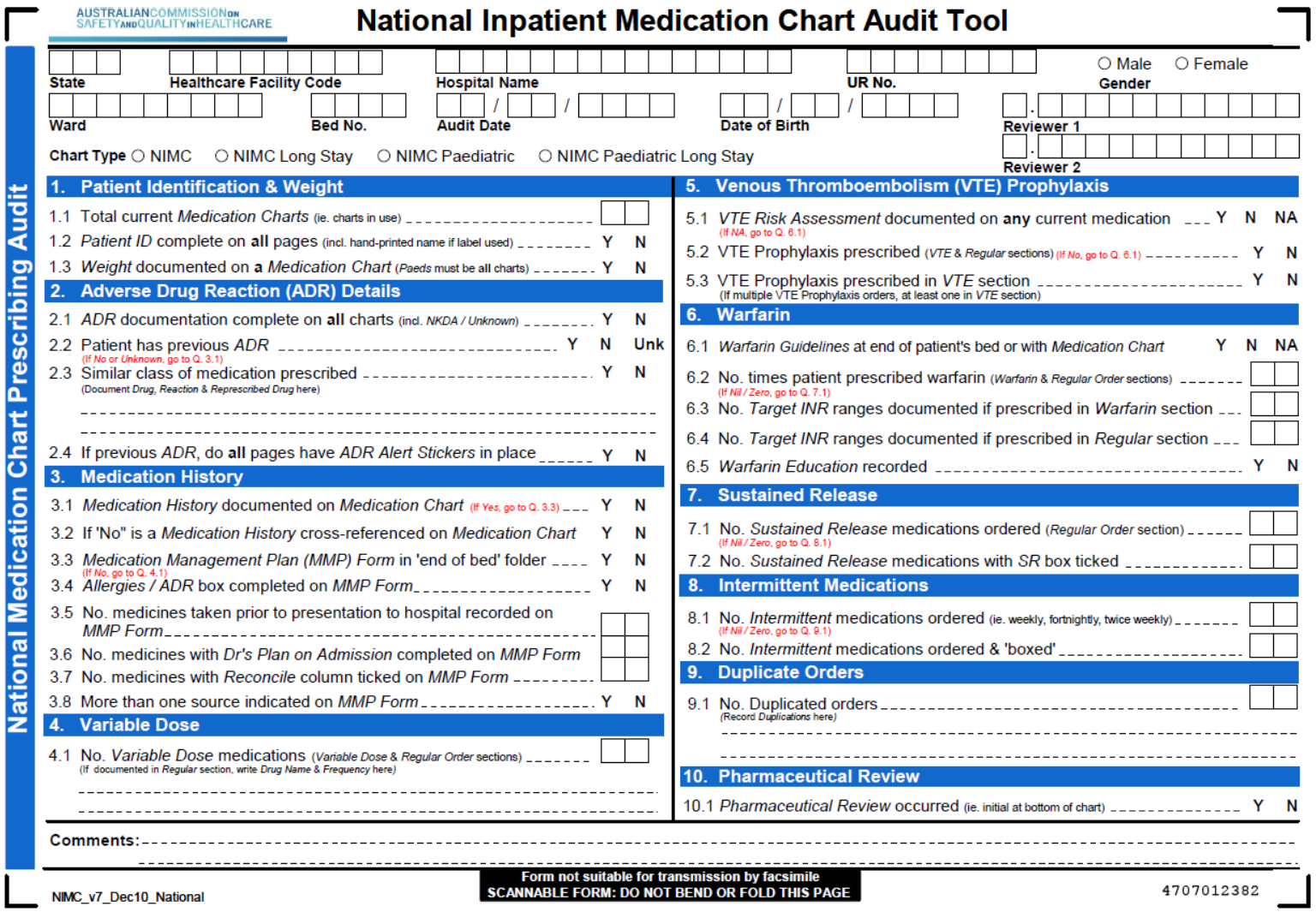
Familiarisation with medication related policies and guidelines

- Local medication related procedures and guidelines – e.g. hospital's list of approved trade names for prescribing
- If no local procedures or policies exist, auditors will need to agree on some audit parameters – e.g. acceptable abbreviations and trade names.
  - Establish consistency between auditors for current and subsequent audits.

Piloting data collection

- Teams should consider testing their data collection methods, using the NIMC Audit Form.
- NIMCs selected should include a variety of medicines which utilise different safety features of the chart.
- Pilot testing and correlating data collection decisions will help to achieve consistency between audit team members.
- Reflective discussion after pilot testing may also be helpful in situations where there is disparity between auditors.

Completing the Audit Tool



AUSTRALIAN COMMISSION ON SAFETY AND QUALITY IN HEALTHCARE

National Inpatient Medication Chart Audit Tool

National Medication Chart Prescribing Audit

State | Healthcare Facility Code | Hospital Name | UR No. | ○ Male ○ Female Gender

Ward | Bed No. | Audit Date | Date of Birth | Reviewer 1 | Reviewer 2

Chart Type ○ NIMC ○ NIMC Long Stay ○ NIMC Paediatric ○ NIMC Paediatric Long Stay

1. Patient Identification & Weight

1.1 Total current *Medication Charts* (ie. charts in use)
1.2 *Patient ID* complete on **all** pages (incl. hand-printed name if label used) Y N
1.3 *Weight* documented on **a** *Medication Chart* (*Paeds* must be all charts) Y N

2. Adverse Drug Reaction (ADR) Details

2.1 *ADR* documentation complete on **all** charts (incl. *NKDA / Unknown*) Y N
2.2 Patient has previous *ADR* Y N Unk
(If No or Unknown, go to Q. 3.1)
2.3 Similar class of medication prescribed Y N
(Document *Drug, Reaction & Represcribed Drug* here)
2.4 If previous *ADR*, do **all** pages have *ADR Alert Stickers* in place Y N

3. Medication History

3.1 *Medication History* documented on *Medication Chart* (If Yes, go to Q. 3.3) Y N
3.2 If 'No" is a *Medication History* cross-referenced on *Medication Chart* Y N
3.3 *Medication Management Plan (MMP) Form* in 'end of bed' folder Y N
(If No, go to Q. 4.1)
3.4 *Allergies / ADR* box completed on *MMP Form* Y N
3.5 No. medicines taken prior to presentation to hospital recorded on *MMP Form*
3.6 No. medicines with *Dr's Plan on Admission* completed on *MMP Form*
3.7 No. medicines with *Reconcile* column ticked on *MMP Form*
3.8 More than one source indicated on *MMP Form* Y N

4. Variable Dose

4.1 No. *Variable Dose* medications (*Variable Dose* & *Regular Order* sections)
(If documented in *Regular* section, write *Drug Name & Frequency* here)

5. Venous Thromboembolism (VTE) Prophylaxis

5.1 *VTE Risk Assessment* documented on **any** current medication Y N NA
(If NA, go to Q. 6.1)
5.2 VTE Prophylaxis prescribed (*VTE* & *Regular* sections) (If No, go to Q. 6.1) Y N
5.3 VTE Prophylaxis prescribed in *VTE* section Y N
(If multiple VTE Prophylaxis orders, at least one in *VTE* section)

6. Warfarin

6.1 *Warfarin Guidelines* at end of patient's bed or with *Medication Chart* Y N NA
6.2 No. times patient prescribed warfarin (*Warfarin* & *Regular Order* sections)
(If Nil / Zero, go to Q. 7.1)
6.3 No. *Target INR* ranges documented if prescribed in *Warfarin* section
6.4 No. *Target INR* ranges documented if prescribed in *Regular* section
6.5 *Warfarin Education* recorded Y N

7. Sustained Release

7.1 No. *Sustained Release* medications ordered (*Regular Order* section)
(If Nil / Zero, go to Q. 8.1)
7.2 No. *Sustained Release* medications with *SR* box ticked

8. Intermittent Medications

8.1 No. *Intermittent* medications ordered (ie. weekly, fortnightly, twice weekly)
(If Nil / Zero, go to Q. 9.1)
8.2 No. *Intermittent* medications ordered & 'boxed'

9. Duplicate Orders

9.1 No. Duplicated orders
(Record *Duplications* here)

10. Pharmaceutical Review

10.1 *Pharmaceutical Review* occurred (ie. initial at bottom of chart) Y N

Comments:

Form not suitable for transmission by facsimile
SCANNABLE FORM: DO NOT BEND OR FOLD THIS PAGE

NIMC_v7_Dec10_National

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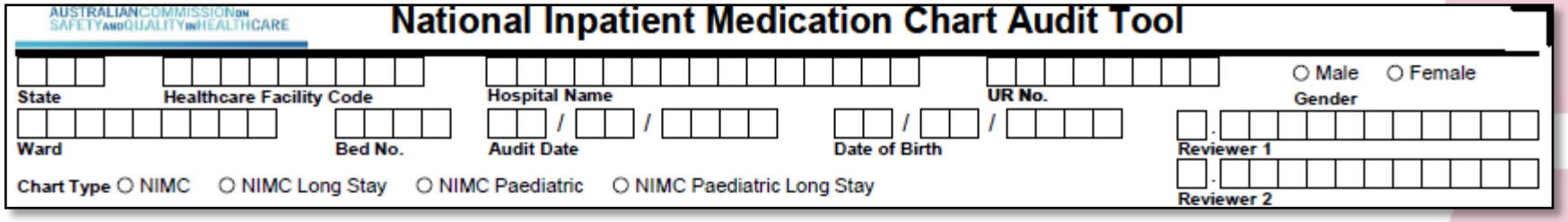
Completing the Audit Tool

- Complete one audit tool per patient.
- Complete all fields on top of page 1.


AUSTRALIAN COMMISSION ON SAFETY AND QUALITY IN HEALTH CARE

National Inpatient Medication Chart Audit Tool

State | Healthcare Facility Code | Hospital Name | UR No. | ○ Male ○ Female Gender

Ward | Bed No. | Audit Date | Date of Birth | Reviewer 1

Chart Type ○ NIMC ○ NIMC Long Stay ○ NIMC Paediatric ○ NIMC Paediatric Long Stay | Reviewer 2

- Ensure all appropriate fields are answered with a “Yes”, “No”, “Unknown” or a number. “NA” should only be used if appropriate.

Patient Confidentiality

- To ensure confidentiality, the UMRN and DOB will not be transmitted beyond the hospital.

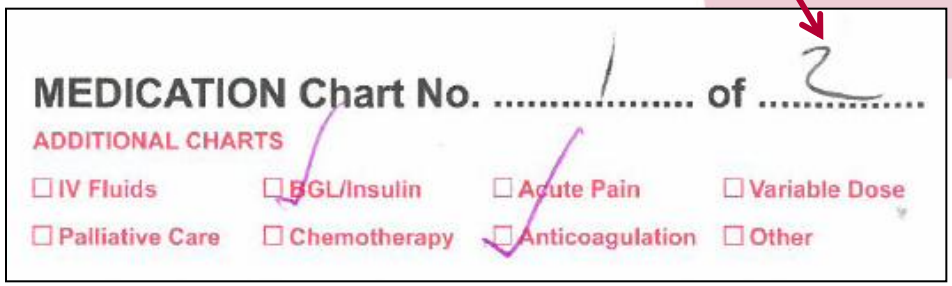
- The electronic NIMC spreadsheet and web-based NIMC audit system will automatically assign individual ID, which de-identifies the patient.

Patient Identification & Weight

1.1 Total current Medication Charts

Count and record the total number of current medication charts in use (on the day of the audit).

Do not rely on the number indicated here.
Only count the NIMCs in use.
(i.e. do not include additional charts such as anticoagulation chart, insulin chart, or IV fluids chart, etc)



Patient Identification & Weight

1.2 Patient ID complete on all pages

Look at pages 3 and 4 of all medication charts.

YES if <u>at least 3</u> are present on (visible and correct):

- Medical record number (UMRN)
- Patient name (family and given names)
- Date of birth
- Gender
- Patient address

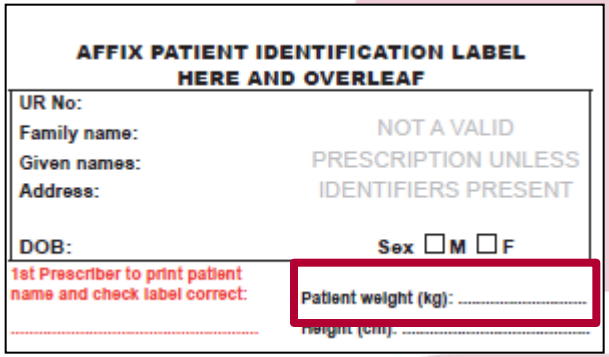
If patient ID label is used, the first prescriber must print the patient's name

Patient Identification & Weight

1.3 Weight documented on a medication chart

YES if:

- **(Adult)** Weight documented on <u>at least one</u> medication chart, OR on general observations chart.


AFFIX PATIENT IDENTIFICATION LABEL HERE AND OVERLEAF

UR No:

Family name:

Given names:

Address:

NOT A VALID PRESCRIPTION UNLESS IDENTIFIERS PRESENT

DOB:

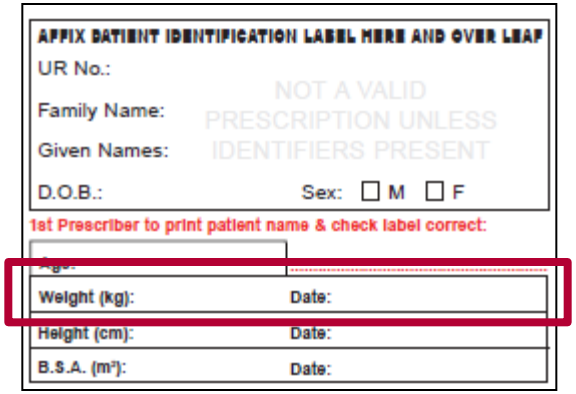
Sex ☐ M ☐ F

1st Prescriber to print patient name and check label correct:

Patient weight (kg): .....

Height (cm): .....

- **(Paediatric)** Weight documented on <u>ALL</u> pages of active medication charts.


AFFIX PATIENT IDENTIFICATION LABEL HERE AND OVER LEAF

UR No.:

Family Name:

Given Names:

NOT A VALID PRESCRIPTION UNLESS IDENTIFIERS PRESENT

D.O.B.: Sex: ☐ M ☐ F

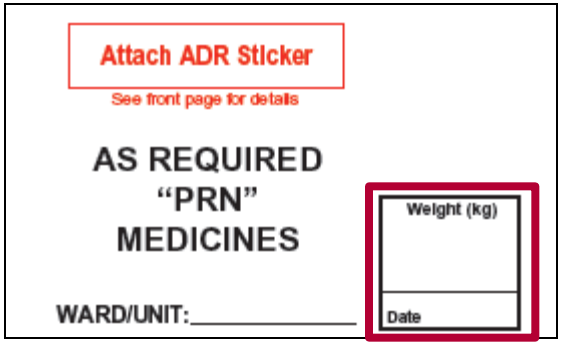
1st Prescriber to print patient name & check label correct:

Age:

Weight (kg): Date:

Height (cm): Date:

B.S.A. (m²): Date:


Attach ADR Sticker

See front page for details

AS REQUIRED "PRN" MEDICINES

WARD/UNIT:_____

Weight (kg)

Date

Adverse Drug Reaction (ADR) Details

2.1 ADR documentation complete on all charts (incl. NKDA / Unknown)

YES if (on ALL medication charts):

- Nil known, unknown or ADR documented,
- Drug name and reaction documented
  - If reaction is unknown, a record of “patient unsure of reaction” (or similar) is required.
  - If no reaction is documented, it is not considered to be complete.
- Clinician signature


Attach ADR Sticker

ALLERGIES AND ADVERSE DRUG REACTIONS (ADR)

☐ Nil known ☐ Unknown (tick appropriate box or complete details below)

Drug (or other)	Reaction/Type/Date	Initials

Sign: Print: Date:

ADR Details

2.2 Patient has previous ADR

If ADR documentation is not completed:

Auditor(s) need to verbally confirm with patient if they have ADR(s), and what they are.

NB: If patient is unable to answer, (e.g. not available, intubated, non-English speaking etc) – check with family/carer.

Select **YES** or **NO** accordingly.

Select **Unknown (Unk)** if unable to verify.

ADR Details

2.2 Patient has previous ADR (continued)

If ADR documented has been completed:

Select **YES** or **NO** accordingly.

ADR Details

2.3 Similar class of medicine prescribed

YES if : patient has a medication (or same class of medication) prescribed

Document in *Comments* section :

- Name of medicine recorded in allergy/ADR section
- Type of reaction recorded
- Name of the re-prescribed medicine
- If any doses of the re-prescribed medicine has been administered. If so, record number of doses given.

ADR Details

2.4 If previous ADR, do all pages have ADR alert stickers in place?

Look at page 3 and 4 of all medication charts.

YES if : ALL medication charts have ADR alert stickers in place.

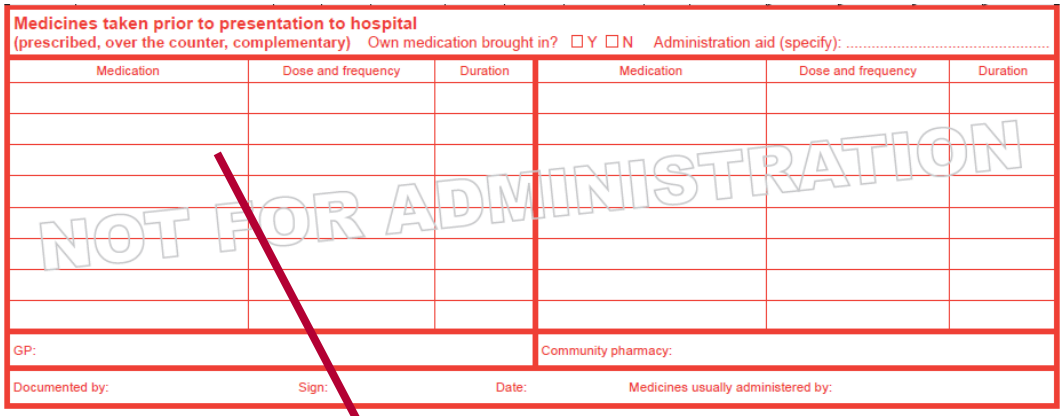
(even if no active order on the page)

NA if : site does not use ADR alert stickers

Medication History

3.1 *Medication History* documented on front of the Medication Chart

YES if : Medication history (including “nil regular meds”) recorded on <u>at least</u> one chart



Is the medication history documented here?

Medication History

3.2 If "No", is a *Medication History* cross-referenced on Medication Chart?

YES if : Medication history is cross-referenced on at least one chart (e.g. "See MMP" or "See previous chart")

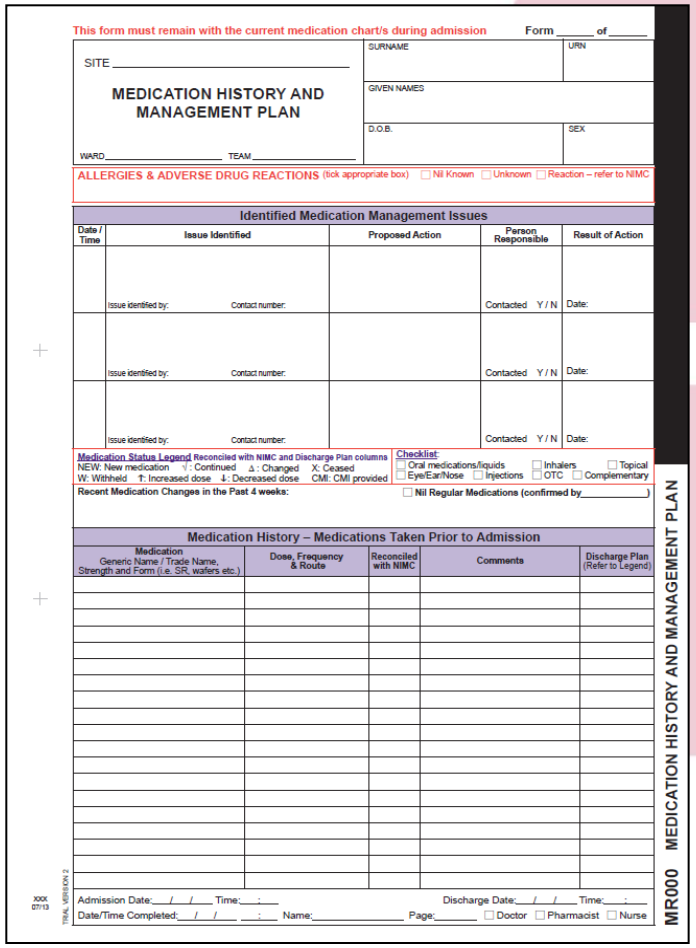
Medication History

3.3 *Medication Management Plan* (MMP) Form in the "end of bed" folder

Refer to the WA Medication History and Management Plan (WA MMP) form.

YES if: WA MMP present in bedside folder.

NB: Either old or new version of the WA MMP is acceptable



This form must remain with the current medication chart/s during admission Form _____ of _____

SITE _____

MEDICATION HISTORY AND MANAGEMENT PLAN

WARD _____ TEAM _____

SURNAME | URN

GIVEN NAMES

D.O.B. | SEX

ALLERGIES & ADVERSE DRUG REACTIONS (tick appropriate box) ☐ Nil Known ☐ Unknown ☐ Reaction – refer to NIMC

Identified Medication Management Issues

Date / Time	Issue Identified	Proposed Action	Person Responsible	Result of Action
	Issue identified by: Contact number:		Contacted Y / N	Date:
	Issue identified by: Contact number:		Contacted Y / N	Date:
	Issue identified by: Contact number:		Contacted Y / N	Date:

Medication Status Legend Reconciled with NIMC and Discharge Plan columns
NEW: New medication √: Continued Δ: Changed X: Ceased
W: Withheld ↑: Increased dose ↓: Decreased dose CMI: CMI provided

Checklist:
☐ Oral medications/liquids ☐ Inhalers ☐ Topical
☐ Eye/Ear/Nose ☐ Injections ☐ OTC ☐ Complementary

Recent Medication Changes in the Past 4 weeks: ☐ Nil Regular Medications (confirmed by_____)

Medication History – Medications Taken Prior to Admission

Medication Generic Name / Trade Name, Strength and Form (i.e. SR, wafers etc.)	Dose, Frequency & Route	Reconciled with NIMC	Comments	Discharge Plan (Refer to Legend)

Admission Date:__/__/__ Time:__:__ Discharge Date:__/__/__ Time:__:__
Date/Time Completed:__/__/__ __:__ Name:_____ Page:_____ ☐ Doctor ☐ Pharmacist ☐ Nurse

MR000 MEDICATION HISTORY AND MANAGEMENT PLAN

XXX 07/13 TRIAL VERSION 2

Medication History

3.4 Allergies/ADR box completed on *MMP form*

YES if: Allergies/ADR box contains an allergy/ADR,

OR “Nil Known” or “Unknown” box has been ticked on WA MMP

Medication History

3.5 No. of medicines taken prior to presentation to hospital recorded on the *MMP form*

Indicate no. of medicines taken prior to admission. Include PRN and OTC medications if the patient is currently taking them.

If nil, enter “0”

Medication History

3.6 No. of medicines with *Dr's Plan on Admission* completed on *MMP form*

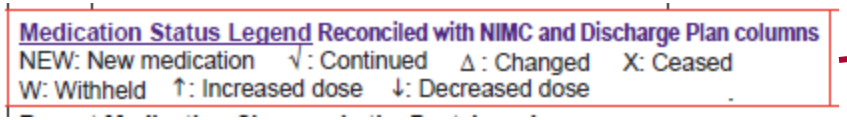
This question is not relevant to WA.*

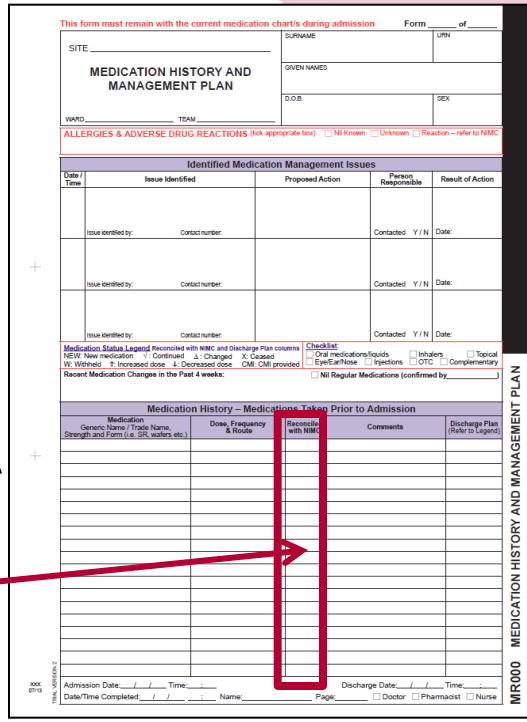
Enter "0".

(*This is different to Commission's Guidelines)

3.7 No. of medicines with *Reconcile column* ticked on *MMP form*

Indicate number of medicines that have documentation (as per legend) in the *Reconcile with NIMC* column.*





Medication History

3.8 More than one source indicated on *MMP form*

YES if : More than one source has been ticked in the *Sources* section
OR if “Second Source deemed unnecessary”

Pre-Admission Medication History Has Been Confirmed with Two Sources
(☐ Nil Regular Medications ☐ Second Source deemed unnecessary Sign_____)

Source	**Sign**	☐ Patient / Relative / Carer		☐ Own Medications	
☐ GP Ph: Fax:		☐ Previous admission:____/____/____ Hospital:		☐ Patient List	
☐ Community Pharmacy Ph: Fax:		Dose Administration Aid (D.A.A.) ☐ Blister Pack ☐ Sachet ☐ Dosette		☐ Other:	
☐ N/Home Ph: ☐ Hostel		☐ Other:_____ Date Packed:____/____/____			

Variable Dose

4.1 No. of Variable Dose medications

Look for medicines prescribed in both *Variable Dose* and *Regular* sections of the medication chart.

- Include ceased orders.
- Exclude warfarin and PRN medications.

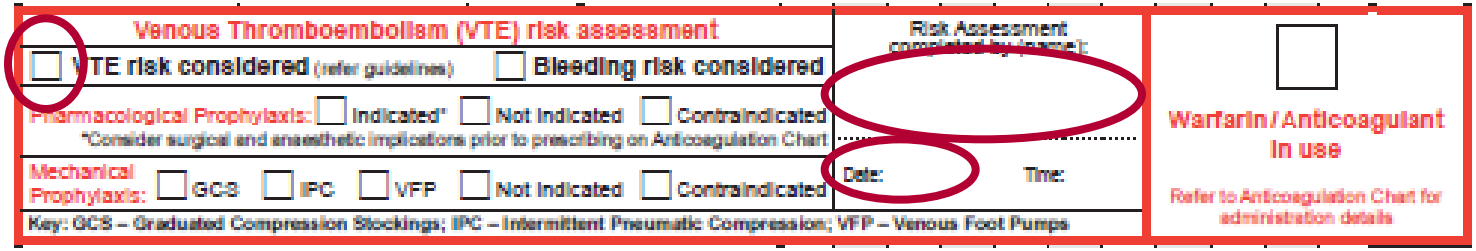
If variable dose medication prescribed in *Regular* section, write name and frequency of the medicine in *Comments* section.

Venous Thromboembolism Prophylaxis

5.1 VTE risk assessment documented on any medication chart

YES if (ALL present):

- VTE Risk considered box ticked*
- Signature present
- Date of risk assessment documented


Venous Thromboembolism (VTE) risk assessment

☐ VTE risk considered (refer guidelines) ☐ Bleeding risk considered

Pharmacological Prophylaxis: ☐ Indicated* ☐ Not Indicated ☐ Contraindicated

*Consider surgical and anaesthetic implications prior to prescribing on Anticoagulation Chart

Mechanical Prophylaxis: ☐ GCS ☐ IPC ☐ VFP ☐ Not Indicated ☐ Contraindicated

Key: GCS – Graduated Compression Stockings; IPC – Intermittent Pneumatic Compression; VFP – Venous Foot Pumps

Risk Assessment completed by (name):

Date: Time:

☐

Warfarin / Anticoagulant in use

Refer to Anticoagulation Chart for administration details

NA if: Auditing long stay, paediatric, paediatric long stay NIMC or if NIMC has no VTE Risk Assessment tool

VTE Prophylaxis

5.2 VTE prophylaxis prescribed

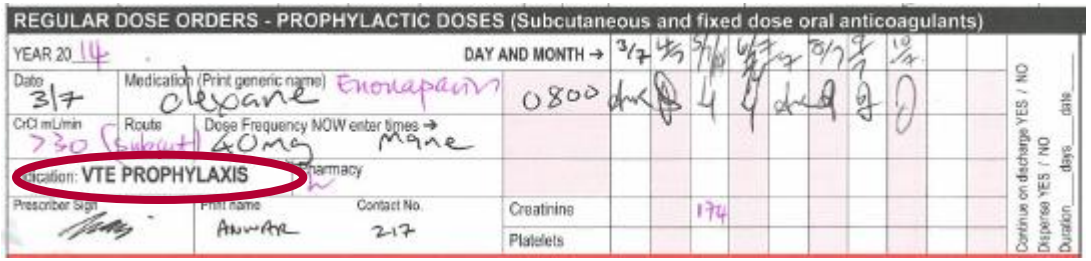
Refer to NIMC and WA Anticoagulation chart.*

YES if: Pharmacological VTE prophylaxis prescribed.

5.3 VTE prophylaxis prescribed in VTE section

Refer to WA Anticoagulation chart only.*

YES if: Pharmacological prophylaxis prescribed in prophylaxis section.


REGULAR DOSE ORDERS - PROPHYLACTIC DOSES (Subcutaneous and fixed dose oral anticoagulants)

YEAR 20 14 DAY AND MONTH → 3/7

Date 3/7 Medication (Print generic name) Enoxaparin clexane 0800

CrCl mL/min >30 Route (Subcut) Dose Frequency NOW enter times → 40mg mane

Indication: VTE PROPHYLAXIS Pharmacy

Prescriber Sign Print name Anwar Contact No. 217

Creatinine 174

Platelets

Continue on discharge YES / NO

Dispense YES / NO Duration ___ days ___ date

Warfarin

WA uses the WA Anticoagulation Medication Chart (WA AMC) for prescribing all anticoagulants. This section is not relevant to WA.

To keep WA data consistent:

Question 6.1 Select NA

Question 6.2 Enter “0”

Doing this will allow you to skip to section 7.

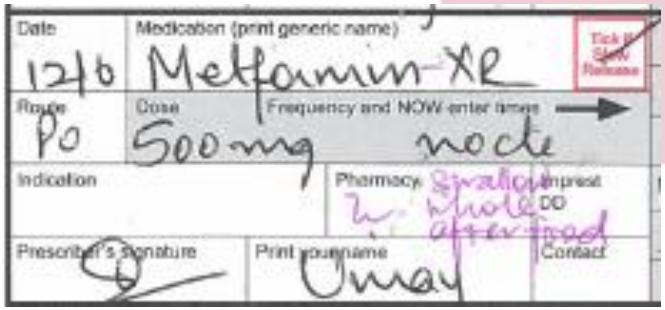
Sustained Release

7.1 No. of *Sustained Release* medications ordered (Regular medications section)

Indicate no. of SR medications prescribed in regular medications section (include ceased orders)

7.2 No. of *Sustained Release* medications with SR box ticked

Indicate no. of SR medications that have the SR box ticked (either doctor or pharmacist)



Intermittent Medications

8.1 No. of *Intermittent* medications ordered (e.g. weekly, fortnightly, twice weekly)

Indicate no. of medicines prescribed intermittently (include ceased and regular medications orders only).

8.2 No. of *Intermittent* medications ordered and "boxed"

Indicate no. of intermittent medications where all relevant boxes have been crossed out to flag dose(s) not to be administered.

Duplicated Orders

9.1 Number of Duplicated Orders

Indicate the no. of current *Once Only, Stat, Telephone, Regular* and *PRN* medication orders duplicated for the same medication or class of medication, which would result in the patient receiving unintentional additional doses of the medication.

If so, document names of the medicines in the *Comments* section.

Note : In some instances, this may be acceptable, e.g. salbutamol regular and PRN doses. Ensure regular dose is cross referenced to PRN dose, and max dose specified in PRN order.

Pharmaceutical Review

10.1 *Pharmaceutical Review* occured (i.e. Initial/s at bottom of chart)

YES if : there is at least ONE initial in the *Pharmaceutical Review* section on the medication chart (regardless of length of stay)

Prescribing and Administration

National Inpatient Medication Chart Audit Tool

11. Prescribing and Administration

Legend

Drug Order:	Drug Name:	Route / Dose:	Frequency:	Others:
R = Regular P = PRN S = Stat/Phone/Once Only V = Variable Dose W = Warfarin	U = Unclear T = Trade C = Clear	C = Clear & Correct M = Missing U = Unclear I = Incorrect	C = Clear M = Missing U = Unclear I = Incorrect NA = Not Applicable	Y = Yes N = No

UR No.

Definitions: Error Prone Abbreviations

mcg, µg, ug = microgram U or u = unit qd or QD = every day o.d. or OD = once daily	SC, S/C = subcutaneous SL, S/L = sublingual o (degree symbol) = hourly frequency No leading zero before a decimal point (eg .5mg) = 0.5mg Trailing zero after decimal point (eg 1.0mg) = 1mg

Order No.	Drug Order	Drug Name	Route	Dose	Frequency	Dose Calc'n Documented	Dose Calc'n Documented Correctly	Error Prone Abbrev'ns Used	Indication Documented	Pharm. Annot.	Pres. Signed	Pres. Clear	Freq. Matches Admin Time	Drug Ceased	Ceased Correctly	Doses Required	Doses Admin	If PRN, Max Dose doc.
						Y N NA	Y N NA	Y N	Y N NA	Y N	Y N	Y N	Y N NA	Y N	Y N NA			Y N NA
						Y N NA	Y N NA	Y N	Y N NA	Y N	Y N	Y N	Y N NA	Y N	Y N NA			Y N NA
						Y N NA	Y N NA	Y N	Y N NA	Y N	Y N	Y N	Y N NA	Y N	Y N NA			Y N NA
						Y N NA	Y N NA	Y N	Y N NA	Y N	Y N	Y N	Y N NA	Y N	Y N NA			Y N NA
						Y N NA	Y N NA	Y N	Y N NA	Y N	Y N	Y N	Y N NA	Y N	Y N NA			Y N NA
						Y N NA	Y N NA	Y N	Y N NA	Y N	Y N	Y N	Y N NA	Y N	Y N NA			Y N NA
						Y N NA	Y N NA	Y N	Y N NA	Y N	Y N	Y N	Y N NA	Y N	Y N NA			Y N NA
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						Y N NA	Y N NA	Y N	Y N NA	Y N	Y N	Y N	Y N NA	Y N	Y N NA			Y N NA
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						Y N NA	Y N NA	Y N	Y N NA	Y N	Y N	Y N	Y N NA	Y N	Y N NA			Y N NA
						Y N NA	Y N NA	Y N	Y N NA	Y N	Y N	Y N	Y N NA	Y N	Y N NA			Y N NA
						Y N NA	Y N NA	Y N	Y N NA	Y N	Y N	Y N	Y N NA	Y N	Y N NA			Y N NA

Form not suitable for transmission by facsimile
SCANNABLE FORM: DO NOT BEND OR FOLD THIS PAGE

Prescribing and Administration

This information is required to be documented separately for each medication order, i.e. *Once Only/Stat, Variable Dose, Regular* and *PRN* – including ceased orders.

Each column must have a response documented.

Focus on actual drug order
(i.e. Doctor's documentation for this section, except question 11.11 – pharmacist annotation)

Prescribing and Administration

11.1 Allocate a number to each order

Only for paper audit tool.

Excel and web based system will generate a number for each order.

11.2 Drug Order (include ceased orders)

This refers to the section of the chart where the medication has been prescribed.

Drug Order Legend			
R	Regular	P	PRN
S	Stat/Once Only/Telephone	V	Variable
W	Warfarin *(Do not use this code in WA as warfarin not prescribed on NIMC)*		

NB : If variable dose medication is prescribed in Regular section, select “R”.

Prescribing and Administration

11.3 Drug Name

Drug Name Legend		Explanation
U	Unclear	Drug name is illegible or may be interpreted as another product.
T	Trade Name	Drug is prescribed by UNACCEPTABLE trade name. e.g. *Timentin* should be prescribed as Ticarcillin/Clavulanic Acid to identify as penicillin (NB: This may differ from site to site)
C	Clear	Drug is prescribed clearly, and there is no potential for error identified. Drugs may be prescribed in ACCEPTED trade name. e.g. Trade names for insulins (to prevent error) e.g. *OxyCONTIN* vs *OxyNORM*

Sites should have a list of acceptable trade names - refer to medication safety group (MSG)

Prescribing and Administration

11.4 Route

Route Legend		Explanation
C	Clear and Correct	Route of administration is clear, correct and no potential for error.
M	Missing	No route documented.
U	Unclear	• Where route may be mistaken e.g. “SC” and “SL” • Where route is illegible • Where multiple routes have been ordered (where different doses are required depending on route chosen)
I	Incorrect	Route documented is incorrect e.g. “po” for tiotropium

Prescribing and Administration

11.5 Dose

This refers only to the documentation of the dose.

Auditors will not need to check the appropriateness of the dose.

Dose Legend		Explanation
C	Clear and correct	Dose is clear, correct and no potential for error.
M	Missing	No dose documented.
U	Unclear	Doses must be specified using metric and Arabic systems. • Avoid abbreviations (Refer to error-prone abbreviations). • Avoid Roman numerals. • Strength of medication must be specified where there are multiple dosage forms.
I	Incorrect	Dose documented is incorrect. e.g. 1mg prescribed instead of 1microgram (see next slide for paediatric dosing)

Prescribing and Administration

11.5 Dose

Paediatric Dose

The dose should be the SAFE, total dose.

Auditors are required to calculate the dose using the patient's weight or body surface area (BSA) according to the paediatric dosing reference endorsed by the site.

A calculator is recommended for this question.

Prescribing and Administration

11.6 Frequency

This refers to the dosing frequency as annotated by the doctor.

Frequency Legend		Explanation
C	Clear	If medication frequency is clear, and there is no potential for error.
M	Missing	No frequency documented.
I	Incorrect	Frequency documented is incorrect.
U	Unclear	Frequency documented is illegible, or where an unacceptable abbreviation has been used. (See following slide for examples)
NA	Not applicable	If *Stat/Once Only* medication or Variable dose medication prescribed in *Variable Dose* section

Prescribing and Administration

11.6 Frequency (continued)

Frequency Legend		Explanation
U	Unclear	Frequency documented is illegible, or where an unacceptable abbreviation has been used.
Regular orders		UNACCEPTABLE: Frusemide 40mg qd (or od) - Should be written as daily, or mane - **Frusemide 40mg mane** ✓
PRN orders		UNACCEPTABLE: Morphine 10mg PRN - Should include a time interval for PRN orders - **Morphine 10mg 4hourly PRN** ✓
PRN orders		UNACCEPTABLE: Metoclopramide 10-20mg tds PRN - May result in administration of doses every 8 hours, however may be clinically acceptable to administer more frequently. - **Metoclopramide 10-20mg 4-6 hourly PRN** ✓

Prescribing and Administration

11.7 Dose Calculation Documented

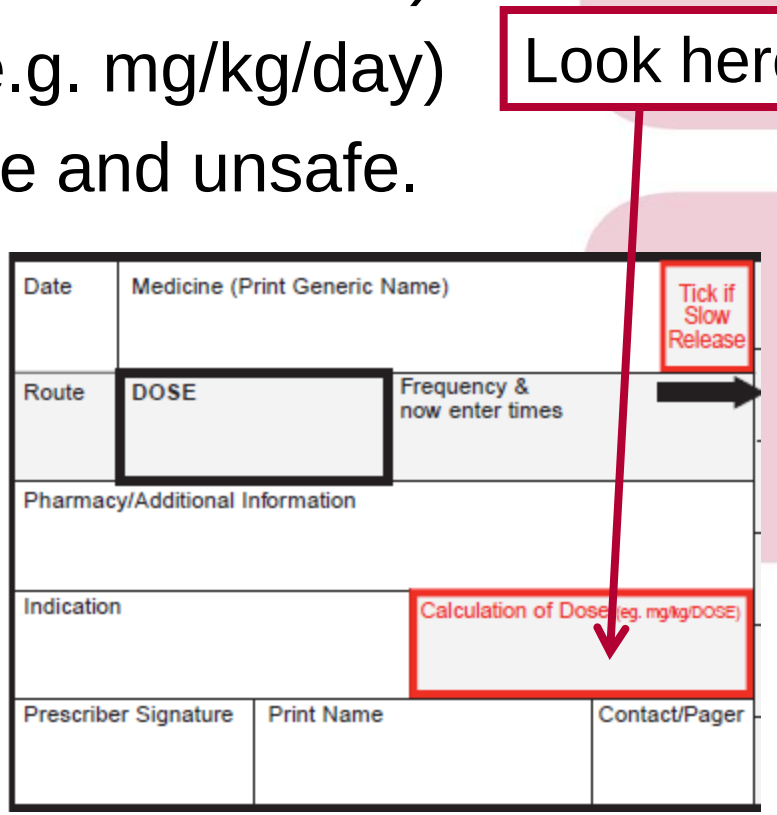
YES if: Basis for dose calculation is documented in dose calculation box (e.g. mg/kg/dose or microgram/m^2/dose)

NB: If written in different form (e.g. mg/kg/day) - this is considered unacceptable and unsafe.

NO if: Not documented

NA if: Not auditing the paediatric NIMC (PNIMC)

OR where dose calculation is not required (e.g. topical)



Prescribing and Administration

11.8 Dose Calculation Documented is Correct

YES if: Dose calculation documented is CORRECT based on the recommended dose in a current paediatric dose reference.

NO if: Dose calculation is incorrect.

NA if: Not auditing PNIMC

OR if dose calculation is not required for the medication (e.g. topical).

Prescribing and Administration

11.9 Error Prone Abbreviations

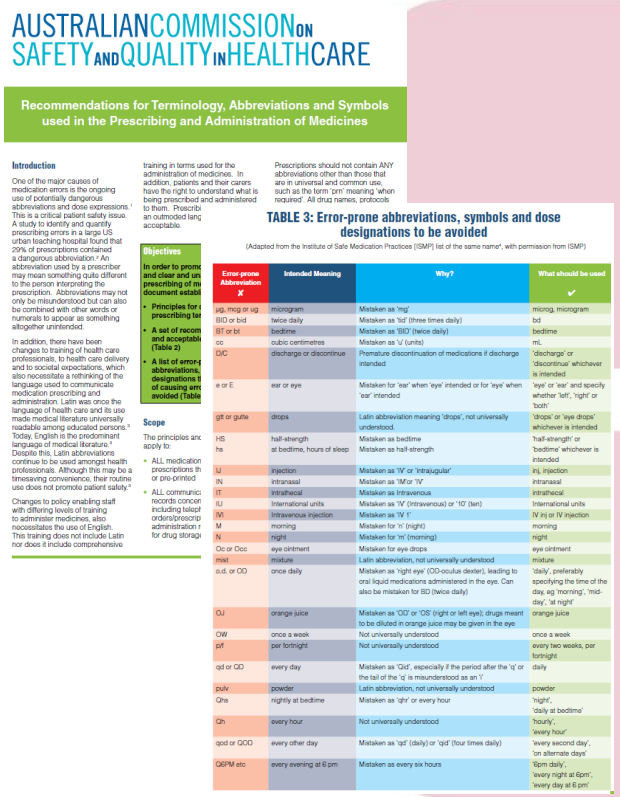
YES if: Error prone abbreviation is used.

Error prone abbreviation	Intended meaning	Correct Abbreviation
ug, mcg or µg	Microgram	Microgram or microg
U or u	Unit	Unit(s)
OD, od or d	Once daily	Daily, or specific time (e.g. mane, nocte)
QD or qd	Every day	Daily, or specific time (e.g. mane, nocte)
Q4H, q4h	Every 4 hours	Every 4hours, 4 hourly, 4hrly
SC or S/C	Subcutaneous	Subcut or subcutaneous
SL or S/L	Sublingual	Subling or sublingual
.5mg	0.5mg	0.5mg or 500microgram or 500microg
5.0mg	5mg	5mg
Drug name abbreviations	e.g. AZT = zidovudine	Do not use abbreviations for medicine names.

Prescribing and Administration

11.9 Error prone abbreviations (continued)

Refer to Commission's *Recommendations for Terminology, Abbreviations and Symbols used in the Prescribing and Administration of Medicines*



AUSTRALIAN COMMISSION ON SAFETY AND QUALITY IN HEALTHCARE

Recommendations for Terminology, Abbreviations and Symbols used in the Prescribing and Administration of Medicines

TABLE 3: Error-prone abbreviations, symbols and dose designations to be avoided

(Adapted from the Institute of Safe Medication Practices [ISMP] list of the same name*, with permission from ISMP)

Error-prone Abbreviation ✘	Intended Meaning	Why?	What should be used ✔
µg, mcg or ug	microgram	Mistaken as 'mg'	microg, microgram
BID or bid	twice daily	Mistaken as 'tid' (three times daily)	bd
BT or bt	bedtime	Mistaken as 'BID' (twice daily)	bedtime
cc	cubic centimetres	Mistaken as 'u' (units)	mL
D/C	discharge or discontinue	Premature discontinuation of medications if discharge intended	'discharge' or 'discontinue' whichever is intended
e or E	ear or eye	Mistaken for 'ear' when 'eye' intended or for 'eye' when 'ear' intended	'eye' or 'ear' and specify whether 'left', 'right' or 'both'
gtt or gutte	drops	Latin abbreviation meaning 'drops', not universally understood.	'drops' or 'eye drops' whichever is intended
HS hs	half-strength at bedtime, hours of sleep	Mistaken as bedtime Mistaken as half-strength	'half-strength' or 'bedtime' whichever is intended
IJ	injection	Mistaken as 'IV' or 'intrajugular'	inj, injection
IN	intranasal	Mistaken as 'IM'or 'IV'	intranasal
IT	intrathecal	Mistaken as Intravenous	intrathecal
IU	International units	Mistaken as 'IV' (Intravenous) or '10' (ten)	International units
IVI	Intravenous injection	Mistaken as 'IV 1'	IV inj or IV injection
M	morning	Mistaken for 'n' (night)	morning
N	night	Mistaken for 'm' (morning)	night
Oc or Occ	eye ointment	Mistaken for eye drops	eye ointment
mist	mixture	Latin abbreviation, not universally understood	mixture
o.d. or OD	once daily	Mistaken as 'right eye' (OD-oculus dexter), leading to oral liquid medications administered in the eye. Can also be mistaken for BD (twice daily)	'daily', preferably specifying the time of the day, eg 'morning', 'mid-day', 'at night'
OJ	orange juice	Mistaken as 'OD' or 'OS' (right or left eye); drugs meant to be diluted in orange juice may be given in the eye	orange juice
OW	once a week	Not universally understood	once a week
pf	per fortnight	Not universally understood	every two weeks, per fortnight
qd or QD	every day	Mistaken as 'Qid', especially if the period after the 'q' or the tail of the 'q' is misunderstood as an 'i'	daily
pulv	powder	Latin abbreviation, not universally understood	powder
Qhs	nightly at bedtime	Mistaken as 'qhr' or every hour	'night', 'daily at bedtime'
Qh	every hour	Not universally understood	'hourly', 'every hour'
qod or QOD	every other day	Mistaken as 'qd' (daily) or 'qid' (four times daily)	'every second day', 'on alternate days'
Q6PM etc	every evening at 6 pm	Mistaken as every six hours	'6pm daily', 'every night at 6pm', 'every day at 6 pm'

- Hospitals may wish to develop more extensive list of error prone abbreviations

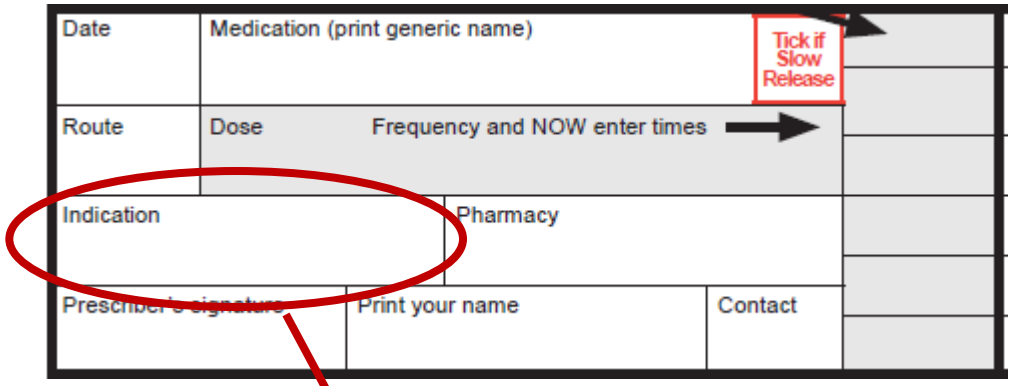
Prescribing and Abbreviations

11.10 Indication Documented

YES if: Indication is documented

NO if: Indication is not documented

NA if: *Stat/Once Only* medication

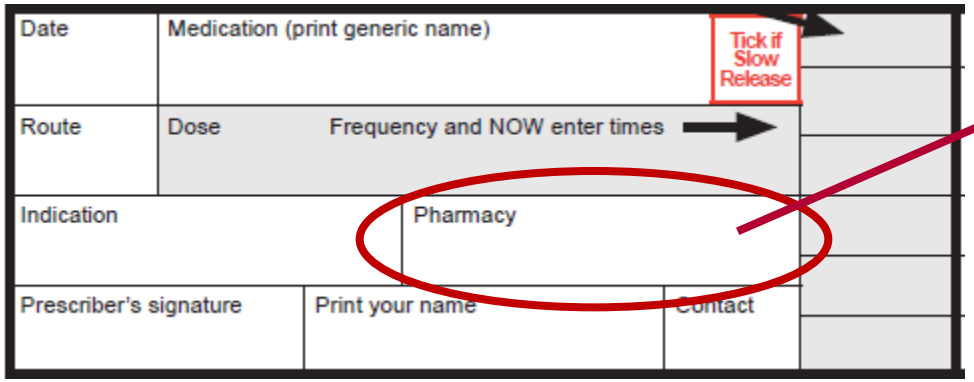


What is this drug being used for?

Prescribing and Administration

11.11 Pharmacy Annotation

YES if: A Pharmacist has added or clarified any information on the medication order (usually indicated by purple pen). Also includes supply information.



A pharmacist's annotation may appear on other parts of the medication order (i.e. not reserved to just the *Pharmacy* section of the medication order).

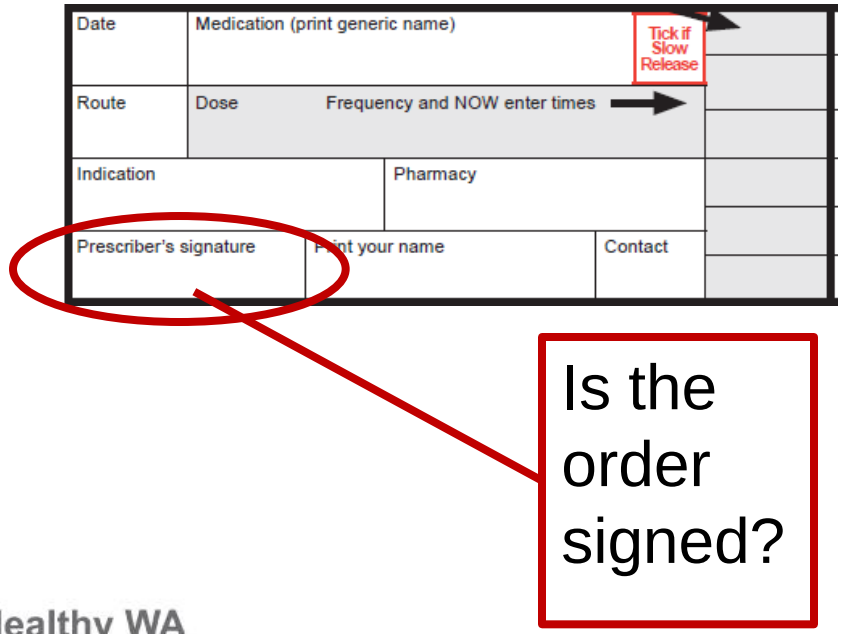
NB: Pharmacists initials alone are not considered "annotation". Some medication orders (if clear) do not require further pharmacist annotation.

Prescribing and Administration

11.12 Prescriber Signature

YES if: Medication order has been signed by the prescriber

NO if: Medication order has not been signed by the prescriber

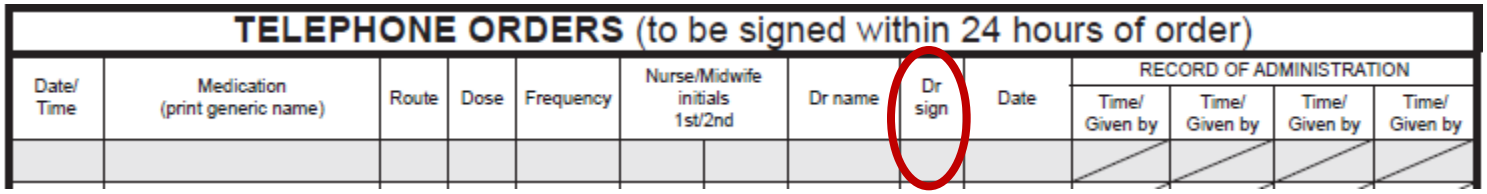


Prescribing and Administration

11.12 Prescriber Signature (continued)

Note 1: A doctor's signature is required within 24 hours of a *Telephone Order.*

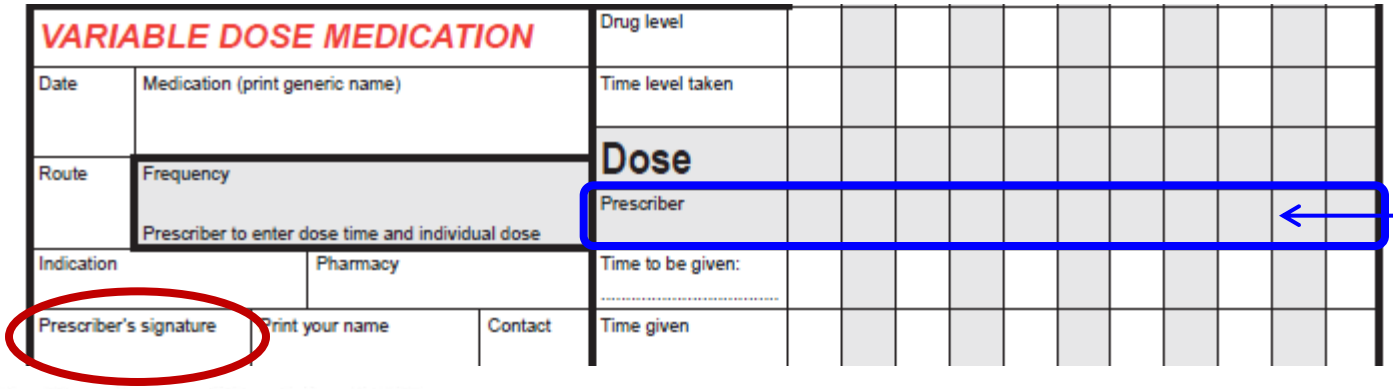
(Answer "Y" if ordered <24hours prior to audit)



TELEPHONE ORDERS (to be signed within 24 hours of order)

Date/ Time	Medication (print generic name)	Route	Dose	Frequency	Nurse/Midwife initials 1st/2nd	Dr name	Dr sign	Date	RECORD OF ADMINISTRATION Time/ Given by	Time/ Given by	Time/ Given by	Time/ Given by

Note 2: A doctor's signature is required for the original order (not the daily order)



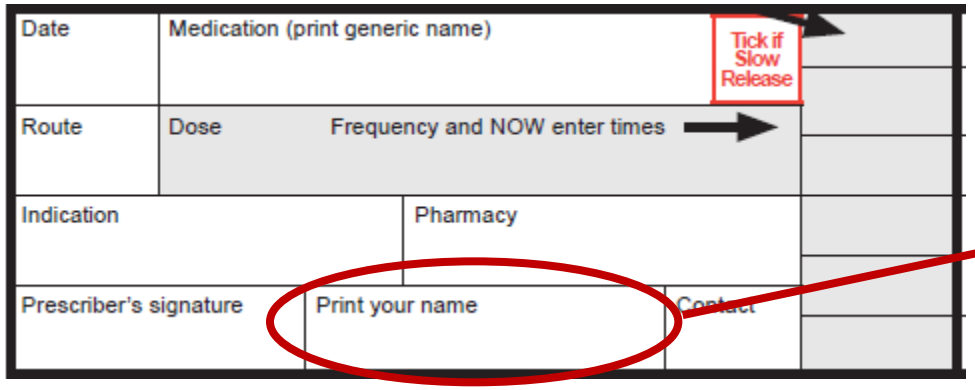
VARIABLE DOSE MEDICATION

Date	Medication (print generic name)	Drug level
		Time level taken
Route	Frequency	**Dose**
	Prescriber to enter dose time and individual dose	Prescriber
Indication	Pharmacy	Time to be given:
Prescriber's signature	Print your name / Contact	Time given

For the purpose of this audit, we will not be considering this section

Prescribing and Administration

11.13 Prescriber Name Clear



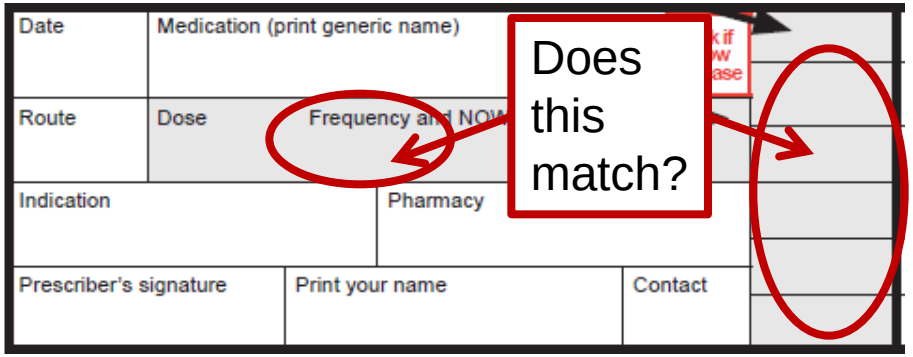
YES if: Prescriber's name is clear.

NO if: Prescriber's name is not clear.

Note: Prescribers should print their surname at least once on the medication chart to enable other clinicians to identify their signature.

Prescribing and Administration

11.14 Frequency Correlates with Administration Time



YES if: Administration time(s) correlates to frequency prescribed

NO if: Administrations time(s) does not correlate to frequency prescribed

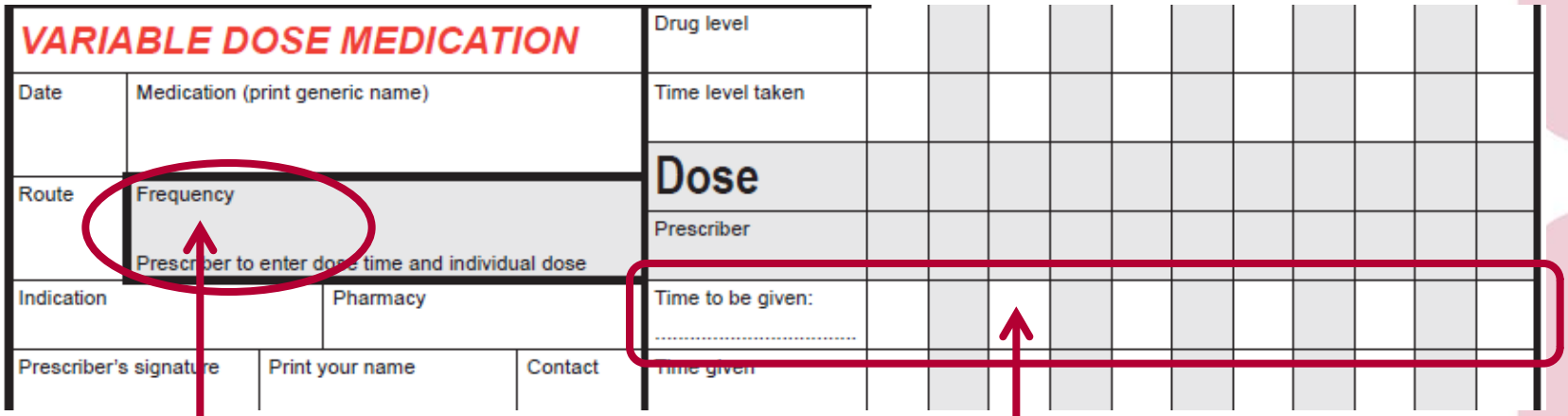
e.g. Metoprolol 50mg TDS ordered, but administration times entered as BD

NA if: *Stat/Once Only* and PRN medications

Prescribing and Administration

11.14 Frequency Correlates with Administration time

Variable dose section:



Check that these match – especially important if more than once daily dosing

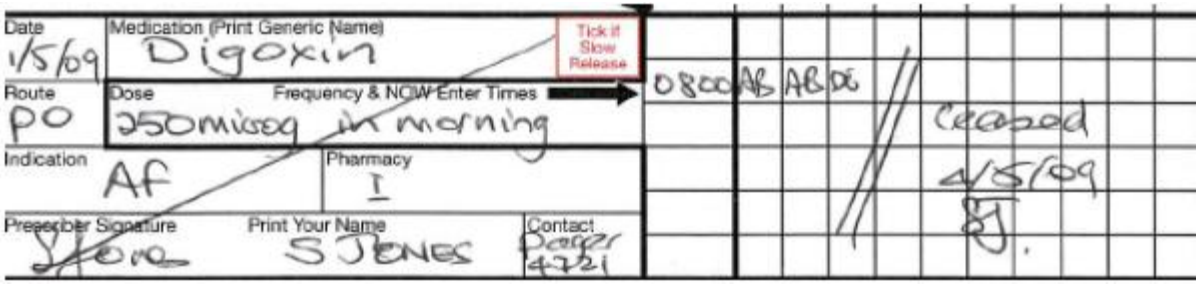
Prescribing and Administration

11.15 Drug Ceased

YES if: Order ceased

NO if: Still an active order

11.16 Drug Ceased Correctly



YES if: Order has been ceased correctly

NO if: Order has not been ceased correctly

NA if: Order has not been ceased

To be ceased correctly:

- Original order should not be obliterated.
- Clear line through order - prescription & administration section
- Reason for changing order (e.g. Ceased, increased, written in error)
- Date & initial the entry

Prescribing and Administration

11.17 Doses Required

Record the number of doses that **should have been administered** from the commencement of the order on the chart to the time of the audit.

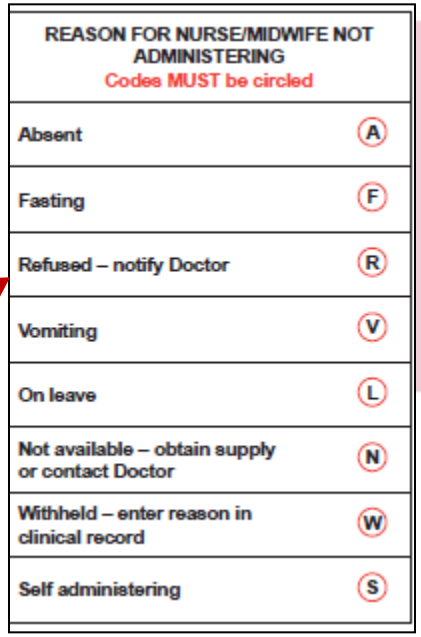
Include *Stat/Once Only* medication.

Enter “0” for PRN medications.

11.18 Doses Administered

Record the number of doses that **have been administered**, including doses that have a “*reason for not administering*” code.

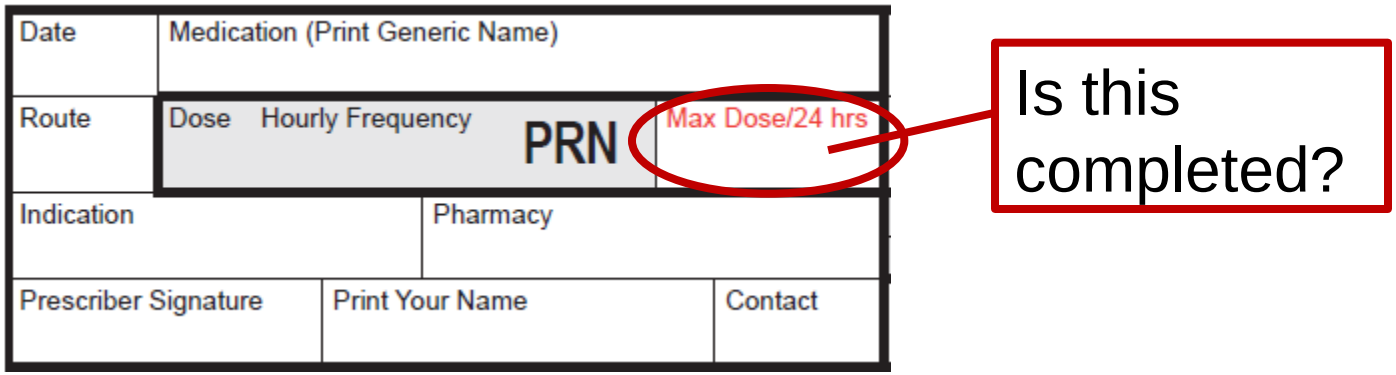
Enter “0” for PRN medications (even if doses have been given).



REASON FOR NURSE/MIDWIFE NOT ADMINISTERING Codes MUST be circled	
Absent	A
Fasting	F
Refused – notify Doctor	R
Vomiting	V
On leave	L
Not available – obtain supply or contact Doctor	N
Withheld – enter reason in clinical record	W
Self administering	S

Prescribing and Administration

11.19 If PRN medication, Max dose documented



YES if: PRN medication has the maximum dose documented

NO if: No maximum dose documented

NA if: *Stat/Once Only, Variable Dose, Regular* medication

Comments Section

Document the following:

- 2.3: Drug & ADR, re-prescribed drug & no. of doses administered.
- 4.1: Name & frequency of variable dose medication prescribed in *Regular* section.
- 9.1: Duplicated drug orders (that are not cross-referenced)

Comments Section

Sites may wish to collect information on particular area(s) of practice for improvement, for example:

- Orders changed but not rewritten
  - e.g. Frusemide 40mg mane increased to 40mg bd on the existing order
- Orders prescribed in roman numerals
  - e.g. Timolol eye drops 0.5% i drop nocte
  - e.g. Paracetamol SR ii tid
- Orders using error-prone abbreviations
  - e.g. “sc” used to denote subcutaneous

Comments Section – Additional Information

Sites may also consider collecting data on:

- the number of orders that have not been annotated by the pharmacist, that should have been
- the percentage of NIMCs that do not have:
  - patient's name printed if using the patient ID label
  - ADR documentation on ALL NIMCs
  - patient weight on ALL paediatric NIMCs

A report can be generated from this content. Commission will include this in national data.

Recommendations

- It is recommended that sites collect data on the paper audit form, and then upload the information onto the database (NIMC Audit System).
- Maintain a log of frequently occurring errors/issues
  - These can justify results for each site
    - e.g. “i-ii drops” – non-standard abbreviation, minimal impact
    - e.g. “U” (for units) – non-standard abbreviation, major impact
  - Can be used for education/improvement at each site

Recommendations

- Take de-identified photos of any major issues – present to site's DTC or MSG
  - May be once-off event
  - May be part of a pattern
- Obtain a list of acceptable tradenames (may need to liaise with DTC or MSG)
- Determine the paediatric dosing reference used, and have it ready when auditing.
- Have a calculator handy – especially when auditing paediatric NIMCs

Acknowledgements

- Australian Commission on Safety and Quality in Health Care

  Resources available at:

  http://117.53.164.80/AustralianCommission/

- Armadale Kelmscott Memorial Hospital

Contact

For more information:

Quality Improvement and Change Management – Medication Safety

- http://www.safetyandquality.health.wa.gov.au/medication/nimc_2014_audit.cfm
- Email: waiseen.kee@health.wa.gov.au
- Telephone: 08 9222 4170 (Thurs/Fri only)

Australian Commission on Safety and Quality in Health Care

- http://www.safetyandquality.gov.au/our-work/medication-safety/medication-chart/nimc/national-inpatient-medication-chart-audit/