

# WA Pharmaceutical Review Policy

## Follow-Up Audit

Guidelines for the use of the WA  
Pharmaceutical Review Audit Tool

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

October 2010

## GUIDELINES FOR THE USE OF THE PHARMACEUTICAL REVIEW BASELINE AUDIT TOOL

**Target Audience:** All pharmacy, medical and nursing staff responsible for prescribing, dispensing, administering and monitoring a patient’s medication.

### ITEMS COVERED IN THIS PROCEDURE

I. Background	
II. Objectives	
III. Audit Instructions	
1. Audit Period	
2. Sample Size	
3. Process for Completion	
4. Post Completion	
IV. Definitions	
1. Chart Review	
1.1. Clinical Pharmacist Review	
1.2. Allergies and Adverse Drug Reactions	
1.3. Prescription Entries	
2. Medication Reconciliation on Admission	
2.1. Medicines taken Prior to Presentation to Hospital	
2.2. Supplementary Activities	
3. Medication Education during Hospitalisation and on Discharge	
3.1. Required Activities	
4. Discharge Process: Communication with General Practitioners and other Health Professionals	
4.1. Required Activities	
5. Quality Activities Promoting Medication Safety	
5.1. Required Activities	

## I. BACKGROUND

In April 2004, Australia's Health Ministers agreed on a national health reform agenda. To reduce the number of adverse events and improve patient safety, eight key safety and quality initiatives were endorsed. One of the eight initiatives was to implement a process of pharmaceutical review in all public hospitals by December 2006.

In Western Australia, this process began with a workshop to discuss the definition and key features of pharmaceutical review. From this workshop, a multidisciplinary Expert Advisory Group (EAG) was established. The EAG had representation from chief pharmacists, clinical pharmacists, and medical, nursing and clinical governance staff.

After significant consultation with the Pharmaceutical Review EAG, the Office of Safety and Quality in Healthcare developed a two-phase proposal for the implementation of a process of pharmaceutical review in Western Australia.

- Phase 1: Development of the WA Pharmaceutical Review Policy.
- Phase 2: Gap analysis and identification of resources needed for full compliance with the pharmaceutical review standards.

The Pharmaceutical Review Policy was released in March 2007. The resource gaps identified in Phase 2 formed the basis for a Business Case submitted to the State Health Executive Forum.

A follow-up audit will occur in **October 2010** to review and assess the uptake of this policy. The results from this audit, and the baseline audit, will determine the future direction of the Policy.

The same audit tool which was developed in consultation with the Pharmaceutical Review Expert Advisory Group (EAG) and used for the baseline audit will again be used. Data collection will commence in the first week of **October 2010** for recruitment of patients.

## II. OBJECTIVE

The purpose of this baseline audit is to measure the current level of compliance by WA Health Services against the five standards of the Pharmaceutical Review Policy.

## III. AUDIT INSTRUCTIONS

### 1. Audit Period

- The baseline audit period will run between **Sunday 17<sup>th</sup> October 2010** and **Sunday 14<sup>th</sup> November 2010**.
- The audit sample will consist of patients admitted to WA public hospitals between **Sunday 17<sup>th</sup> October 2010** and **Sunday 24<sup>th</sup> October 2010**.
- All data is due back to the Office of Safety and Quality in Healthcare by **Tuesday 30<sup>th</sup> November 2010**.

### 2. Sample Size

- Health Service Project Leads will be responsible for determining the sample size. This sample should reflect the hospital size, while balancing the need to minimise pressure on staff against the need to capture a comprehensive picture of the level of compliance of pharmaceutical review standards.
- Health services should aim to **audit 50% of patients admitted during a one-week** period.

### 3. Process for Completion

- Each site has identified a Pharmaceutical Review Audit Project Lead.
- The Project Lead is responsible for the overall implementation of the baseline audit, and recruiting audit team members within each site.
- Team members can include pharmacists, pharmacy technicians, pharmacy students/interns, doctors, nurses and ward clerks.
- Project Leads will coordinate how the sample is selected at each site. Ideally, the sample population should be reflective of the various patient groups admitted to the site e.g. surgical, general medical, day surgery, various specialties etc.
- Each ward should keep a record of the number of patients admitted between **Sunday 17<sup>th</sup> October 2010 and Sunday 24<sup>th</sup> October 2010**, which of these patients were audited, and when the audited patients were discharged.
- For a patient to be included in the audit, the audit team will attach an audit form to the front of the patient's file.
- Once an audit form is attached to the file, complete the following details on **Page 2**:
  - Patient identification details (affix label)
  - Ward number/name
  - Date of admission
  - Patient's GP, Community Pharmacist and Residential Care Facility (where applicable) - this information may be useful for follow-up after discharge
  - Whether the patient is a high-risk patient
- The audit team is to monitor each patient being audited and complete the relevant sections of the audit tool, until the patient is discharged.
- Once the patient is discharged, document 'Discharge date' on PAGE 2. If patient is not discharged before **Sunday 14<sup>th</sup> November 2010**, tick the 'Not discharged prior to audit completion date' on PAGE 2.

#### *Important*

The purpose of this audit is to gauge level of compliance by WA Health Services against the five standards of the WA Pharmaceutical Review Policy with the current resource allocation. To ensure that we have accurate data, it is imperative that audit teams are honest in their responses and **do not alter behaviour** for patients that are being audited.

### 4. Post Completion

- Ward level audit team is to ensure that all appropriate sections of the audit tools are completed.
- Completed audit tools are to be forwarded to the Hospital Project Lead.
- Project Leads are to complete 'Hospital Demographic Information Collection' sheet (Appendix 1).
- Project Leads are to forward all audit tools and Hospital Demographic Sheet to the Office of Safety and Quality in Healthcare by **Tuesday 30<sup>th</sup> November 2010**.

## IV. DEFINITIONS

**Appropriately credentialed professional** - a pharmacist, doctor or nurse who has the relevant knowledge, or the ability to access relevant knowledge, about certain aspects of the medication management cycle.

**Illegible prescription** - a prescription that is NOT considered to be printed legibly and has the potential to be misinterpreted. The prescription must be able to be clearly interpreted by all clinicians involved in the patient's care.

High-risk patient - a patient who meets one or more of the following criteria:

- is currently prescribed five or more medications;
- has multiple co-morbidities;
- is prescribed a medication with a narrow therapeutic index;
- is receiving therapy with high-risk drugs (such as anticoagulants and immunosuppressants);
- has symptoms suggestive of a drug-related admission; and
- is having difficulty managing medicines because of literacy, language difficulties, dexterity problems, impaired sight, dementia or other cognitive difficulties.

**HIGH-RISK DRUGS COMMONLY USED IN THE COMMUNITY AND/OR HOSPITAL SETTING -**

**Note: This is not an exhaustive list of all 'high-risk' or potentially 'high-risk' drugs.**

<ul style="list-style-type: none"> <li>■ <b>Antiarrhythmics</b> <ul style="list-style-type: none"> <li>■ Amiodarone, digoxin, quinidine</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>■ <b>Anticoagulants</b> <ul style="list-style-type: none"> <li>■ Enoxaparin, unfractionated heparin, warfarin</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>■ <b>Antiepileptics</b> <ul style="list-style-type: none"> <li>■ Carbamazepine, phenytoin, sodium valproate</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>■ <b>Antineoplastics</b> <ul style="list-style-type: none"> <li>■ Fluorouracil, methotrexate etc.</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>■ <b>Antiretrovirals</b> <ul style="list-style-type: none"> <li>■ <u>Fusion inhibitors</u> <ul style="list-style-type: none"> <li>■ Enfuvirtide</li> </ul> </li> <li>■ <u>NNRTI</u> <ul style="list-style-type: none"> <li>■ Delavirdine, efavirenz, nevirapine</li> </ul> </li> <li>■ <u>NRTIs</u> <ul style="list-style-type: none"> <li>■ Abacavir, didanosine, lamivudine, stavudine, zalcitabine, zidovudine</li> </ul> </li> <li>■ <u>NtRTI</u> <ul style="list-style-type: none"> <li>■ Tenofovir</li> </ul> </li> <li>■ <u>Pis</u> <ul style="list-style-type: none"> <li>■ Amprenavir, atazanavir, indinavir, lopinavir, nelfinavir, ritonavir, saquinavir</li> </ul> </li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>■ <b>Drugs for diabetes</b> <ul style="list-style-type: none"> <li>■ Insulins, sulfonylureas (glibenclamide, glimepiride, gliclazide and glipizide)</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>■ <b>Drugs for gout</b> <ul style="list-style-type: none"> <li>■ Colchicine</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>■ <b>Immunosuppressants</b> <ul style="list-style-type: none"> <li>■ Azathioprine, cyclophosphamide, cyclosporin, everolimus, hydroxyurea, methotrexate, mycophenolate, sirolimus, tacrolimus</li> </ul> </li> </ul>

<ul style="list-style-type: none"> <li>■ <b>Non-steroidal anti-inflammatory drugs (combined with clinical risk e.g. renal failure, elderly etc)</b> <ul style="list-style-type: none"> <li>■ Aspirin, celecoxib, diclofenac, ibuprofen, indomethacin, meloxicam, naproxen, piroxicam</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>■ <b>Opioid Analgesics</b> <ul style="list-style-type: none"> <li>■ Methadone, morphine, pethidine, oxycodone</li> </ul> </li> </ul>

**COMMON DRUGS WITH A NARROW THERAPEUTIC INDEX THAT REQUIRE THERAPEUTIC DRUG MONITORING -**

<ul style="list-style-type: none"> <li>■ <b>Antibacterials</b> <ul style="list-style-type: none"> <li>■ Aminoglycosides (amikacin, gentamicin and tobramycin)</li> <li>■ Glycopeptides (teicoplanin and vancomycin)</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>■ <b>Anticoagulants</b> <ul style="list-style-type: none"> <li>■ Unfractionated heparin</li> <li>■ Warfarin</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>■ <b>Antiepileptics</b> <ul style="list-style-type: none"> <li>■ Phenytoin</li> <li>■ Sodium valproate</li> <li>■ Carbamazepine</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>■ <b>Bronchodilators</b> <ul style="list-style-type: none"> <li>■ Theophylline</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>■ <b>Psychotropics</b> <ul style="list-style-type: none"> <li>■ Lithium</li> <li>■ Clozapine</li> </ul> </li> </ul>

1. **Chart Review** - All inpatient medication charts are to be reviewed, ideally on a daily basis, by an appropriately credentialed professional, such as a clinical pharmacist.

1.1. **Clinical Pharmacist Review**

The form is titled 'REGULAR MEDICATIONS' and includes a 'DATE & MONTH' field. It contains several medication entries, each with fields for 'Drug/Brand', 'Dose', 'Frequency', 'Time of Day', 'Pharmacy', and 'Pharmacist Signature'. A specific entry for 'WARFARIN (Marrow/Coumadin)' is highlighted with a red box. Below the medication entries, there is a section for 'DOCTORS MUST ENTER administration times' with a grid for tracking. At the bottom of the chart, there is a 'Clinical Pharmacist Review' section with a signature line and a grid for daily review.

1.1.A. Indicate whether the ‘Clinical Pharmacist Review’ section is signed, either by the clinical pharmacist or an appropriately credentialed professional. This section should be signed to indicate that chart review has occurred in accordance with the Required Activities of Standard 1 of the WA Pharmaceutical Review Policy (pg 6).

A detailed review must be undertaken, including the consideration of the patient’s medication history and medical condition, before the ‘clinical pharmacist review’ section is signed.

*Note: For those hospitals/sites not using the National Inpatient Medication Chart (NIMC), a process of initialling at the bottom of the chart to indicate review, similar to the NIMC, should be adopted.*

**Rationale**  
Allows calculation of the total number of charts that were reviewed by an appropriately credentialed professional.

1.1.B. Indicate the first date that the ‘Clinical Pharmacist Review’ box was signed.

**Rationale**  
This date enables calculation of how long after admission the first clinical pharmacist review occurred. Ideally, for high-risk patients, the first review should occur within 24 hours of admission.

1.1.C. Frequency of chart review

1. Count the number of ‘Mondays’ during the length of the patient’s admission - document this in the ‘Monday’ column.
2. Repeat step 1 for Tuesday, Wednesday, Thursday, Friday, Saturday and Sunday.

**1.1.D. Health professionals conducting the chart review**

3. On how many of the ‘Mondays’ of the patient’s admission was the ‘Clinical Pharmacist Review’ box signed by the Clinical Pharmacist - document this in the ‘Clinical Pharmacist - Monday’ column
4. On how many of the ‘Mondays’ of the patient’s admission was the ‘Clinical Pharmacist Review’ box signed by another appropriately credentialed professional - document this in the ‘Other appropriately credentialed professional - Monday’ column.
5. Repeat steps 3 and 4 for Tuesday, Wednesday, Thursday, Friday, Saturday and Sunday.

**Note:** *In accordance with the NIMC Guidelines, if the chart is reviewed by an appropriately credentialed professional, they should sign immediately under the ‘Clinical Pharmacist Review’ sign-off box.*

- Include the day of the patient’s admission and discharge in the count.
- If the patient is known to have been admitted after the daily clinical pharmacist round, document this in the ‘comments’ section of the audit tool.
- If the patient is known to have been discharged before the daily clinical pharmacist round, document this in the ‘comments’ section of the audit tool.

**Rationale**

This breakdown of the clinical pharmacist review activity will allow analysis of how often a patient’s chart is reviewed, if there are particular days on which chart reviews do not occur, the pattern of review on weekends and which of the professions primarily complete the reviews.

Of the patient’s total admission period:	SUN	MON	TUES	WED	THUR	FRI	SAT
C. Indicate the number of each day that passed, <i>eg total number of Mondays, Tuesdays etc.</i>							
D. For each day of the patient’s admission, how many of the corresponding ‘Clinical Pharmacist Review’ boxes had been signed by a: <ul style="list-style-type: none"> <li>• Clinical Pharmacist</li> </ul> OR <ul style="list-style-type: none"> <li>• Other appropriately credentialed professional</li> </ul>	<b>Comments:</b>						

**Example**

Mr Citizen is admitted on Tuesday 19<sup>th</sup> October at 3pm and discharged on Sunday 31<sup>st</sup> October at 8am. His chart was reviewed and signed by a Clinical Pharmacist every Monday through to Wednesday, reviewed and signed in the relevant section by a doctor on Thursday, but was not reviewed on Fridays, Saturdays and Sundays.

Mr Citizen's audit would look like this:

Of the patient's total admission period:	SUN	MON	TUES	WED	THUR	FRI	SAT
C. Indicate the number of each day that passed, <i>eg total number of Mondays, Tuesdays etc.</i>	2	1	2	2	2	2	2
D. For each day of the patient's admission, how many of the corresponding 'Clinical Pharmacist Review' boxes had been signed by a: • Clinical Pharmacist OR • Other appropriately credentialed professional	Comments:						
		1	2	2			
					2		

**Note: Two blank cells assume that a review did not occur for the patient on that day.**



- **Scenario 2:** A clinical pharmacist reviewed the patient’s medication chart on Tuesday 19<sup>th</sup> October, and made the appropriate changes. The pharmaceutical review audit section was also completed on Tuesday 19<sup>th</sup> October, after the chart review. The auditor would document the following on page 4 of the audit tool -

- In the ‘POST CHART REVIEW’ section, all completed chart review activity.
- The ‘PRE CHART REVIEW’ section should have nothing documented since no orders were written between the chart being reviewed, and the audit being completed.

- **Scenario 3:** A clinical pharmacist had not reviewed the patient’s medication chart. The auditor would document the following on page 4 of the audit tool -

- The ‘POST CHAR REVIEW’ section should have nothing documented since no orders were reviewed before the audit being completed.
- In the ‘PRE CHART REVIEW’ section, all activity.

**Note: If chart has not yet been reviewed, complete only the ‘pre chart review’ section, BUT DO NOT INCLUDE AMENDMENTS THAT YOU MAKE WHILE REVIEWING THE CHART in the calculations.**

- 1.3.A. Count ALL prescription entries on the National Inpatient Medication Chart (OR Long Stay Chart OR Paediatric Chart where applicable). This includes once-only/nurse initiated orders, telephone orders, regular orders and PRN orders. **Only count current medication entries, exclude ceased orders.**
- 1.3.B. Count the number of prescriptions where the **generic name** (or agreed exception) is **not used**.
- 1.3.C. Count the number of prescriptions that do not meet legal requirements.
- 1.3.D. Count the number of prescriptions that are not in accordance with hospital policy, guidelines and restrictions on use.
- 1.3.E. Count the number of prescriptions that are not considered to be printed legibly, and have the potential to be misinterpreted. The prescription must be able to be clearly interpreted by all clinicians involved in the patient’s care.
- 1.3.F. Count the number of prescriptions that may potentially interact with other drugs prescribed or medications taken prior to presentation to hospital or may cause an adverse drug reaction. *A clinical pharmacist (or appropriately credentialed professional) should be involved in the calculation of this response.*
- 1.3.G. For how many of the potential known drug interactions identified above, was there **no documentation on appropriate action/monitoring required** on the medication chart or in the patient’s notes. *A clinical pharmacist (or appropriately credentialed professional) should be involved in the calculation of this response.*
- 1.3.H. Count the number of prescriptions **not** using only approved abbreviations (see Appendix 2 and 3 for ‘approved’ and ‘not to be used’ abbreviations).
- 1.3.I. Count the number instances where drugs are prescribed without a clearly identifiable reason for their use. *A clinical pharmacist (or appropriately credentialed professional) should be involved in the calculation of this response.*

**Note that drugs may be prescribed ‘off-label’/not for a registered indication, but still be considered appropriate, based on available evidence for their use in the given indication.**

- 1.3.J. Count the number of instances where the dosage of a drug has been changed inadvertently without a clearly identifiable reason, (i.e. determined that dosage was altered in error). *A clinical pharmacist (or appropriately credentialed professional) should be involved in the calculation of this response.*
- 1.3.K. Count the number of instances where the form of the drug prescribed (e.g. slow release versus immediate release) has been changed inadvertently without a clearly identifiable reason, (i.e. determined that drug form prescribed was altered in error). *A clinical pharmacist (or appropriately credentialed professional) should be involved in the calculation of this response.*
- 1.3.L. Count the number of instances where the route of a drug (e.g. oral versus intravenous) has been changed inadvertently without a clearly identifiable reason, (i.e. determined that drug route was altered in error). *A clinical pharmacist (or appropriately credentialed professional) should be involved in the calculation of this response.*

**Rationale**

All chart reviews should identify whether prescriptions are written correctly, meet legal requirements and are written in accordance with hospital policy guidelines and restrictions on use.

**2. Medication Reconciliation on Admission - Medication reconciliation, including an accurate medication history, is to be conducted for all inpatients by an appropriately credentialed professional, ideally within 24 hours of admission for high-risk patients.**

**2.1. Medicines taken Prior to Presentation to Hospital**

Medicines taken Prior to Presentation to Hospital (Prescribed, over the counter, complementary)					
Medication			Dose & frequency		
Duration		Medication		Dose & frequency	
Duration		Medication		Dose & frequency	
NOT FOR ADMINISTRATION					
GP:			Community Pharmacy:		
Documented by:		(Sign)	(Date)	Medicines usually administered by:	

**2.1.A.** Indicate yes if the ‘Medicines taken Prior to Presentation to Hospital’ section on the front page of the NIMC is completed (or referenced), or if the medication history is documented in the patient’s notes. (i.e. use of Medication Action Plan or equivalent) Document the date that the medication history was completed and who the history was completed by. Tick the ‘Unknown/Not Documented’ box if it is not known when the history was completed or who completed the medication history.

If the medication history is not fully completed, document this in the ‘comments’ section.

If the patient’s medication history is not taken, tick ‘No’ and continue to section 2.2.

**2.1.B.** Tick the source(s) of information for the medication history. If the source is unknown tick the ‘Unknown/Not Documented’ box.

**Rationale**

Allows calculation of how often medication histories are being completed, how long after admission histories are being completed, which of the professions primarily complete medication histories and who the primary source of information is for medication histories.

**2.2. Supplementary Activities**

**2.2.A.** Consult patient/carer or appropriate clinician and establish whether the patient had or was given a Patient’s Own medication bag on admission. Tick ‘NA’ if the Patient’s Own bag is not appropriate for the patient. Tick the ‘Unknown/Not Documented’ box if it is not known whether the patient had or was given a Patient’s Own medication bag on admission.

**2.2.B.** Consult patient/carer or appropriate clinician and establish whether the patient had brought in a current medication profile. Tick ‘NA’ if the patient does not own a current medication profile. Tick ‘Unknown/Not Documented’ if it is unknown whether the patient has a current profile.

**2.2.C.** Consult patient/carer or appropriate clinician and establish whether the patient had brought in a previous hospital discharge summary or nursing home summary. Tick ‘NA’ if the patient does not own a previous hospital discharge summary or

nursing home summary. Tick 'Unknown/Not Documented' if it is unknown whether the patient has a previous hospital discharge summary or nursing home summary.

- 2.2.D. Consult patient/carer or appropriate clinician and establish whether the patient had brought in a St John Ambulance MedicAlert bracelet or MedicAlert wallet card. Tick 'NA' if the patient does not own a St John Ambulance MedicAlert bracelet or MedicAlert wallet card. Tick 'Unknown/Not Documented' if it is unknown whether the patient has St John Ambulance MedicAlert bracelet or MedicAlert wallet card.
- 2.2.E. Consult patient/carer or appropriate clinician and establish whether the patient had brought in a Home Medicines Review report. Tick 'NA' if the patient does not own a Home Medicines Review report. Tick 'Unknown/Not Documented' if it is unknown whether the patient has a Home Medicines Review report.

#### **Rationale**

Patients should be encouraged to bring their current medications and/or list of medications with them to hospital. These questions are designed to identify how often this currently occurs and areas in which programs may be implemented.

### **3. Medication Education during Hospitalisation and on Discharge - Patients and/or their carers are to be provided with medication education during their hospitalisation to ensure that they have an understanding of their medications, and ideally be given a medication profile on discharge**

#### **3.1. Required Activities**

- 3.1.A. Consult the patient's medication chart and indicate whether any changes (additions, cessations or alterations) were made to the patient's medication management e.g. dose increase.

#### **Rationale**

The policy indicates that medication education is to be provided to the patient/carer when any additions, cessations or alterations are made to the dosage regimen of the patient's medications. This question identifies patients that are a priority for medication education.

- 3.1.B. Consult the patient's medication chart/patient's notes to identify whether the provision of **education** for any changes in medication management was documented in the medical record or on medication chart.

If known, document who provided the education.

#### **Example**

Clinician increased the dose of patient's medication. Clinician documents in the notes that this medication increase was discussed with patient.

- 3.1.C. Consult the patient's medication chart/medical record and indicate whether the provision of a Consumer Medicine Information leaflet (or other appropriate literature) was documented.
- 3.1.D. Consult the patient's medication chart/medical record and indicate whether the provision of a 'Patient First' booklet was documented.
- 3.1.E. Consult the patient's medication charts to identify whether the patient had been prescribed the following high-risk medications:
- Anticoagulant e.g. warfarin
  - Immunosuppressant
  - Medications with a narrow therapeutic index e.g. digoxin

If one or more high-risk medications had been prescribed, indicate whether the provision of education about these medications was documented in the medical record or medication chart.

- 3.1.F. Consult the patient/carer, appropriate clinician and/or medical record to establish whether the patient was provided with a medication profile on discharge. The medication profile may be provided in various forms, e.g. at the back of the 'Patient First' booklet, via an electronic system such as TEDS etc.

***Note: The questions in this section have been phrased as 'was the activity documented in the patient's medication chart/records'. Although measuring documentation is not the ideal method, it is designed to make the audit process easier.***

## 4. Discharge Process: Communication with the General Practitioner and other Health Professionals - A patient's medication-related information is to be provided to his or her general practitioner and other health professionals upon discharge

### 4.1. Required Activities

- 4.1.A. Consult patient's record and/or appropriate clinician to determine whether a discharge summary was prepared by **Sunday 14<sup>th</sup> November 2010**.

For the purpose of this audit, the discharge summary must include (but is not limited to) the following components:

- Admission information
  - Presenting complaint
  - Diagnosis
  - Process during treatment
- Medication list on discharge
- Follow-up

**If patient did not have a discharge summary prepared, continue to section 5.1.**

- 4.1.B. Compare the medications documented in the discharge summary with those prescribed on the NIMC and indicated for continuation after discharge. If any discrepancies are identified, tick 'yes'.

Compare the discharge summary with the patient's medication profile. If any discrepancies are identified, tick 'yes'. Tick the 'NA' box if patient does not have a medication profile.

- 4.1.C. Consult the medical record to determine if clinical pharmacist involvement in medication component of the discharge summary is recorded.

- 4.1.D. Consult the patient and/or patient's medical record to determine whether the patient received a copy of their discharge summary by **Sunday 14<sup>th</sup> November 2010**.

- 4.1.E. Consult the patient's general practitioner and/or medical record to determine whether the general practitioner was provided with the patient's discharge summary by **Sunday 14<sup>th</sup> November 2010**.

If the general practitioner was provided with a discharge summary, document the date it was sent from the hospital.

- 4.1.F. Consult the patient's community pharmacist to determine whether they were provided with a copy of the patient's discharge medication list, and/or contacted by the hospital to discuss the patient's medications.

- If the patient does not have a community pharmacist, tick 'NA'
- If the patient does have a community pharmacist, but they were not sent a discharge medication list and/or contacted, tick 'No'
- If the patient does have a community pharmacist, and they were sent a discharge medication list and/or contacted, tick 'Yes'

- 4.1.G. Indicate whether patient resides in a Residential Care Facility.

**If no, continue to section 4.1.H.**

If patient does reside in a Residential Care Facility, consult the facility to determine whether the facility was provided with a copy of the patient's discharge medication list and/or contacted to discuss the patient's medications.

- 4.1.H. Count all of the medications listed on the patient's discharge summary.

- 4.1.1. Of all the medications listed on the discharge summary, count the number of medications with:
- Generic name documented (or brand name where relevant)
  - Dose documented
  - Drug status documented (e.g. drug ceased, dose decreased etc)
  - Rationale for changes (e.g. dose decreased due to impaired renal function)
  - Monitoring requirements where relevant (e.g. interactions, dose increased)
  - Expected outcomes (e.g. a defined target for systolic blood pressure with the commencement of an antihypertensive)
  - Additional information (e.g. accessing further supplies via hospital for SAS medication)

**Rationale**

To calculate frequency and timeliness of a discharge summary being created, and whether this information is communicated to the patient's general practitioner and/or other health professionals. Post-discharge continuity of care is a factor in determining hospital readmission rates.

**5. Quality Activities Promoting Medication Safety - Health services are to be involved in medication-related safety and quality activities**

**5.1. Required Activities**

- 5.1.A. Consult the patient's notes and/or appropriate clinician, to determine whether the patient experienced any adverse drug reactions during this admission.
- 5.1.B. If the patient did experience an ADR, was it life threatening - i.e. was emergency medical attention needed?
- 5.1.C. If the patient did experience an ADR, consult the patient's notes, patient's medication chart and discharge summary, and indicate in which, if any, of these documents the ADR was recorded.
- 5.1.D. If the patient did experience an ADR, is there documentation in the patient's notes that the event was reported via the hospital's clinical incident management process - i.e. evidence of an AIMS form being completed or other appropriate reporting mechanism.
- 5.1.E. If the patient did experience an ADR, is there documentation in the patient's notes that the event was reported to the Adverse Drug Reaction Advisory Committee (ADRAC).

**Rationale**

To determine whether health professionals and health services detect and report ADRs to an appropriate committee and what quality improvement activities are undertaken to reduce future medication errors.

## APPENDIX 1 - HOSPITAL DEMOGRAPHIC INFORMATION COLLECTION SHEET

1. Hospital Name: \_\_\_\_\_
2. Total number of hospital beds (as at 17<sup>th</sup> October 2010): \_\_\_\_\_
3. Total number of patients admitted to hospital between 17<sup>th</sup> October and 24<sup>th</sup> October 2010: \_\_\_\_\_
4. Total number of patients with Pharmaceutical Review Baseline Audit Tool attached to patient file between 17<sup>th</sup> October and 24<sup>th</sup> October 2010: \_\_\_\_\_
5. Total number of COMPLETED Pharmaceutical Review Baseline Audit Tools collected at the end of the audit period (this includes patients that weren't discharged, but have the 'Not discharged prior to audit completion date' box ticked): \_\_\_\_\_
6. Total number of INCOMPLETE Pharmaceutical Review Baseline Audit Tools collected at the end of the audit period: \_\_\_\_\_
7. Total number of authorised full-time equivalent (FTE) Pharmacist positions: \_\_\_\_\_
8. Total number of filled full-time equivalent (FTE) Pharmacist positions: \_\_\_\_\_
9. Total number of Pharmacists (count the number of Pharmacists including full-time, part-time and casual staff): \_\_\_\_\_
10. Total number of authorised full-time equivalent (FTE) Clinical Pharmacist positions: \_\_\_\_\_
11. Total number of filled full-time equivalent (FTE) Clinical Pharmacist positions: \_\_\_\_\_
12. Total number of Clinical Pharmacists (count the number of Clinical Pharmacists including full-time, part-time and casual staff): \_\_\_\_\_
13. Total number of Clinical Technicians (support staff working in a clinical capacity): \_\_\_\_\_
14. Average Clinical Pharmacist to patient ratio during the audit period: \_\_\_\_\_
15. Does the hospital have a committee that is responsible for the oversight and coordination of initiatives relating to the Quality Use of Medicines? YES NO
16. Does the hospital promote participation in Quality Use of Medicine activities? YES NO
17. Does the hospital participate in drug use evaluations? YES NO
18. Does the hospital conduct routine review/audit of charts for features such as legibility, errors on charts, dose administration times and dose omissions? YES NO
19. If 'YES' are the above review/audit of charts endorsed by an appropriate QA committee (i.e. audit tools are endorsed and consistent with the aims of the QA committee) YES NO
20. Are hospital staff involved with other hospital and state medication safety working groups and email discussion networks, such as the WA Medication Safety Group? YES NO

# Commonly Used and Understood Abbreviations

Abbreviation	Meaning
<i>Routes of administration</i>	
Eye drop	Eye drop
Eye ointment	Eye ointment
IM	Intramuscular
Inhaler	Metered Dose Inhaler
Intrathecal	Intrathecal
IV	Intravenous
MDI	Metered Dose Inhaler
Neb	Nebulised
NG	Nasogastric
PEG	Percutaneous Endoscopic Gastrostomy
PO	Per oral
PR	Per rectum
PV	Per vagina
Sublingual	Sublingual
Subcut	Subcutaneous
top	Topical
<i>Units of measure</i>	
g	Gram
L	Litre
mg	Milligram
microgram	Microgram
mL	Millilitre
Unit(s)	International Unit(s)
<i>Times of administration</i>	
bd	Twice a day
Mane	In the morning
Nocte	At night
qid	Four times a day
tds	Three times a day

### Do not use

S/C	IU or iu	6/24
S/L	OD, od, d	1/7
E	QD, qd	X 3d
ug	M or m	i, ii, iii, iv, v
U or U/s	N or n	
Zero after decimal point e.g. 5.0mg		
No zero before decimal point e.g. .5mg		

## Abbreviations Not To Be Used

Avoid	Intended Meaning	Reason to Avoid	Acceptable Alternative
E	Ear or Eye	Misinterpreted for wrong organ	Write Ear or Eye in full
S/C	Subcutaneous	Mistaken for S/L sublingual	Subcut or subcutaneous
S/L	Sublingual	Mistaken for S/C	Write sublingual
ug	Microgram	Mistaken for milligram when handwritten	Write microgram
IU or iu	International unit(s)	Mistaken as IV	Write unit(s)
U or U/s	Unit or Units	Mistaken for 0	Write unit(s)
No zero before decimal point e.g. .5mg	0.5mg	Misread as 5mg	Write 0.5mg or write 500 micrograms
Zero after decimal point e.g. 5.0mg	5mg	Misread as 50mg	Do not use decimal points after whole numbers
i, ii, iii, iv, v etc	1, 2, 3, 4, 5	Do not use Roman numerals	Write 1, 2, 3, 4, 5
m	Moming	Mistaken for n (night)	Write mane
n	Night	Mistaken for m (morning)	Write nocte
OD, od, d	Once a day	Mistaken for twice a day, D can be missed	Write mane, nocte or specific time
QD, qd	Every day	Mistaken as QID	Write mane, nocte or specific time
6/24	Every six hours	Mistaken for 6 times per day	Write 6 hourly
1/7	For one day	Mistaken for one week	Write 'for one day' in full
X 3d	For three days	Mistaken for 3 doses	Write 'for three days' in full

HMBS2 OCT09-2109