

BASELINE AUDIT SUMMARY TEMPLATE

<HOSPITAL NAME>

<DATE>

MEDICATION RECONCILIATION

# BASELINE AUDIT SUMMARY

## Objectives of the Audit

An audit at <Hospital Name> was conducted to establish a baseline and evaluate current activity relating to the continuity of medication management, prior to any formal education program or improvement strategies.

In particular to determine whether:

* A Best Possible Medication History (BPMH) is documented for every patient within 24 hours of admission
* All medicines taken prior to admission which were intended to continue were prescribed on the patient’s medication chart, with documented reason/s for any change
* On discharge, the discharge summary contains an accurate medication list
* On discharge, the discharge summary contains the reason/s for any change in medicines
* On discharge the patient is provided with an accurate medication list.

## 

## Summary of Results

* x% of patients had a clear medication history documented within 24 hours, x% of these could be recognised as a Best Possible Medication History (BPMH).
* x% of patients had all medicines taken prior to admission which were intended to continue prescribed on their medication chart, with documented reason/s for any change
* x% of discharge summaries contained an accurate medication list
* x% of discharge summaries contained the reason/s for any change in medicines
* x% of patients were provided with an accurate medication list.

## Method

A retrospective audit of the medical records of patients discharged between the <date> to <date> from <name of ward(s)> was conducted. Patients who had been admitted for less than 24 hours, transferred from other hospitals (other than direct ED to ED), died during the admission, were provided palliative care only or were admitted directly to ICU, were excluded from the audit. <Number> medical records were randomly selected and reviewed. After exclusions <number> medical records remained. Both paper and electronic records were reviewed.

## Definitions

The following terms and definitions are used during the audit and have been included in this report:

|  |  |
| --- | --- |
| Best Possible Medication History | A medication history that has each medicine clearly identified and with clear directions i.e. dose and frequency; allergies and/or adverse drug reactions recorded; and evidence of at least two sources used |
| Regular prescribed medication  prn prescribed medication | A medicine that would require a prescription or would normally form part of a prescribed treatment plan (e.g. aspirin in a patient with cardiovascular risk factors). This excludes medicines used only when necessary  A medicine used only when necessary that would require a prescription |
| Non-prescribed medication | A medicine that does not require a prescription or form part of a prescribed treatment plan e.g. over-the-counter medicines, vitamins and complementary medicines |
| Discrepancy | An omission or change in a medication that has no documented reason and has not been identified or rectified within 48 hours |
| Unintentional discrepancy | A discrepancy that has not been identified by the auditors as probably intentional due to the patient’s condition or circumstances. |

## Results

It was found that <number> (x%) of the <number> patients were on medications prior to their hospital admission (see Table 1. for a breakdown of patient details).

Of the <number> patients:

* <Number> had no medication history documented, though they were identified as taking medications
* <Number> (x%) had a comprehensive medication history documented (<number> (x%) by a pharmacist, <number> (x%) by an Emergency Department medical officer and <number> (x%) by the admitting medical team)\*
* <Number> (x%) of the medication histories were documented in the electronic notes.

\*The clinician allocated was that identified by the auditor as taking the most comprehensive medication history as documented in the medical record.

### Table 1. Patient details per ward

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Ward | Number of patients | Median age | Age range | Percentage of males | Median number of regular prescribed medications | Median length of stay |
| A |  |  |  |  |  |  |
| B |  |  |  |  |  |  |
| **Total** |  |  |  |  |  |  |

## Best Possible Medication History

The <number> medication histories documented in the medical records were reviewed to identify whether they could be classified as a BPMH i.e. each medication was clearly identified and had clear directions, allergies were recorded and a minimum of two sources were used to obtain and verify it. Data was collected for all medicines (regular prescribed, prn prescribed and non- prescribed) in the medication history. Figure 1. displays the number of medication histories meeting one or more criteria, for ‘all’ medications and for ‘regular prescribed’ medications.

<insert graph>

*Figure 1. Percentage of medication histories completed within 24 hours, meeting BPMH criteria*

Only <number> medication histories met all criteria for a BPMH and were documented within 24 hours. As the audit was conducted retrospectively verification was determined only if there was evidence in the medical record. Of the <number> medication histories (considering regular prescribed medications only) <number> (x%) of them were clear (all medications with clear name, dose and frequency), documented within 24 hours and included allergies (including unknown or nil known). Though classified as clear, being retrospective, the audit could not determine whether these histories were correct.

There were a total of <number> regular prescribed, <number> prn prescribed and <number> non-prescribed medications recorded. Of the prescribed medications <number> (x%) had a documented plan in the medical record i.e. whether they were to continue, change or be ceased during the admission (plans which stated to ‘continue all medicines’ were included, whereas those that stated ‘as charted’ were excluded).

## Prescribed Medications on Admission

The medications prescribed on admission for each patient were reviewed to determine whether any pre-admission medications had been omitted or changed without a documented reason (i.e. had a discrepancy) and if so, not been identified or rectified within 48 hours.

A total of <number> (x%) patients had one or more of their pre-admission medications either omitted or changed without a documented reason on admission. Some of these changes were identified by the auditors as probably intentional due to the patient’s condition or circumstances. Removing these resulted in <number> (x%) patients with ‘unintentional’ omissions or other discrepancies (Figure 2.) The number of unintentional omissions or other discrepancies per patient ranged from <number> to <number>, with an average of <number> errors per patient.

It is likely that the number of errors per patient is actually higher than that determined in this audit. Not all pre-admission medications documented in the medication history had clear directions (<number> medications belonging to <number> patients were not clear) making it impossible to determine whether they were prescribed with or without a discrepancy. It was also not possible to determine whether there may have been medications the patient was taking that were not documented. These medications would not be captured as an omission in the audit.

<insert graph>

*Figure 2. Percentage of patients with at least one omission or discrepancy on admission (excluding those identified or rectified within 48 hours)*

## Discharge Medicines Information

In order to determine the medications to continue on discharge for each patient the auditors were required to consider the patient’s pre-admission medications, the medication chart, discharge prescriptions (if available) and any documented plan for continued therapy. Auditors found that <number> (x%) patients had some change made to their medications. Either new medications were commenced or pre-admission medications were ceased or changed during their admission.

Of the <number> patients on medications on discharge, <number> discharge summaries were completed. Of these <number> (x%) had either a medication omission or other discrepancy (Figure 3.)

More than <number> of the patients (<number> of <number>) who had a medication error (omission or other discrepancy) on admission also had medication errors on discharge.

The number of medications patients were taking at the time of discharge ranged from <number> to <number> medication, with a median of <number> medications. Of the <number> patients on medications at discharge <number> (x%) were taking five or more medications.

<insert graph>

*Figure 3. Percentage of patients with at least one omission or discrepancy on their discharge summary*

There was evidence that only <number> of the <number> patients that were taking medications on discharge was provided a patient medication list. <Number> (%x) of patients with a patient medication list had a medication omission and <number> (%) had an other discrepancy in their medication list (Table 2.) <Number> (%x) of the patient medication lists provided included reasons for any change/s.

*Table 2. Number of patients with a medication omission or discrepancy in their medication list*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Patient medication list | Medication omissions | Medication discrepancies | Reasons for any change/s |  |  |  |
| **Percentage of patients** | x% | x% | x% |  |  |  |

## Limitations

The audit had a number of limitations, these included:

* The audit was conducted retrospectively relying solely on the documentation that was available, there was no patient interview
* Medication histories documented could not be verified for their accuracy, this may have resulted in an underreporting of omissions
* Evidence of medication omissions and other discrepancies being *identified* on admission was considered an indication of a reconciliation process. Not all identified discrepancies may have followed through to be rectified
* Subjective decisions were made when no plan was available to determine whether discrepancies were intentional i.e. obvious patient/disease factors. There may have been less obvious reasons for an intentional omission or change
* Auditors may have been subjective in determining the intended regimen on discharge from the information available in the record.

## Summary

There is evidence that the processes of medication reconciliation are happening for some admitted patients. Clear medication histories within 24 hours are documented for x% of patients and x% of patients had all medicines taken prior to admission which where intended to continue prescribed on their medication chart. Discharge summaries were completed for the majority of patients with x% containing an accurate medication list. Medication reconciliation however, should be a standard systematic process occurring for all admitted patients throughout their hospital stay.

This audit summary highlights a number of areas requiring improvement. The following recommendations have been made to reduce the current gap between patients that have their medications reconciled and those that do not; reducing the number of patients at risk of experiencing an adverse medication event.

## Recommendations

<See suggestions below>

* Increasing the number of medication histories meeting the criteria for a BPMH by introducing a standard process of collecting and documenting a medication history.

(Strategies may include an educational program, defining roles and responsibilities, redesigning current processes, agreement on when and where it is documented, creating a referral pathway, using a dedicated form that prompts this information, developing a policy or procedure)

* Documenting the plan for the patient’s pre-admission medications to improve the recognition of intended changes to medications and providing evidence of reconciling medication orders on admission. This will assist future audits as it will reduce subjectivity resulting from poor documentation.

(Strategies may include a dedicated form that prompts this information, defining roles and responsibilities, agreement on when and where it is documented)

* Documenting the plan for the patient’s medications on discharge and identifying the changes made to pre-admission medications.

(Strategies may include easy access to the BPMH, defining roles and responsibilities, agreement on when and where it is documented)

* Increasing the number of patients provided with an accurate medication list and the reasons for any changes.

(Strategies may include defining roles and responsibilities, creating a referral pathway, investigating electronic tools/programs)

Improvements in these areas will improve patient care, reduce patient harm and assist to meet Medication Safety Standard 4 of the National Safety and Quality Health Service Standards.



**Correspondence**

Locked Bag 8

Haymarket NSW 1240

Tel 61 2 9269 5500

Fax 61 2 9269 5599

www.cec.health.nsw.gov.au