

Using the Medication Management Plan (MMP) Training Presentation

Introduction

The national Medication Management Plan (MMP) is an initiative of the Australian Commission on Safety and Quality in Health Care (the Commission). The MMP provides health service providers with a standardised form that can be used by nursing, medical, pharmacy and allied health staff to improve the accuracy of medicines information recorded on admission and available to the clinician responsible for therapeutic decision making.

A standardised form to record the medicines taken prior to presentation at the hospital and use for reconciling patients' medicines on admission, intra-hospital transfer and at discharge is considered essential for an effective medication reconciliation process. The national MMP provides Australian hospitals with a suitable form to use for this purpose. The MMP form has been designed for use in adult and paediatric patients.

The MMP is based on the Medication Action Plan developed by the Safe Medication Management Unit, Queensland Health. This work was done in consultation with nurses, doctors and pharmacists. The MMP aligns with the Australian Pharmaceutical Advisory Council's *Guiding principles to achieve continuity in medication management*. It incorporates the minimum data set for a medication history outlined in guiding principle 4 - Accurate medication history.

The presentation - *Using the Medication Management Plan*, has been developed to assist healthcare professionals to use the MMP to obtain and document a complete and accurate medication history, known as a Best Possible Medication History or BPMH. It also provides an overview of the four steps of medication reconciliation and highlights the evidence for, and the benefits of having a formal medication reconciliation process.

The presentation is available as a pdf file with associated speaker notes (see below) or as a Flash-based interactive training presentation with audio voice over. Both versions of the presentation can be downloaded from the Australian Commission on Safety and Quality in Health Care website at

http://www.safetyandquality.gov.au/internet/safety/publishing.nsf/Content/PriorityProgram-06_MedRecon

Using the MMP - Speaker Notes

Slide 1

Title slide - no notes

Slide 2

This presentation is designed to highlight the problem of medication errors which commonly occur at interfaces of care and how the implementation of a formal medication reconciliation process can substantially reduce these preventable medication errors.

The presentation provides health professionals with an overview of:

- How to obtain and document an accurate and complete medication history, known as a Best Possible Medication History (BPMH)
- How to use the National Medication Management Plan (the MMP) to record the BPMH and the key steps of medication reconciliation and
- Discusses the benefits of using the MMP as the one place to record the BPMH and any medication issues and actions occurring during the patient's stay in the hospital.

Slide 3

Communication problems between settings of care are a significant factor in causing medication errors and adverse drug events. Studies have shown that around 50% of all medication errors occur at transitions of care such as at:

- admission to hospital;
- transfer between wards; and
- Discharge home or to another facility such as a residential aged care facility.

As many as twenty percent of adverse drug events that occur in hospital result from errors occurring at these interfaces of care.

Slide 4

Medication reconciliation is a systems based approach to reducing medication errors at transitions of care. The aim is to reduce preventable adverse drug events occurring when patient care is transferred.

This is achieved by:

- obtaining and documenting a complete and accurate list of the medicines a patient is taking prior to admission to hospital
- comparing this list to the medicines prescribed on admission, on transfer to another ward or on discharge to ensure all changes are intentional and clinically appropriate AND by
- identifying and resolving any discrepancies with the prescribing doctor and documenting any resulting changes to medications.

Slide 5

A formal process of medication reconciliation involves 4 steps

1. **Compiling a best possible medication history (known as a BPMH)** by conducting a structured interview with the patient, carer or a family member
2. **Confirming** the medication history with at least one other source. This may include: the patient's own medicines, patient's medicines list, GP's referral letter, by contacting the patient's GP or community pharmacy, or by reviewing a previous health record.
3. **Comparing the BPMH** with the medication orders on admission, transfer to another ward or at discharge in order to identify any discrepancies. If the history and the medication orders do not match and the changes are not clinically appropriate then these are discussed with the prescriber and the reasons for

4. changes to therapy are documented. For example, warfarin ceased prior to surgery, please recommence on discharge.
5. **Supplying** accurate medicines information when care is transferred, such as when a patient is transferred to another ward, or on discharge. On discharge the care provider, for example the GP, and the patient and/or their carer should be supplied with an accurate and complete list of the patient's medicines and information about any changes made to the medicines.

Slide 6

A formal process of medication reconciliation is important because studies have shown that:

- Up to 67% of medication histories contain one or more errors, and up to a third of these errors have the potential to cause harm
- 30 - 70% patients have one or more unintended variation between their medication history and the medicines ordered on admission
- Australian studies have shown 12% patients have an error in their discharge prescription and one in six have medicines omitted unintentionally from their discharge summary
- Patients with medicines unintentionally omitted from their discharge summary are more likely to be re-admitted to hospital.

Slide 7

This slide illustrates the mismatch that commonly occurs between the history documented in the patient notes and what is ordered on the medication chart.

The plan was to withhold digoxin and continue all medicines however some have not been charted and the doses of others have been changed.

Medication management decisions have not been documented and it is not clear if these changes are intentional or are errors.

Slides 8, 9 and 10

These case studies highlight the serious nature of problems that can occur when a formal medication reconciliation process is not in place.

In the first case the failure occurred at admission due to the lack of a systematic process for taking the best possible medication history. Omissions of regular medicines on admission to hospital are the most common medication reconciliation related error. In this case the omission of thyroxine - a critical medication - was not identified during the patient's admission and ultimately led to the death of an elderly patient.

In the second case the failure occurred at discharge. Without a formal process for checking the patient's discharge medications against the Best Possible Medication History, the patient was sent home without their regular cardiovascular medications. A formal process of medication reconciliation at discharge which also involved the patient and/or their carer could have prevented the patient's death.

Slide 11

These are a few examples of studies that provide clear evidence to show how a formal medication reconciliation process can reduce medication errors at transitions of care by more than 50% and in some cases almost eliminate these errors.

Slide 12

The following components are considered to be essential elements of a successful medication reconciliation process.

Medication reconciliation is a **formal process** in which health care professionals partner with patients. Responsibility for each step of the process should be clearly assigned and communicated in the organisation.

It requires **collaboration and team work amongst** prescribers, pharmacists, nurses and other health care professionals. Some additional training of key clinicians is required. The actual roles and responsibilities for each discipline and clinician are based on the team's local medication reconciliation practice model. Models will differ from hospital to hospital and from team to team

within a hospital-. Patients and families can serve as a central resource of information about their medicines by providing medicine containers, lists and other information. Reconciliation should be **timely** - The BPMH, initial reconciliation and communication of discrepancies to the prescriber should be completed as soon as possible within 24 hours of the decision to admit the patient and ideally, within 4 hours for high risk medicines such as insulin and opioids.

The use of a **standardised form** such as the MMP to record medicines taken prior to admission to hospital and to aid reconciliation on admission, intra-hospital transfer and discharge is an essential component of a formal process of medication reconciliation.

Slide 13

The National Medication Management Plan has been designed to support the key steps of medication reconciliation.

It is suitable for use in both adult and paediatric settings and can be used to replace the *Medications taken prior to Presentation to Hospital* section on the National Inpatient Medication Chart.

Together the MMP and the National Inpatient Medication Chart form the main record of medicines for patients.

The MMP should be kept with the active medication chart(s) throughout the patient's admission.

Slide 14

The MMP becomes a ready reference of the patient's regular medicines and medication history which is standardised and can be easily found. There is no need to search through the notes to find the history and documentation of any changes, for example, medicines withheld, doses changed.

The MMP eliminates the need for repetitive history taking and documentation in the progress notes. Clinicians can write "see MMP" for medication history.

The MMP ultimately saves everyone time and improves the efficiency of the discharge process.

Slide 15

The best possible medication history is a record of all medicines a consumer is taking immediately prior to the time of their admission or presentation to hospital.

The BPMH is the baseline from which drug treatment will be continued at the time of admission, therapeutic interventions will be made, and self caring will be continued after discharge.

The BPMH is documented on the Medication Management Plan form.

*The record should reflect what the patient was **actually** taking immediately prior to admission. It should **not** include what they should be taking, are not taking or what the admitting doctor has prescribed for their presenting complaint.*

Slide 16

The BPMH should include details of previous Adverse Drug Events and allergies for example allergy to penicillin.

It should include ALL medicines the consumer is taking at the time of presentation to hospital including:

- Prescribed medicines
- Non-prescribed, over-the counter (OTC) medicines
- Complementary/herbal medicines
- "prn" or "as needed" medicines

The BPMH should also include any recently ceased or changed medicines.

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Now we will go through how to take a BPMH and step through how it is recorded on the Medication Management Plan.

Slide 18

Use the Medication History Checklist on the MMP to assist in determining the medicines currently taken. Use of the checklist on the MMP helps to structure the interview and ensure all routes of administration are covered as well as non-prescribed medicines, herbals, recreational drugs etc

Use the patient's own medicines or the patient's medicines list as a prompt ONLY

If these are not available and the patient or carer is unsure of what medicines are taken you should ask permission from the patient to contact their GP or their community pharmacy to obtain a current list of their medicines.

Go through each medication **one at a time** with the patient to establish:

- How they take it (dose and frequency)
- Why they think they take it (where applicable)
- If it is taken regularly or when required only (where appropriate)
- How long they have been taking it
- If they have supplies of their medicines at home
- If the patient's medicine containers or a medicines list are not available, ask the patient if they know which medications they take
- If they are unsure, ask if you can contact their community pharmacy, GP or family member for a list for them to confirm

Remember that patients frequently take their medicines differently to what is reflected on the label or their medicines list. Therefore it is important to clarify this with the patient for each medicine.

Document all medicines on the Medication Management Plan.

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Document any allergies or adverse drug reactions. This includes:

- Name of drug or substance;
- Reaction details (*e.g. rash, diarrhoea*) and type of reaction (*e.g. allergy, anaphylaxis*);
- Date that reaction occurred (or approximate timeframe *e.g. "20 years ago"*)
- If the patient is not aware of any previous ADRs, then the **Nil known** box should be ticked.

Sign, print name and date the entry.

For each medicine document:

- The generic and brand name, strength form and route
- Dose
- Frequency or the time usually taken
- Indication for use
- The date started or how long the patient has been taking the medicine
- Prescribers should indicate their plan for each medicine i.e. whether it is to be continued, ceased or changed.
- The person taking the history should initial each medicine and document their profession

Record whether the patient has more than 7 days supply of medicine in the supply at home column. This information will help ensure that at discharge the patient receives only those medicines they require. This will reduce the potential confusion caused by different brand names and duplicating the supply of medicines at discharge.

Slide 20

On the left hand page of the inside of the MMP record any recently ceased or recent changes to medicines along with other relevant information such as the reason for the change.

Recent changes to a patient's medicines may highlight the possibility of an adverse drug event which may have been the cause of the patient's admission.

Use this section to record medicines such as Aspirin that has been withheld for surgery - make sure you annotate that it needs to be restarted on discharge. Put this information here.

Slide 21

The Medication History Checklist is a tool to assist in determining a patient's complete medication history on presentation to hospital. It is recommended that the checklist is routinely used as part of the medication history interview with the patient or carer to help structure the interview and obtain as much information as possible.

Use of the checklist on the MMP ensures all routes of administration are covered as well as non-prescribed medicines, herbals, recreational drugs etc.

Slide 22

The medication risk identification section allows documentation of the patient's level of independence, the patient's ability to self-administer medicines and any adherence issues.

This information will help identify issues which require some form of action by nursing, pharmacy or medical staff. For example, the patient uses a blister pack such as a Webster pack as an administration aid and a new pack will be required when the patient is discharged.

Slide 23

Record the prescriber's plan to continue, withhold, cease or change the medicines on admission. This will assist with reconciling the BPMH with the medicines ordered at admission, on transfer and at discharge. If there is no plan, clarification must be sought from the attending medical officer.

Indicating if the patient has supplies of medicines at home helps with discharge planning and reduces the risk of patients doubling up on medicines when they go home.

Slide 24

For Paediatric Patients

Record details on the method of administration usually used in the "medicine" column.

This should include the route (for example, "*NG*" for *nasogastric*) and the formulation (for example, "*oral mixture*").

It may be necessary to use an additional line for detailed information (for example, "*Disperse one tablet in 8mL water, give 6mL*").

Slide 25

Confirmation of the medicine list with a second source improves the accuracy and completeness of the medicines list.

The list here details the various sources of information that may be available to confirm the medicine list.

Community healthcare providers should be contacted if appropriate after seeking permission from the patient.

Slide 26

Tick the sources used, document who confirmed it and the date of confirmation.
Also use this section to document information on how the medicines are administered at home and whether the patient brought their own medicines with them.
Children's immunisation status should be recorded in this section along with contact details for community care providers.

Slide 27

Each medicine taken prior to presentation should be checked against the medicines prescribed on the National Inpatient Medication Chart.

Medicines which match in terms of name, strength, dose and frequency, taking into consideration the Doctor's recorded plan, should have a 'tick' placed in the reconcile column. Once all medicines have been reconciled there should be ticks against each medicine as illustrated here.

This will ensure the patient receives all intended medicines.

Slide 28

If you are **adding** to a documented medication history

- List the additional medicines
- Initial and add designation beside each new medicine
- Document the sources used
- Sign, name and date the bottom of the page next to initial history taker.

If you are **amending** a medication history

- Neatly cross through any documentation as required
- Initial and date any changes
- Sign and date at the bottom next to initial history taker.

Note if you need another MMP, write 1 of 2 and attach them together.

Slide 29

The medication management plan section on the front of the form can be used:

- To document discrepancies between the BPMH and the medication orders on the National Inpatient Medication Chart;
- To document any issues identified through the process of medication review; and
- As a handover document between clinicians.

On discharge (or transfer to another health care facility) any outstanding medication issues or actions should be transferred to the next healthcare provider.

Documenting issues and changes improves the communication of medication information between clinicians and facilitates follow-up and resolution of the issues. Documentation however does not replace the need for direct consultation between clinicians.

Slides 30 to 36

To document a medication issue, complete the following:

1. Date and time that the issue was identified
2. A description of the issue
3. Any action that is required
4. The person responsible for that action
5. Name and contact number of the person identifying the issue.

When the action has been completed;

- document the date of the action and
- a description of the results/ outcome of the action.
- This may be completed at a different time to the identification of the issue.

Slide 37

In this example metoprolol was documented on the Best Possible Medication History but has been left off the medication chart.

The issue has been identified as "*usual medication metoprolol has not been charted*"

The proposed action is "*Please review and chart if metoprolol is to be continued*"

Person responsible is "Cardiology Registrar/ Intern".

Slides 38 and 39

The back page of the MMP contains a section for recording medication changes during admission which may be required at the point of discharge to inform the patient, carer, general practitioner, or community pharmacy.

This information should be included in the discharge summary.

If any medicines are to be withheld, restarted on discharge or ceased, document the reason here on the MMP.

Slide 40

This checklist outlines common tasks which occur on discharge. Each task should be considered, completed if appropriate and documented.

Reconciliation on discharge

When the discharge prescriptions and the discharge summary have been reconciled against the National Inpatient Medication Chart and the MMP, tick the "*reconciled on discharge*" box in the Medication Discharge Checklist section and sign and date the entry.

Slide 41

The home medicines referral section of the form helps the clinician determine whether a home medicines review will be needed once the patient has gone home. If a referral for a home medicine review is required local processes should be followed to communicate this need to the patient and their GP.

Slide 42

Here are some additional points for reducing medication errors when using the MMP.

Avoid using error prone abbreviations. Recommendations for terminology, abbreviations and symbols used in prescribing medicines are available from the Commissions website. Write legibility in ink - preferably black and don't use whiteout or erasers. Cross out any errors and rewrite the correct information. If you are unsure of drug names and/or doses always check in a drug information reference or check with a pharmacist.

Take particular care when documenting sustained release products and combination products especially where there are different strengths available.

Slide 43

The National Inpatient Medication Chart and the MMP together form the medication record for each patient.

Once admitted, the MMP should stay with the patient's charts throughout their admission.

At the time of discharge, the MMP should be filed in the patient's notes.

Slides 44 to 46

The Medication Management Plan is an important tool to COMMUNICATE with other members of the patient's health care team.

Medication Reconciliation including taking a Best Possible Medication History saves time, and avoids the confusion associated with having different sources of information in multiple locations.

Having **ONE** source of information means easy access to information and no repetitive documenting in notes.

Importantly, having a formal process of medication reconciliation in place reduces medication errors and prevents adverse medicines events that can occur at transitions of care.

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The Commission has developed a User Guide to the Medication Management Plan which provides further details on how to complete the MMP as well as an A3 poster.

These resources are available on the Commission website at www.safetyandquality.gov.au

The Commission has also developed some education materials for hospitals using the theme of *MATCH UP Medicines*. *MATCH UP Medicines* is designed to reinforce that medication reconciliation prevents patient harm through a systematic checking process at each transition of care. The *MATCH UP Medicines* tag line is a simple, effective way of promoting the key components of a successful medication reconciliation process.

Materials include a poster and brochure to introduce health professionals to the four steps of medication reconciliation. These resources are available in softcopy format on the Commission's website.

Slide 48

Acknowledgements - no notes

Slide 49

References - no notes

Thank You for your attention!