



MEDICATION SAFETY  
AND QUALITY

Continuity of medicines

Ensuring safe care



CLINICAL  
EXCELLENCE  
COMMISSION



# MEDICATION RECONCILIATION IMPLEMENTATION WORKBOOK

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# INTRODUCTION

Welcome to the Medication Reconciliation Implementation Workbook. This workbook is designed to assist program leads in the development of an action plan for improving medication reconciliation processes within their local health district (LHD).

The workbook provides:

- A framework to improve medication reconciliation processes
- Information on resources to support improvement activity
- An implementation action plan template

The workbook is divided into five sections, following the key steps of Clinical Practice Improvement methodology. This provides a framework for incorporating medication reconciliation processes into everyday practice. The five sections include:

1. Establishing Governance
2. Improving Practice
3. Education
4. Monitoring Practice
5. Sustaining and Spreading

There are a number of underpinning factors which also need to be considered as part of implementation, these include project management, change management and communication. These factors will provide a platform to sustain change.

All the resources referred to during the workshop session are available on the Continuity of Medication Management (CMM) program page of the Clinical Excellence Commission (CEC) website.

# CONTINUITY OF MEDICATION MANAGEMENT PROGRAM

The CMM program is an initiative of the Medication Safety and Quality unit at the CEC.

The program was developed in 2012 in response to the identification of a clear gap between best practice recommendations for continuity of medication management and existing processes in the NSW health services. The current focus of the program is medication reconciliation.

Medication reconciliation is an international evidence-based strategy to reduce medication errors at transfers of care. The goal is to prevent patient harm through improved communication of medicines information.

The Australian Commission on Safety and Quality in Health Care (ACSQHC) has recognised the patient safety benefits of medication reconciliation and included these processes in the National Safety and Quality Health Service (NSQHS) Standards.

The CMM program aims to:

- Raise greater awareness of medication reconciliation as a patient safety initiative with hospital staff and patients
- See standardised medication reconciliation processes implemented across all NSW health services
- Promote medication reconciliation as a multidisciplinary activity
- Actively support health services in their efforts to achieve these aims.

# IMPLEMENTATION FRAMEWORK

## 1. Establishing Governance

The success and long-term sustainability of standardised medication reconciliation processes is dependent on appropriate governance structures and processes at all levels of the health service.

Establishing a compelling case for change will help convince both management and clinicians that it is necessary to change current practice. Local data showing how medicines information is currently communicated across the continuum of care is a powerful tool to convince others why the change is necessary. Any improvement initiative should be linked with the local quality and safety plan and relevant national accreditation standards.

The following roles should be identified at both LHD and facility levels:

- Executive sponsor and / or committee
- Program lead
- Program team to oversee the improvement process

The program team will need a mix of senior managers and clinicians to provide organisational and department leadership. There will need to be agreement on communication and reporting channels between the program team, program leads and the executive sponsor and / or committee.

An initial task for the program team is to develop an overall implementation plan for the LHD or facility. This plan will guide the team and ensure relevant activities are managed from the outset including readiness assessment, team member roles and communication and evaluation strategies.

### **HELPFUL RESOURCES**

ACSQHC Literature review: medication safety in Australia 2013

Committee brief template

Guide to engaging a multidisciplinary quality improvement project team

Readiness assessment

Implementation flowchart

## Establishing Governance - Implementation Action Plan

Area	Action	Owner	Due	Status / Progress
<p>1. Prepare a compelling case for change</p> <ul style="list-style-type: none"> <li>• Have you got evidence of a problem? e.g. local incident reports or audit results showing contribution to patient harm</li> <li>• Are there linkages with national accreditation standards?</li> </ul>				
<p>2. Establish executive support</p> <ul style="list-style-type: none"> <li>• What are your governance structures?</li> <li>• Who would be a suitable executive sponsor? How will they be involved?</li> <li>• What are the service's current priorities?</li> </ul>				
<p>3. Identify &amp; form a team</p> <ul style="list-style-type: none"> <li>• Who are the relevant stakeholders? Individuals &amp; groups at LHD &amp; hospital levels</li> <li>• How will you engage with them?</li> <li>• How will the team work together?</li> <li>• Is there a suitable existing multidisciplinary quality improvement team/committee?</li> </ul>				
<p>4. Develop a communication &amp; reporting channel</p> <ul style="list-style-type: none"> <li>• Which communication strategies will be most useful to meet the needs of various stakeholders at different levels of the service?</li> <li>• How will patients be informed?</li> </ul>				
<p>5. Develop an implementation plan</p> <ul style="list-style-type: none"> <li>• Consider including scope, readiness / risk assessment, communication plan, team member roles &amp; evaluation strategies</li> <li>• What is the endorsement process?</li> </ul>				
<p>6.</p>				





## 2. Improving Practice

Prior to improving practice, it is essential that the desired medication reconciliation process is clearly defined. Review of best practice recommendations for continuity of medication management such as the National Safety and Quality Health Service Standard 4: Medication Safety and APAC Guiding Principles to Achieve Continuity of Medication Management may assist with this step. The CEC has developed a Framework for Medication Reconciliation (see Appendix) to guide health services in defining best practice, including how this will benefit patients and what action is required to achieve these benefits.

A review or map of the current medication reconciliation process should be undertaken. This will enable the program team to identify what the service is doing well and recognise areas for improvement in the process. If resources are available, it is useful to undertake a retrospective audit to provide further insights into current practice. Presentation of this data is also a powerful tool to convince clinicians why change is necessary.

A range of quality improvement tools can be used by the program team to assist with the identification and prioritisation of issues. These tools will aid in selecting specific improvement strategies to address prioritised issues.

Improvement efforts can be made more manageable by targeting specific clinical areas such as the emergency department, pre-admission clinic or medical assessment unit before spreading the improvement to the next area.

Improvement strategies should focus on standardisation of the process, examples of such strategies include:

- Determine the roles and responsibilities of each member of the health care team
- Determine documentation requirements for each step of the process
- Develop a local operating procedure or similar

Any improvement strategies undertaken on a large scale should be adapted to the workflow of the particular health service or clinical unit.

## **HELPFUL RESOURCES**

Best practice recommendations

- NSQHS Standard 4 Medication Safety 2012
- APAC Guiding principles to achieve continuity of medication management 2005

Guide to mapping your current medication reconciliation process

Gap analysis

Guide for determining roles, responsibilities and documentation requirements

Local operating procedure example

Frequently Asked Questions

Medication management plan example

Patient medication list example

## Improving Practice - Implementation Action Plan

Area	Action	Owner	Due	Status / Progress
<p>1. Define the desired medication reconciliation process</p> <ul style="list-style-type: none"> <li>• <i>What is best practice for medication reconciliation?</i></li> <li>• <i>How will patients benefit?</i></li> </ul>				
<p>2. Define the current medication reconciliation process</p> <ul style="list-style-type: none"> <li>• <i>Has any review or mapping of current processes been done?</i></li> <li>• <i>Processes may vary depending on the facility and / or department e.g. preadmissions vs emergency department</i></li> </ul>				
<p>3. Undertake a baseline audit</p> <ul style="list-style-type: none"> <li>• <i>Are there any audit tools already available?</i></li> <li>• <i>What are the gaps between best &amp; current practice?</i></li> </ul>				
<p>4. Identify &amp; prioritise issues</p> <ul style="list-style-type: none"> <li>• <i>What are the barriers to changing practice?</i></li> <li>• <i>What tools or methods can the team use to facilitate identification &amp; prioritisation of issues? e.g. staff surveys, cause &amp; effect diagrams, multi-voting, weighted voting, Pareto chart</i></li> </ul>				
<p>5. Select an improvement strategy or strategies to implement</p> <ul style="list-style-type: none"> <li>• <i>Who will be responsible for what actions? When will they occur? Resources required?</i></li> </ul>				
<p>6. Select a particular clinical area to target</p> <ul style="list-style-type: none"> <li>• <i>Develop a plan for roll out across the service</i></li> </ul>				
<p>7.</p>				



### 3. Education

Education and training is important to initiate a clinical practice change and is also vital to help sustain and spread the change over time.

An initial step is to identify who requires education and document a plan to provide tailored education for specific clinician groups. Education for all groups should aim to ensure a common understanding of medication reconciliation, the terminology used and its goals.

The education strategy will vary in each facility however it may be helpful to consider how education has been rolled out for previously successful programs. At a minimum, there will need to be awareness training for all managerial and clinical staff. More detailed training should be provided for medical, nursing and pharmacy staff who will be undertaking the medication reconciliation process. This detailed training may be broken down into separate sessions to address each step of medication reconciliation e.g. how to take a Best Possible Medication History.

The mode of education will need to be determined. Consider the following modes:

- Face to face awareness training
- Online learning
- Interactive workshops
- Practice-based activities

Education can be incorporated into the staff orientation programs for junior medical officers, new graduate nurses and intern pharmacists as well as new staff starting at the hospital.

Evaluation of the education strategy should be undertaken, ideally using a pre and post education survey.

#### **HELPFUL RESOURCES**

Obtaining a BPMH presentation

BPMH interview Guide

General medication reconciliation presentation

Medication reconciliation: beyond admission presentation

HETI online continuity of medication management modules

ACSQHC Get it Right! Taking a best possible medication history video and online module

NPS MedicineWise online learning modules



## Education - Implementation Action Plan

Area	Action	Owner	Due	Status / Progress
<p>1. Document a medication reconciliation education plan</p> <ul style="list-style-type: none"> <li>• <i>Who requires education? What has worked before?</i></li> <li>• <i>How will education vary for specific clinician groups?</i></li> </ul>				
<p>2. Investigate available educational materials</p> <ul style="list-style-type: none"> <li>• <i>What is available locally, state-wide, nationally?</i></li> <li>• <i>Consider different modes of education e.g. face to face, online</i></li> </ul>				
<p>3. Organise awareness training for all managerial &amp; clinical staff</p> <ul style="list-style-type: none"> <li>• <i>How, when &amp; where should this be done?</i></li> </ul>				
<p>4. Organise detailed training for specific clinician groups</p> <ul style="list-style-type: none"> <li>• <i>Can training be incorporated into existing education programs e.g. weekly JMO education, ward in-services</i></li> </ul>				
<p>5. Organise training for all new staff</p> <ul style="list-style-type: none"> <li>• <i>Can training be incorporated into staff orientation?</i></li> </ul>				
<p>6. Document an education evaluation plan</p> <ul style="list-style-type: none"> <li>• <i>Consider pre &amp; post evaluation</i></li> </ul>				
<p>7.</p>				





## 4. Monitoring Practice

Prior to implementing the selected improvement strategy, the program team should consider how they will measure its effect. As the overall aim of medication reconciliation is to ensure patients receive all intended medicines during their care, and that accurate and current medicines information follows them on transfer and discharge, the measures should demonstrate the achievement of this aim. These measures should be incorporated into a program evaluation plan.

If baseline data has not already been collected then this should be done as early as possible. This will provide a standard for data comparison and assist with identifying areas that may require focussed attention.

The CEC has developed a comprehensive audit tool for the purpose of collecting and analysing detailed data. This tool is recommended for the collection of baseline data and provides an indication of the quality of medicines information in the patient record.

An observational 'snapshot' audit tool has also been developed and collects information of whether components of medication reconciliation are evident for each patient. It provides a quick overview of the processes that are occurring and those which are not. It does not provide detail regarding the quality of the information in the patient record.

The principles of these audits are equally applicable to health services that have paper based or electronic systems.

Evaluation activities should include analyse and comparison of baseline and post implementation data. Results of these activities can be used for the purposes of ongoing improvement and should be shared to help drive improvement. Each facility and LHD should establish processes for reporting results to staff and any relevant committees.

Collecting feedback from staff is important. Qualitative methods such as staff surveys and focus groups may provide useful feedback to assist with refining the improvement strategy.

## **HELPFUL RESOURCES**

Medication reconciliation – Comprehensive audit tool

Medication reconciliation – Comprehensive audit tool user guide

Medication reconciliation – Audit tool data spread sheet

Baseline audit summary template

Medication reconciliation – Snapshot audit tool

Medication reconciliation – Snapshot audit tool user guide

Medication Management Plan user evaluation

National Quality Use of Medicines Indicators for Australian Hospitals

## Monitoring Practice - Implementation Action Plan

Area	Action	Owner	Due	Status / Progress
1. Develop an evaluation plan <ul style="list-style-type: none"> <li>Consider the measures you will use e.g. process vs outcome measures, developing new or using existing audit tools, how results will be communicated</li> </ul>				
2. Undertake a baseline audit (if not already done)				
3. Establish a process for ongoing post-implementation data collection <ul style="list-style-type: none"> <li>How, when, where will data be collected?</li> <li>What resources are needed?</li> </ul>				
4. Establish a process for data analysis & comparison <ul style="list-style-type: none"> <li>How, when, where will data be analysed?</li> </ul>				
5. Share / report results with staff & relevant committees <ul style="list-style-type: none"> <li>How can the results be communicated to drive improvement?</li> <li>What is the process for reporting to relevant committees?</li> </ul>				
6. Gain feedback from staff & patients <ul style="list-style-type: none"> <li>Consider surveys, focus groups or other qualitative methods</li> </ul>				
7.				



## 5. Sustaining and Spreading

Sustaining and spreading improvements requires an investment in time, resources and commitment at all levels of the health service.

Elements of the implementation process that have been shown to contribute to sustainability include:

- Standardisation in process
- Integration into everyday practice
- Incorporating education into existing training programs
- Measurement and feedback
- Encouraging staff and patient feedback
- Highlighting the benefits gained and lessons learnt
- Linking improvements with other safety initiatives e.g. clinical handover
- Documentation of the improvement process

Ensuring that each of these elements is included and done well during implementation will increase the likelihood of the change being sustained over time.

Once the improvement strategy has been refined in one clinical area, the process can be spread to other areas using a similar methodology.

Providing frequent updates on the progress of improvement strategies will assist in promoting the value of medication reconciliation and support its spread to other areas. Communication should address executive, manager, ward, staff and patient levels.

A variety of formal and informal channels can be used to communicate progress. Consider the following:

- Standing item on LHD, facility and ward meeting agendas
- Presentations
- Visual aids e.g. Run charts, dashboards
- Email, intranet posts or newsletters
- Awards

Other strategies that support the spread of improvements include:

- Development of organisational policy or procedure around medication reconciliation processes
- Building a related competency into staff job descriptions and appraisals
- Demonstrating adaptability of the approach to different areas
- Marketing good news stories on the benefits to patients and staff
- Tap into organisational networks and links

## **HELPFUL RESOURCES**

Poster – Four easy steps of medication reconciliation

Poster – Getting a BPMH

Poster – Compare medication lists at every transfer of care

Poster – Supply accurate medicine information

Patient poster – Your medication list is important to your care

Spreading medication reconciliation improvements presentation

Medication reconciliation run chart

## Sustaining and Spreading - Implementation Action Plan






Area	Action	Owner	Due	Status / Progress
1. Consider strategies that will promote sustainability <ul style="list-style-type: none"> <li>• <i>What ongoing resources are required to sustain improvements?</i></li> </ul>				
2. Decide when & where to spread the improvement <ul style="list-style-type: none"> <li>• <i>Refer back to your plan for roll out.</i></li> <li>• <i>What are the timeframes for spreading to other areas?</i></li> </ul>				
3. Develop a communication plan that will support spread <ul style="list-style-type: none"> <li>• <i>What communication channels are available or have worked with other successful projects?</i></li> </ul>				
4. Consider strategies that will promote spread <ul style="list-style-type: none"> <li>• <i>How can learnings be shared between clinical areas?</i></li> </ul>				
5.				
6.				





# APPENDIX

## A Framework for Medication Reconciliation

FRAMEWORK FOR MEDICATION RECONCILIATION		
This Framework has been developed to guide NSW Health Services in formalising medication reconciliation processes		
Ensuring Continuity of Medication Management	What this Means for Patients	Actions Required by NSW Health Services
<p><b>Collect</b> Information to Compile a Medication History</p> 	<p>Enables patients to communicate how they actually use their medications</p>	<ol style="list-style-type: none"> <li>1.1 A system is in place which ensures all patients admitted to hospital have a medication history interview conducted by the end of the next calendar day</li> <li>1.2 A standardised form for documenting the information obtained from the interview should be made available to clinicians</li> <li>1.3 Clinicians are trained in how to compile a Best Possible Medication History (BPMH)</li> <li>1.4 The information documented is made available at the point of care</li> </ol>
<p><b>Confirm</b> Accuracy of the History</p> 	<p>Medication treatment decisions are made in reference to accurate, current and comprehensive medicines information</p>	<ol style="list-style-type: none"> <li>2.1 A system is in place which ensures a medication history is confirmed with at least one additional source of medicines information</li> <li>2.2 There is a procedure for documenting the source/s and date of the medication history confirmation</li> </ol>
<p><b>Compare</b> Medication history with prescribed medicines and identify and rectify any discrepancies</p> 	<p>Patients receive all medications intended to continue while in hospital</p>	<ol style="list-style-type: none"> <li>3.1 A system is in place for documenting and reconciling current medicines at all transfers of care, including:               <ul style="list-style-type: none"> <li>- Admission</li> <li>- Transfer</li> <li>- Discharge</li> </ul> </li> <li>3.2 There is a procedure for documenting and communicating any discrepancies which have been identified or rectified</li> <li>3.3 Roles and responsibilities for each health care team member are assigned</li> </ol>
<p><b>Supply</b> Accurate medicines information to the patient and next care provider</p> 	<p>Patients and their next care provider receive accurate medicines information when concluding an episode of care</p>	<ol style="list-style-type: none"> <li>4.1 A system is in place that generates and distributes a current and comprehensive medication list, including any explanation of changes and any ongoing medication management requirements</li> <li>4.2 A current and comprehensive medicines list is provided to the patient and/or carer in a patient friendly format</li> <li>4.3 A current and comprehensive medicines list is provided in the discharge summary for the next care provider</li> </ol>
<p><b>Monitor Practice</b></p> 	<p>Health services monitor performance and strive to improve processes</p>	<ol style="list-style-type: none"> <li>5.1 Annual audit to determine compliance with obtaining patients' BPMH</li> <li>5.2 Annual audit to determine compliance with providing medication lists to patients</li> <li>5.3 Annual audit to determine quality of medication information provided to patients and community health care providers</li> <li>5.4 Results of audit and review are reported back to clinicians to drive change</li> <li>5.5 Clinicians are educated on the need for a formal medication reconciliation process</li> </ol>



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