

# MEDICATION SAFETY

The Australian Commission on Safety and Quality in Health Care

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## World Health Organization's High 5s Medication Reconciliation Program

Nineteen Australian hospitals will participate in the World Health Organization's High 5s Medication Reconciliation Project. Participating hospitals will test a standard operating protocol designed to assure medication accuracy at transitions of care. It is an opportunity for participating hospitals to focus on medication reconciliation in high risk areas. They will have high visibility and recognition from implementing and evaluating the standard operating protocol, and for their leadership in standardising patient care processes.

This is a five year project. The first phase of the project is the introduction of medication reconciliation for patients 65 years of age and older who are admitted to a medical ward from the emergency department. In subsequent phases, the scope will be expanded to include all patients from all entry points to inpatient and outpatient settings.

The Commission is the lead technical agency for Australia's involvement in the World Health Organization program. Further information on the project is available on the Commission's web site at:

[http://www.safetyandquality.gov.au/internet/safety/publishing.nsf/Content/PriorityProgram-06\\_MedRecon](http://www.safetyandquality.gov.au/internet/safety/publishing.nsf/Content/PriorityProgram-06_MedRecon)

Assuring medication accuracy at transitions of care, through medication reconciliation, is one of the evidence based solutions for common patient safety risks which form the World Health Organization's High 5s project.

The High 5s standard operating protocol for assuring medication accuracy at transitions of care is consistent with Australian practice and aligns with the former Australian Pharmaceutical Advisory Council's *Guiding principles to achieve continuity in medication management*.

## Medication safety literature reviews

A review of medication safety in Australian hospitals has been published in the online journal *Australia New Zealand Health Policy*.

The review (by Dr Susan Semple and Assoc Prof Libby Roughead) was undertaken as part of the Commission's National Medication Safety and Quality Scoping Study in 2009, and is available in two parts: *Medication safety in acute care in Australia: where are we now? Part 1: a review of the extent and causes of medication problems 2002-2008* and *Medication safety in acute care in Australia: where are we now? Part 2: a review of strategies and activities for improving medication safety 2002-2008*. Both parts of the review are available at: <http://www.anzhealthpolicy.com/>

The review concludes that medication-related hospital admissions remain a significant problem in the Australian healthcare system. It can be estimated that 190,000 medication-related hospital admissions occur per year in Australia, with estimated costs of \$660 million.

Medication incidents remain the second most common type of incident reported in Australian hospitals.

The National Prescribing Service (NPS) has also released a literature review focusing on medication safety in the community. It is available on the NPS web site at:

[http://www.nps.org.au/research\\_and\\_evaluation/research/current\\_research/medication\\_safety\\_community](http://www.nps.org.au/research_and_evaluation/research/current_research/medication_safety_community)

Both reviews collate significant new evidence on medication safety in the two care settings, hospitals and community.

The Commission will develop an agenda for further research work in 2010 to enhance the medication safety and quality evidence base and to direct its own work in medication safety and quality.

## Electronic Medication Management Systems Guidelines for Hospitals

The Commission and the National E-Health Transition Authority (NEHTA) are working together to reduce medication errors in hospitals through safer electronic medication management systems. The term Electronic Medication Management (EMM) refers to the electronic systems used to manage the phases of the hospital medication management process including: clinical decision support, order entry (e-prescribing), medication review, dispensing, and recording administration of medicines.

The Commission and NEHTA are developing three guidelines to assist hospitals safely specify and implement EMM systems. They will consist of:

- User requirements and product selection guide for hospital EMM systems;
- An implementation toolkit for hospitals;
- An optimal look-and-feel user interface, building on the National Inpatient Medication Chart (NIMC).

The aims of the project are to:

- Reduce expensive and inefficient duplication by hospitals undertaking EMM systems specification and implementation;
- Optimise the safety and effectiveness of EMM systems implementation in hospitals;
- Minimise the danger of poorly designed or resourced implementations; and
- Reduce error risk from health professionals interacting with unfamiliar user interfaces.

The Commission is being advised on the project by a group of clinical and implementation experts including representatives from:

- Hospitals that have implemented electronic medication management systems;
- National Prescribing Service Ltd;
- National E-Health Transition Authority;
- State and Territory health departments.

The guidelines will be provided to the Commission and NEHTA for review in February 2010. Information on the project is available on the Commission web site at:

[http://www.safetyandquality.gov.au/internet/safety/publishing.nsf/Content/PriorityProgram-08\\_ePrescribing](http://www.safetyandquality.gov.au/internet/safety/publishing.nsf/Content/PriorityProgram-08_ePrescribing)

## Medication Safety Seminar

The Commission, in conjunction with Queensland Health and the Centre for Research Excellence in Patient Safety (CREPS), held a medication safety seminar at the Royal Brisbane and Women's Hospital on 30 October 2009. Titled *Strategies for improving medication safety in hospitals: the way forward*, the seminar brought together academic researchers, clinicians and other practitioners for a day long program. The seminar agenda focused on medication safety and electronic information, high risk medication and moving research into practice.

Seminar presentations are available on the CREPS web site at:

<http://www.crepatientsafety.org.au/seminars/>

## Medication safety self assessment

The Commission recommends Medication Safety Self Assessment for Australian Hospitals (MSSA) to assist hospitals develop safer systems for managing medicines. The Commission's National Medication Safety and Quality Scoping Study 2009 recommended national adoption of MSSA to identify risks in acute care medication management systems and to drive improvement.

The MSSA was developed by the NSW Clinical Excellence Commission in conjunction with NSW Therapeutic Advisory Group, and is based on nearly thirty years of work and research by the Institute of Safe Medication Practice in the United States. It was field tested in NSW, Queensland, Tasmanian, Victorian and South Australian hospitals.

MSSA provides a consistent basis for hospitals to assess the safety of medication practices, identify opportunities for improvement and compare outcomes with an aggregate of demographically similar Australian hospitals.

In addition, there is a specialised MSSA available which focuses on antithrombotic therapy.

Both MSSA tools are available from the Commission web site at:

[http://www.safetyandquality.gov.au/internet/safety/publishing.nsf/Content/NIMC\\_008\\_Tools](http://www.safetyandquality.gov.au/internet/safety/publishing.nsf/Content/NIMC_008_Tools)

The Commission is assessing development of additional MSSA for other high risk areas such as operating theatres, and for other settings such as residential aged care facilities.

## National Terminology, Abbreviations and Symbols

A new edition of the national *Recommendations for Terminology, Abbreviations and Symbols used in the Prescribing and Administering of Medicines* is now available on the Commission web site at: [http://www.safetyandquality.gov.au/internet/safety/publishing.nsf/Content/NIMC\\_001\\_NTAS](http://www.safetyandquality.gov.au/internet/safety/publishing.nsf/Content/NIMC_001_NTAS)

The main changes to the document incorporate acceptable abbreviations (such as microg for microgram and inj for injection).

In December 2008 Health Ministers endorsed use of the terminology document in all Australian hospitals. Currently States, Territories and hospitals are implementing the terminology document. The Commission web site includes examples of policies, directives and support materials used to implement the terminology document.

The Commission is responsible for maintaining the terminology document. Suggestions for changes to it should be sent to local NIMC Oversight Committee contacts:

[http://www.safetyandquality.gov.au/internet/safety/publishing.nsf/Content/com-pubs\\_MedSafety-MSA-con/\\$File/23770-MS-Update-July2009.pdf](http://www.safetyandquality.gov.au/internet/safety/publishing.nsf/Content/com-pubs_MedSafety-MSA-con/$File/23770-MS-Update-July2009.pdf)

Requests for changes to the terminology document, and decisions, are detailed in the change register which is also available on the Commission web site.

## Medication Action Plan

The Commission is investigating a standardised national medication action plan or MAP. The 2008 NIMC quality improvement project recommended development of a standard national form for recording the medication history on admission, and to replace the current front section on the NIMC.

A national Medication Action Plan Reference Group, with public and private hospital representatives and content experts, met in September 2009. The group recommended that

the Commission develop a national medication action plan comprising:

- the medication history on admission;
- the reconciliation process; and
- medication issues.

Further, the group resolved that the medication action plan, along with the National Inpatient Medication Chart and related charts, should form the medication record for admitted patients.

As a first step, the group agreed a list of essential data elements required to record a best possible medication history on admission and to reconcile medicines at points of transfer of care. The list is derived from the APAC *Guiding principles for continuity of medicines management* and the SHPA *Standard of practice for the provision of medication reconciliation*.

The agreed list of data elements will also be recommended as the basis for electronic systems used to record medication histories and reconcile medicines on admission, transfer and discharge, and to document medication issues identified and actions taken.

The MAP Reference Group will meet again in February 2010 after which its recommendations will be consulted more widely. Outcomes from the MAP Reference Group meeting will be made available on the Commission web site.

## Parenteral Medicines Labelling Project

In February 2010 the Commission's Parenteral Medicines Labelling Project will begin piloting its draft recommendations in 11 hospitals.

The labelling of injectable medicines and fluids during their preparation and administration, and the labelling of devices used to deliver these, is a major patient safety issue. The recommendations project aims to standardise Australian practice and reduce the risk of harm.

The project is expected to conclude in May 2010. Further details are available on our web site at:

[http://www.safetyandquality.gov.au/internet/safety/publishing.nsf/Content/NIMC\\_006\\_Initiatives&Events#nplr](http://www.safetyandquality.gov.au/internet/safety/publishing.nsf/Content/NIMC_006_Initiatives&Events#nplr)

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