Roll out of electronic medicine reconciliation and electronic prescribing and administration

The roll out of eMR and ePA in public hospitals is taking place in four phases.

Phase one, in which eMM was piloted in the hospitals of four District Health Boards (DHBs) – Waitemata, Counties Manukau, Taranaki and Southern – has been completed.

Phase two has now begun, and sees:

- ePA in a further seven wards at Southern DHB, taking the total to nine wards and covering 118 beds
- ePA to go live in Taranaki DHB (three wards, 120 beds) and Waitemata DHB (two wards, 68 beds) later this year
- eMR expanded at Counties Manukau, Waitemata and Taranaki DHBs. It is expected to go live in Auckland DHB and one other DHB later this year.

Phase three begins in 2013 and will focus on the implementation of eMR and ePA in all DHBs by the end of 2014. Phase four, to take place in 2015, will focus on evaluation and maintaining momentum.

Regional governance groups for eMM have been established by the Midland and Northern region DHBs. Southern region is currently establishing the Southern Alliance Network, which is expected to manage regional governance for eMM. The Central region is currently establishing regional governance for the Central Region Information Systems Plan (CRISP), which includes eMM.
Electronic medicines management readiness assessment

In December 2011, the Chairs of the Commission, NHB and NHITB introduced the Go for Gold campaign. Go for Gold encourages DHBs to have achieved ‘gold’ level medication management by the end of 2014, with the aim of having 100 percent of public hospitals participating in the eMM programme from 2012.

There are bronze, silver and gold levels of medication management:
- **bronze**: paper-based national medication chart and paper-based medicine reconciliation process
- **silver**: transition to eMR and ePA
- **gold**: eMR and ePA throughout the hospital.

Experience locally and internationally indicates that implementation of eMR/ePA is as much about facilitating and supporting staff change as about the implementation of a computer system.

To support change at DHB hospitals, the eMedicines Programme is undertaking a ‘readiness assessment’ to understand where each DHB is now and where they will need to be in order to implement eMR and ePA.

The assessment focuses on identifying the key organisational structures and practices, and technology foundations DHBs need to have in place before beginning to implement the eMM modules.

The assessment findings will be used to help DHBs with their planning for implementing eMR and ePA as well as enabling discussions about capacity, availability, and scheduling with software vendors and the eMedicines Programme team, and to develop a nationally coordinated programme to meet the Go for Gold objectives.

DHBs will shortly receive a package of information about the Go for Gold campaign, and a representative from the eMM Programme will follow up to schedule a visit.

National medication chart for aged care sector being developed

The Commission is working on the introduction of a national medication chart for the aged care sector.

Senior Portfolio Manager for Medication Safety, Carmela Petagna, says the introduction of the chart is an important step towards achieving national consistency and reducing medication error and its corresponding harm to residents.

“The benefits of having a standard national chart include the opportunity to incorporate best practice design for the improved safety of residents and having a consistent format for medicine information for everyone who may be involved in medication management, such as doctors, pharmacists, administrators and caregivers.”

She says transition points of care such as between an aged care facility and hospital, or where medicine information is exchanged across the GP, pharmacy and the aged care facility, are when medication errors are most like to occur.

“A standard format for sharing medicine information will help reduce this risk.”

The aged residential care sector in New Zealand is complex, with about 700 aged care residences. Aged residential care services include rest home care, hospital care, dementia care and psycho-geriatric care.

Currently, a range of medication chart designs are used

---

**National medication chart for aged care sector being developed**

The Commission is working on the introduction of a national medication chart for the aged care sector.

Senior Portfolio Manager for Medication Safety, Carmela Petagna, says the introduction of the chart is an important step towards achieving national consistency and reducing medication error and its corresponding harm to residents.

“The benefits of having a standard national chart include the opportunity to incorporate best practice design for the improved safety of residents and having a consistent format for medicine information for everyone who may be involved in medication management, such as doctors, pharmacists, administrators and caregivers.”

She says transition points of care such as between an aged care facility and hospital, or where medicine information is exchanged across the GP, pharmacy and the aged care facility, are when medication errors are most like to occur.

“A standard format for sharing medicine information will help reduce this risk.”

The aged residential care sector in New Zealand is complex, with about 700 aged care residences. Aged residential care services include rest home care, hospital care, dementia care and psycho-geriatric care.

Currently, a range of medication chart designs are used...
in aged residential care facilities across the country for the prescribing and administration of medication for residents, many developed in-house by aged care providers.

Carmela Petagna says the requirements for a medication chart for aged residential care will differ from those of a hospital-focused chart. “While the design should align with the national medication chart in use in DHB hospitals it should also draw from best-practice design features of charts currently used in aged residential care facilities in New Zealand. “

“As well, the national medication charting standards are currently being reviewed, and the aged care sector chart design will need to align with these standards, and be mindful of compliance requirements of aged care facilities.”

She says there will be consultation with the sector during the development of the chart, including with general practitioners and community pharmacists.

Pharmacy Partners, a consultancy that specialises in medicines management issues, has been appointed to lead the project. Its principals, David Mitchell and Christine Mandeno, are both practising pharmacists.

The consultation and design phase of the project is expected to be complete by the end of June. This will be followed with the piloting of the chart in a group of aged care facilities representative of the sector. Evaluation will also be a crucial part of the process with the learnings informing the final chart design. It is expected that a new national chart will be implemented no later than 1 July 2013.

**National medication chart review**

The national medication chart has been in use for a year and during this time clinicians identifying any issues with the design have been encouraged to submit change requests. The change requests entered onto the electronic change register up to and including 5 March will be considered in the chart review – thanks to those DHBs who have submitted requests.

Following the review, a second iteration of the national medication chart will be made available. The chart will balance the needs of multiple clinical areas and patients.

In the future, a biannual review is planned because the design of the chart will need to respond to changes in clinical practice on an ongoing basis.

**Paediatric consultation**

In February, there was consultation on whether it would be best to develop a paediatric-specific chart or whether a better approach would be to make the current adult national medication chart paediatric-friendly. The consultation included what paediatric-specific features are required on a chart, and the best position for them, if included on the adult chart. The feedback is being reviewed by the national medication chart design subcommittee.

**Long stay chart pilot**

The pilot of the long stay national medication chart on 12 wards across four DHBs has finished. Feedback from the focus groups has been circulated to the project leads at each DHB for comment by attendees. Pre- and post-pilot audits will identify any issues with the design of the long stay chart. Of particular interest is whether the flaps used to extend the chart from 7 days to 16 days have led to errors in administration.

The information gathered from the long stay pilots is included in the national medication chart review process.

**Health information solutions and standards**

The Commission’s medication safety specialists and the Health Information Standards Organisation (HISO) team are working together to review and update the current medicine reconciliation and medicine charting standards. The outcome will be endorsed HISO standards for medicine reconciliation and medicine charting to support the Medication Safety Programme.
The first stage, to be completed from April to June 2012, will focus on developing and agreeing a set of indicators and measures. These will then be tested with the DHBs taking part in the eMM programme, through site visits and data collection. After an agreed ‘settling in’ period, an evaluation of phase two of eMM will be undertaken.

Sapere Research has been appointed to lead and coordinate the first phase of this project, with the National Institute for Health Innovation (NIHI) and the Centre for Health Systems (Otago University) as other contributors. They will work closely with the Commission and stakeholders. We will keep you up to date with developments in this area.

**New Medication Safety Watch**

The Commission will circulate a regular Medication Safety Watch – a bulletin for all health professionals and health care managers working with medicines or patient safety. You can find the first issue here. Email us to add your name to the distribution list or register through our website.
Medication Safety Watch provides timely information about medicine-related incidents, errors and adverse drug reactions and their implications, and offers recommendations on how to improve medication safety. It replaces the former DHB Safe and Quality Use of Medicines (SQM) group newsletter.

**New Zealand ePrescription Service**

The New Zealand Electronic Prescription Service (NZePS) allows GPs to send prescriptions to community pharmacies electronically. In future it will enable a prescription given to people discharged from hospital or who attended a hospital outpatient clinic to also be sent via the service.

The service is being trialled in the Auckland region and covers one GP vendor (MyPractice) and one pharmacy vendor (LOTS). The trial will be expanded to include all GP and pharmacy vendors and other regions prior to national roll out. The timing of this will be determined once the consultation period for the Pharmacy Services Agreement (PSA) closes and the transition plan for the PSA has been determined.

Work is underway with the NHITB, HISO, and the Commission to address the standardisation of prescribing solutions and the prescription information these produce.

**New Zealand Universal List of Medicines**

The New Zealand Universal List of Medicines (NZULM) is the master list of all medicines used in New Zealand. It brings together key information from Medsafe, PHARMAC and the Pharmacy Guild, combined with a common medicines terminology. It is continuously updated, accessible online and via portable devices, and will be fully integrated with the e-health environment, including prescribing and dispensing software and medicines information products.

The NZULM was released for general use in June 2011. A number of vendors have started to use the NZULM and a number are in the process of integrating it into their systems. It is undergoing ongoing enhancements.

See [www.nzulm.org.nz](http://www.nzulm.org.nz) for updates.

**Register for medication alerts**

To receive medication alerts, please email Medication Safety Specialist Beth Loe at beth.loe@hqsc.govt.nz

Click [here](http://www.nzulm.org.nz) to see current alerts and alerts under development.

**Medication reconciliation resources for consumers and health professionals**

Two medication reconciliation pamphlets are available for download from the Commission’s website:

- **Making sure you are taking the right medicines:** An important guide for people coming into hospital
- **Medicine Reconciliation: A guide for health professionals.**

A third pamphlet, for consumers in the community, is under development and expected to be available for download in June.
Coming Soon – The New Zealand Medicines Formulary

After being selected as the preferred supplier of the New Zealand Formulary (NZF) in September last year, the New Zealand Medicines Formulary Limited Partnership (NZMF LP) has made good progress and is on track to release the initial NZF in July this year.

The NZF is a resource for health care professionals prescribing, dispensing and administering medicines across primary and secondary care. It addresses their need for general purpose, point of care information about the use of medicines in New Zealand. It will aid in decision making and contribute to best practice in medicines through standardised and evidence-based information about medicines.

The Medication Safety Expert Advisory Group has written a medication safety section for the NZF covering principles of safe prescribing, dispensing and administration.

Governance

The New Zealand Formulary Advisory Board (NZFAB) and Editorial Advisory Board (EAB) were established last year and have been actively working in their respective roles.

The NZFAB is the representative body that governs the NZF service from a sector perspective. Each member of the NZFAB has a responsibility to liaise with their representatives to ensure a thorough understanding of their needs and use this knowledge to ensure the NZF meets and continues to meet the needs of the sector.

The EAB is responsible for final review of the editorial content in the NZF. Its responsibility is to ensure the service and content are safe, usable, of high standard and relevant to New Zealand practice. While it will receive advice and guidance on policy and scope of content, the EAB is independent of the NZFAB with respect to clinical editorial processes.

Information

The information content of the NZF is based on the British National Formulary (BNF) and the British National Formulary for Children (BNFc). It is adapted for the New Zealand context and covers medicines used in New Zealand, including Section 29 medicines where appropriate. The editorial process involves a comprehensive review and adaptation by a team of clinical pharmacists and clinical advisors. The final step is review and sign off by the EAB.

Initially, the NZF will cover information such as:

- medicine indications, cautions, contraindications, side effects, warnings, dosage, medicines use in pregnancy, breastfeeding, patient advice and cautionary and advisory labelling
- the use of medicines in cases of renal and hepatic impairment, pregnancy, lactation and sport
- drug interactions via Stockley’s interaction alerts
- concise disease management advice relating to pharmaceutical options
- adverse event reporting.

Further enhancements are planned over time, such as the development of the New Zealand Formulary for Children based on the BNFc, tools to allow integration of preferred medicines lists and local protocols in secondary care, and other extensions according to user feedback.

The NZF will be available in July 2012:

- in a format optimised for integration into clinical systems
- as an application for installation on individual computers
- as an eBook
- to third parties for the development of added value applications, eg, smart phones and tablet computers
- to everybody through the website www.nzformulary.org.nz.
Introducing The Medication Safety Expert Advisory Group

“The Medication Safety Expert Advisory Group is committed to producing a safer and more informed environment for the use of medicines in New Zealand. Our perspective ranges from national policies, best practice with medication usage and the relationships between each of the stakeholders, through to the very practical issues faced by consumers and those who prescribe, dispense and administer medications to them on a daily basis.”

Dwayne Crombie

The Medication Safety Expert Advisory Group (MSEAG) provides technical and clinical advice to the National Medication Safety Programme. The group has replaced the Safe and Quality Use of Medicines Group and aspects of the former Safe Medication Management Programme Steering Group. It is accountable to the Medication Safety Strategic Governance Group.

Group members are:

<table>
<thead>
<tr>
<th>Name</th>
<th>Role and Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dwayne Crombie (Chair)</td>
<td>Dwayne is CEO of Bupa Care Services. He has a background in medicine, public health and public health sector management.</td>
</tr>
<tr>
<td>Christina Cameron (Deputy Chair)</td>
<td>Chris is a practising clinical pharmacologist and general physician at Capital &amp; Coast DHB, where she is Chair of the Medicines Committee.</td>
</tr>
<tr>
<td>David Woods</td>
<td>David is a pharmaceutical consultant on pharmacy education, online learning, evidence-based medicine and rational drug use and has recently been appointed as managing editor for the New Zealand Medicines Formulary.</td>
</tr>
<tr>
<td>Sandra Fielding</td>
<td>Sandra is the nurse leader for medical services at Bay of Plenty DHB.</td>
</tr>
<tr>
<td>Rob Ticehurst</td>
<td>Rob is currently the principal pharmacist for medication safety at Auckland DHB.</td>
</tr>
<tr>
<td>Mary-Anne O’Rourke</td>
<td>Mary-Anne is a clinical pharmacist at Kowhai Health Trust, Hutt Valley.</td>
</tr>
<tr>
<td>Alan Davis</td>
<td>Alan is a physician based in Northland. He has headed the Northland DHB Drugs and Therapeutics Committee for the last eight years.</td>
</tr>
<tr>
<td>Beryl Wilkinson</td>
<td>Beryl is the group’s consumer representative, and has worked in health and nursing in the hospital and community environment. She has been the President/Executive Chairperson of Age Concern in Whangarei for over 20 years.</td>
</tr>
<tr>
<td>Avril Lee</td>
<td>Avril’s current role is quality improvement specialist pharmacist at Waitemata DHB, focussing on patient safety.</td>
</tr>
<tr>
<td>Janet Mackay</td>
<td>Janet works in the Access and Optimal Use team at PHARMAC.</td>
</tr>
<tr>
<td>Stacey Hurrell</td>
<td>Registered nurse Stacey is the quality assurance manager for Waitemata DHB and represents the National DHB Quality &amp; Risk Managers on the Medication Safety Expert Advisory Group.</td>
</tr>
<tr>
<td>Mary Seddon</td>
<td>Mary is clinical director of the Centre for Quality Improvement at Counties Manukau DHB.</td>
</tr>
<tr>
<td>Beth Loé and Nirasha Parsotam</td>
<td>Beth and Nirasha have backgrounds in pharmacy, and are medication safety specialists working in the Health Quality &amp; Safety Commission’s medication safety team.</td>
</tr>
<tr>
<td>Gillian Bohm</td>
<td>Gillian, principal advisor quality improvement for the Health Quality &amp; Safety Commission, has a clinical background and has extensive experience in the areas of clinical quality improvement, patient safety and innovation.</td>
</tr>
<tr>
<td>David (known as Bev) Niccolls</td>
<td>Bev combines practising as a GP in Stoke with a position as one of five executive clinical directors (community) in Nelson Marlborough DHB with responsibility for primary care development.</td>
</tr>
</tbody>
</table>

More information about MSEAG members can be found here.

Next Update

The next National Medication Safety Programme Update will be circulated in July 2012.

Contact

If you have any comments or queries related to the National Medication Safety Programme, please email info@hqsc.govt.nz