ISSUE 3 – APRIL 2011

Contact

NEWSLETTER FOR MEMBERS OF THE PHARMACY GUILD OF NEW ZEALAND

GUEST FEATURE

Patient safety key to health systems

Professor Alan Merry, Chair of the Health Quality & Safety Commission, writes how increasing the involvement of pharmacists in managing patients' medications is one of the most cost-effective ways to improve medication safety.

New Zealand has an excellent health system, with nearly a million people treated in our hospitals effectively and safely each year. But there is no room for complacency. The new Health Quality & Safety Commission aims to work with clinicians and health service providers to maintain the process of continuously improving the quality and safety of our health and disability systems.

Each year we report the serious and sentinel events that have occurred over the preceding 12 months. These reports show that a disturbing number of patients suffer preventable harmful events, and there are even more near misses. In last year's report of serious and sentinel

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events, 17 events were directly related to medication errors. For example, one patient was given too much insulin, causing her to have severely low blood sugar levels; another developed a slow heart rhythm and low blood pressure after a medication error. He suffered cardiac arrest, but responded to emergency treatment. Errors of this sort result in human suffering and financial cost to the sector. It is not surprising, therefore, that medication safety is a priority for the Commission.

Pharmacists are well recognised for the major role they play in reducing medication errors and preventing patient harm. This is core business for pharmacists and there is evidence that increasing the involvement of pharmacists in managing patients' medications is one of the most cost-effective ways to improve medication safety.

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The Commission is leading the safe medication management programme, in close collaboration with the National IT Board, the National Health Board and PHARMAC. In the long term, national in-hospital electronic-prescribing, point of care checking of medications with barcodes (or possibly other identification technologies), and unit dosing, are all planned. Important elements of the electronic infrastructure will include a standardised reliable patient record containing, among other things, a patient's medication history, accurate accounts of any allergies and an up-to-date list of conditions critically relevant to prescribing, such as asthma, renal failure and diabetes.

Computerisation on its own makes little difference – the point of computerisation is to make sound manual systems based on trained practitioners (notably pharmacists in this context) more efficient and effective, and, in some cases, possible at all.* The aim is improved patient safety, and the Commission has accelerated two paper-based building blocks as priorities in this ambitious overall project. These are the introduction of a standardised national medication chart to be used for all adult, medical and surgical inpatients, and a medicine reconciliation process to be used across all District Health Boards (DHBs).

A great deal of design, consultation and piloting has gone into producing a national medication chart that will be a powerful tool for medication safety – simple to use and inexpensive, but effective in reducing medication errors.

It will enable:

- clear documentation of patients' adverse drug reactions and allergies
- the separation of regular and non-regular medicines
- easy identification of health care practitioners who use the document when querying prescribing, dispensing or administration
- facilitation of standard education and training for all health professionals using the chart
- consistency for mobile junior doctors and other staff within the country's public hospitals.

If all DHB hospitals adopt this chart, everyone who prescribes, dispenses, administers and reviews medicines for adult inpatients will be using the same chart across the country. This is a huge step forward in standardising medicine-related practice. We will soon follow this initiative with a chart for paediatric patients and then turn our attention to primary care, with a focus on aged care.

Medicine reconciliation is an evidence-based process involving three core steps:

1. Collecting the most accurate medicines list using at least two different information sources, the primary source being patients themselves.
2. Comparing the most accurate medicines list against the current medication chart and clinical notes for any documented changes to medicines.
3. Communicating any discrepancies (ie undocumented changes, whether intended or not) to the prescriber and ensuring that these are reconciled and corrected.

Once again, it can be seen that safety will depend on people – and pharmacists are well trained to contribute in this area. It may well be possible to move quickly to electronic tools to facilitate and enhance the processes of reconciliation, but unless someone actually checks the lists and acts on the information, nothing worthwhile will have been achieved. The Commission will focus on practical outcomes, and maintain close oversight of all its projects, to ensure value for every dollar invested.

The pharmacy profession has an intrinsic interest and understanding of the fundamental tenets of medication safety, and I encourage you all to be active participants in medication safety to ensure safe, appropriate and cost-effective medicine use.

Professor Alan Merry chairs the Health Quality & Safety Commission. He is also the Head of Department for Anaesthesiology at the University of Auckland's School of Medicine. He is a practicing cardiac anaesthetist and chronic pain specialist, currently chairs the Quality and Safety Committee of the World Federation of Societies of Anaesthesiologists and has worked with the World Health Organisation as the anaesthesia lead of the Safe Surgery Saves Lives initiative. He co-authored the book *Safety and Ethics in Healthcare, A Guide to Getting it Right*.

* Poon EG, Keohane CA, Yoon CS, Ditmore M, Bane A, Levtzion-Korach O, et al. Effect of barcode technology on the safety of medication administration. New England Journal of Medicine 2010;362(18):1698-707