Time for action on medicine mistakes

Medication is the most common intervention in health care. Most New Zealanders who are prescribed, dispensed, and administered medication will receive safe and effective care. However, when medication errors do occur they have the potential to cause significant harm. It is therefore vital that the contributing factors are analysed, and that lessons are learned, preventative action taken, and systems strengthened to ensure that such errors do not occur again.

With this in mind, I have recently published a report detailing an analysis of complaints closed by HDC between 2009 and 2016 where a medication error was found to have occurred. The aim was to shed light on some possible patterns regarding contributing factors that lead to medication error. The report also collates the lessons from the findings and from the case examples detailed in the report, in order to assist providers and organisations to recognise and address factors that contribute to medication errors.

Medication error in primary care

On analysis of complaints data it was found that a quarter of the medication errors occurred in a primary care setting. The majority were prescribing errors (73%), with the most common types of prescribing errors being the prescribing of a contraindicated medication and the prescribing of the wrong dose of medication.

Common contributing factors to prescribing errors in primary care included:

- A failure to obtain the necessary information: This was often in relation to a provider not
 adequately eliciting or reviewing the patient's medication history, not reviewing best
 practice guidelines when prescribing a medication, or not reviewing the consumer at
 clinically appropriate intervals when providing repeat prescriptions.
- A failure to communicate effectively with the consumer: This represented a missed opportunity to provide consumers with the information they required to identify the medication error themselves.
- A failure to act on information: This often reflected situations where the provider had the necessary information to prescribe correctly (e.g., the consumer's relevant medication history and best practice guidelines) but did not synthesise this information adequately and apply it to the patient's individual risk factors.
- Inadequate/incorrect documentation: Documentation issues often related to relevant aspects of the patient's history not being documented adequately (e.g., the patient's weight, details of previous prescriptions, reasons for discontinuation of medications, contraindications, previous adverse drug reactions and allergies), or relevant documentation not being available at the point of care.
- Inadequate software system: Common issues around software systems included inadequate access to best practice prescribing guidelines; technological errors resulting in important prescribing alerts not appearing (e.g., no alert appearing on the system to warn a provider that a drug is contraindicated); the ease with which alerts could be ignored or overridden; and a lack of access to electronic patient notes.

Reducing prescribing errors

The trends and themes that emerge from this analysis suggest that additional focus could be given to the following:

Doing the basics well: Read the notes, ask the questions, talk to the patient. Often
prescribing errors are contributed to by a failure to gather the appropriate information or to
use that information effectively. It is incumbent on prescribers to think critically each time
they prescribe a medication — considering the drug, the patient, and the context in which

- the medication is being delivered to ensure that the medication is being delivered safely. Getting these basics right every time is vital to ensuring patient safety.
- Provision of medication information to consumers: The more information patients have about their medication, the better they are able to act as a defence against any medication errors. It is expected that prescribers will take the time to check the prescription with the patient, verbally check any allergies, and educate the patient about his or her medication regimen.
- **Documentation of prescribing decisions:** The quality of the information in the patient record has an influence on the safety and quality of subsequent prescribing decisions, and is vital to continuity of care. It is expected that individual prescribers keep a clear, accurate, and timely patient record.
- Repeat prescribing in primary care: It is important that general practices have robust policies and procedures regarding patients on repeat prescriptions being reviewed at clinically appropriate intervals, and that they have in place systems to ensure that these policies are adhered to by practice staff.
- Electronic medicine management: Electronic medicine management systems with clinical decision support tools that are fit for purpose would mitigate against a number of the contributing factors to errors seen in the report. In order to reduce error it is important that these systems are well planned, well designed, and subject to close scrutiny, and that providers are trained appropriately on the use of these tools to ensure that they make the best use of the safety features. Roll-out of electronic medicine management systems, such as electronic prescribing, across the health sector is incomplete. Lack of progress in this area is concerning, and it is recommended that this be prioritised.

This report is available on our website at www.hdc.org.nz. I encourage all providers, when reading the report, to consider, "Could this happen at my place?" and, if so, what changes could be made to prevent it.

Anthony Hill, **Health and Disability Commissioner**Natasha Davidson, **Senior Advisor - Research and Education** *NZ Doctor*, 13 February 2019