Comment on: “Quality of electronic records documenting adverse drug reactions...”

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Adverse drug reactions (ADRs) are an important contributor to mortality, morbidity and healthcare costs. A 1998 meta-analysis in the US concluded that ADRs were the fourth to sixth leading cause of death in hospitalised patients, with serious ADRs occurring in 6.7% of patients.¹ Since that report, ADR-related deaths in the US have increased from 0.08 to 0.12/100,000 population over the eight-year period 1999 to 2006, with death significantly more likely in those aged over 55 years and greatest in those aged 75 years or more.² Importantly it is recognised that significant numbers of ADRs are preventable—72% in one review of occurrence in developed nations.³ While definitive New Zealand research in this area is lacking we are not immune to this phenomenon, particularly given an ageing population.⁴

A primary step for recognising and therefore preventing ADRs is the collection of accurate and shareable data describing these events. However, the recent article by Braund et al has highlighted shortcomings in this area due to data inaccuracies, lack of precision and difficulties in accessing event information.⁵ The authors conclude that:

“...information transfer between electronic systems needs high-quality data to be entered at the time of a reaction initially being recorded to ensure there is appropriate robustness and maximal clinical utility of information through sharing of information”.

The necessity to collect robust and sharable ADR data has been recognised and a solution is being developed through the auspices of the Health Information Standards Organisation (HISO) with input from Medsafe and clinical experts. HISO, a committee supported by the Ministry of Health’s Data and Digital directorate, promotes the adoption of fit-for-purpose health information standards for the New Zealand health system. An Adverse Reaction Reporting Standard (ARRS) is currently under development for evaluation, and is expected to be released during 2019. This standard is based on the SNOMED CT terminology to support efficient entry, retrieval and reuse of clinical information. Once approved, ARRS can underpin a nationally integrated ADR reporting system to enable both individual patient alerting and national pharmacovigilance.

This will be an important step in improving patient safety and wellbeing. But for these benefits to be realised there must be uptake from vendors to incorporate this initiative into existing and future IT products, and the cooperation of clinicians to effectively utilise this solution.
Competing interests:
Nil.

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