

Letters to the Editor

Disjointed medication management systems in aged care

Aust Prescr 2017;40:125

<https://doi.org/10.18773/austprescr.2017.048>

In the February 2017 issue of *Australian Prescriber*, John Jackson and Elspeth Welsh discussed medication charts used in residential aged-care facilities. They highlighted the advantage of having prescribers, aged-care staff and pharmacists working from a single record of medication order information.¹ Their article focused primarily on problems with paper medication charts, and suggested that electronic charts may address the problems.

We wish to highlight issues with currently available electronic medication charts, also known as electronic medication administration records. Unfortunately, these are usually not integrated with GPs' clinical software. It is common practice for GPs to handwrite medication orders on paper charts which are copied and faxed or emailed to the residential aged-care facility's pharmacy. There the order is transcribed into an electronic system to populate the electronic medication administration record.²⁻⁴ When a dose is altered or a drug is stopped the same process has to occur to update the electronic medication administration record. GPs usually also prepare separate Pharmaceutical Benefits Scheme (PBS) prescriptions via their clinical software or by hand.

These processes lead to the following:²⁻⁴

- multiple, sometimes conflicting, medication records
- delays in medication administration (or cessation) for unwell patients
- medication errors
- major inefficiencies for GPs, aged-care staff and pharmacists.

What is needed are fully integrated electronic medication management systems, in which GPs (and other prescribers) can initiate, modify and cease medications electronically, with the order automatically transmitted to the electronic medication administration record and the pharmacy, while also fulfilling PBS prescription requirements and linking with GPs' clinical records. This would be more efficient and have safety benefits.^{5,6}

Rohan A Elliott
Senior pharmacist
Austin Health
Heidelberg, Vic.

Adjunct senior lecturer
Monash University
Parkville, Vic.

Jonathan Ramachenderan
General practitioner anaesthetist
Pioneer Health
Albany, WA

REFERENCES

1. Jackson J, Welsh E. Medication charts in residential aged-care facilities. *Aust Prescr* 2017;40:20-2. <https://doi.org/10.18773/austprescr.2017.004>
2. Australian Commission on Safety and Quality in Health Care. Analysis of residential aged care facility staff and approved providers surveys 2012. Sydney: ACSQHC; 2012. www.safetyandquality.gov.au/wp-content/uploads/2012/06/NRMC-Analysis-of-RACF-Staff-and-Approved-Provider-Surveys-2012.pdf [cited 2017 Jul 1]
3. Tariq A, Lehnbohm E, Oliver K, Georgiou A, Rowe C, Osmond T, et al. Design challenges for electronic medication administration record systems in residential aged care facilities: a formative evaluation. *Appl Clin Inform* 2014;5:971-87. <https://doi.org/10.4338/ACI-2014-08-RA-0062>
4. Elliott RA, Lee CY, Hussaini S. Evaluation of a hybrid paper-electronic medication management system at a residential aged care facility. *Aust Health Rev* 2016;40:244-50. <https://doi.org/10.1071/AH14206>
5. Tariq A, Georgiou A, Westbrook J. Medication errors in residential aged care facilities: a distributed cognition analysis of the information exchange process. *Int J Med Inform* 2013;82:299-312. <https://doi.org/10.1016/j.ijmedinf.2012.08.006>
6. Elliott RA, Lee CY, Hussaini S. Electronic prescribing and medication management at a residential aged care facility: uptake by general practitioners and evaluation of the benefits and barriers. *Appl Clin Inform* 2016;7:116-27. <https://doi.org/10.4338/ACI-2015-08-RA-0098>

John Jackson and Elspeth Welsh, the authors of the article, comment:



The letter highlights the risks associated with disjointed medication management systems whether they be hard copy, digital or hybrid systems. The official hard copy National Residential Medication Chart, developed to facilitate PBS prescribing and incorporating proven patient safety features, can only address some of the issues identified in the letter (e.g. multiple, sometimes conflicting, medication records). However, the current level of implementation has limited these benefits.

We agree that fully integrated electronic medication management systems are required in residential aged care. Some of the delays and inefficiencies will only be fully addressed by real-time, comprehensive electronic communication between aged-care staff, prescribers and pharmacists.



The Editorial Executive Committee welcomes letters, which should be less than 250 words. Before a decision to publish is made, letters which refer to a published article may be sent to the author for a response. Any letter may be sent to an expert for comment. When letters are published, they are usually accompanied in the same issue by any responses or comments. The Committee screens out discourteous, inaccurate or libellous statements. The letters are sub-edited before publication. Authors are required to declare any conflicts of interest. The Committee's decision on publication is final.