Better aged care data for pandemics

Richard Cumpston, Hugh Sarjeant and David Service

(The authors are actuaries, and directors of Australian Projections Pty Ltd. Richard can be contacted on richard.cumpston@gmail.com, or 0433 170 276.)

Summary

This is a submission to the Royal Commission into Aged Care Quality and Safety, made on behalf of consumers. It addresses the request for submissions on the impact of COVID-19.

During COVID-19 and future pandemics, a data-based aged care system could

- provide earlier detection of infected staff and residents
- allow better planning for the use of emergency staff
- provide emergency staff with medical histories in familiar form
- provide some of the health measurements needed in pandemics
- allow research into better procedures
- reduce the need for on-site visits by quality regulators.

1. Introduction

Cumpston and Bail [1] have suggested that modern technology could make a wide range of quality measures feasible at low cost. We have proposed a data-based aged care system [2] allowing for

- rapid detection of individual health problems, and prompt help to individuals
- prompt help to providers, and well-based regulatory action where needed
- rapid detection of system health threats
- quality of care measurements to help consumers, providers and regulators
- appropriate Commonwealth subsidies for each care recipient
- well-timed transitions between care levels
- research on the cost-effectiveness of different monitoring systems
- · research on the needs for different levels of care staff
- data access for treating professionals
- data access for researchers.

2. Earlier detection of infected staff and residents

The most common symptom of COVID-19 is a cough, followed by a fever, sore throat, headache and runny nose [3, p28]. Coughing might be detected by audio analysis, and fevers by temperature or pulse measurements. While not as reliable as individual testing, such automatic measurements could provide valuable early warnings.

3. Better planning for the use of emergency staff

As evidence to the Commission has shown [4], aged care homes can rapidly lose many of their staff when any infections are detected. Under the data system we have proposed, staff would log on when starting work, and log off when stopping, with the data being recorded in a central Australian system. Those responsible for allocating emergency staff would thus have knowledge of both the numbers of residents likely to be infected, and the numbers of staff likely to be able to help them.

4. Providing emergency staff with medical history data in familiar form

One witness to the Commission said that emergency staff were often not familiar with the electronic health systems used by particular providers, so that they had to revert to manual medical histories. The centrally recorded data we propose would allow emergency staff to use electronic data in a familiar form.

5. Providing some of the health measurements needed in pandemics

Professor Ibrahim said in evidence [5]

"In aged care, personal care workers are not trained to do vital signs or take observations. The number of nurses is very low and they don't have time to do the observations because they are either managing the facility or dispensing the medication. They may or may not have thermometers that are working. They won't have the full range of equipment that you have in hospital".

6. Research into better procedures

There have been strong disagreements between Commonwealth and state authorities about the appropriateness of transferring infected residents into hospitals [6]. Centrally recorded data would allow research into appropriate transfer criteria. Research would also be possible into associations between infection rates and staffing levels. Insights might be obtained on facility designs better suited to resist pandemics.

7. Reducing the need for on-site visits by regulatory staff

A data-based aged care system would reduce the need for on-site visits. This would be particularly valuable during pandemics.

References

- [1] Cumpston R & Bail K 12 February 2019. *Data on residential aged care quality*. Submission to the Royal Commission Into Aged Care Quality and Safety. Available from https://www.australianprojections.com.au/publications/data-on-residential-aged-care-quality
- [2] Cumpston R, Sarjeant H & Service D 9 April 2020. *A data-based aged care system.* Submission to the Royal Commission Into Aged Care Quality and Safety. Available from https://www.australianprojections.com.au/publications/a-data-based-aged-care-system

- [3] COVID-19 Australia: Epidemiology report 23. Downloaded 4 September 2020 from https://www1.health.gov.au/internet/main/publishing.nsf/Content/novel_coronavirus_2019_nc ov_weekly_epidemiology_reports_australia_2020.htm
- [4] Hearing transcript 10 August 2020, p8379
- [5] Hearing transcript 12 August 2020, p8579
- [6] Hearing transcript 10 August 2020, p8376