Strategies to promote access to medications during the COVID-19 pandemic

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Background

During the COVID-19 pandemic, vulnerable and older people with chronic and complex conditions have self-isolated in their homes, potentially limiting opportunities for consultations to have medications prescribed and dispensed.

Objective

The aim of this article is to describe initiatives to ensure ongoing access to medications during the COVID-19 pandemic.

Discussion

Cooperation between wholesalers and purchase limits in pharmacies have helped to ensure supply of essential medications. Therapeutic substitution by pharmacists is permitted for specific products authorised by the Therapeutic Goods Administration. Prescribers are permitted to issue digital image prescriptions, and implementation of electronic prescribing has been fasttracked. Expanded continued dispensing arrangements introduced during the bushfire crises have been temporarily extended. Pharmacists are permitted to provide medication management reviews via telehealth. A Home Medicines Service has been introduced to facilitate delivery of medications to people who are vulnerable or elderly. Anticipatory prescribing and medication imprest systems are valuable for access to endof-life medications within residential aged care.

MEDICATIONS are the most common healthcare intervention for both acute and chronic conditions. The COVID-19 pandemic has resulted in most Australians, including vulnerable and older people with chronic and complex conditions, being asked to self-isolate in their own homes. These people may not be able to attend consultations with their medical practitioner or visit their community pharmacy to have medications prescribed and dispensed. For this reason, a series of Commonwealth and state initiatives have been enacted to ensure ongoing access to medications.

Stockpiling and medication shortages

Medication shortages include temporary local or regional shortages and more serious system-wide shortages that attract the attention of the Australian Therapeutic Goods Administration (TGA). Medication shortages have become increasingly common worldwide. Shortages can be linked to interruptions in supply (eg manufacturing, distribution, logistics) or changes in demand (eg exceptional requests, changes to prescribing or reimbursement policies).1,2 Reasons include raw material unavailability, decreased resilience to demand fluctuation and delocalisation of manufacturing.2 Last year, the TGA and European Medicines Agency introduced new guidelines for the monitoring and communication

of medication shortages.2,3 The TGA's Medicine Shortages Information Initiative (https://apps.tga.gov.au/prod/MSI/ search) highlights current medication shortages in Australia.3 It is recognised that medication shortages are associated with a range of clinical, economic and humanistic outcomes for patients. These include inferior health outcomes if the preferred treatment is not available, errors linked to the use of unfamiliar alternative agents, time and cost required to source therapeutic alternatives, and frustration, anxiety and anger.4

Stockpiling and panic buying can result in exceptional demand that has the potential to result in, or potentiate, medication shortages. During the COVID-19 pandemic, there have been widespread reports that pharmacies have experienced increased prescriptions or requests for, and subsequent difficulty sourcing, specific brands of salbutamol, fluticasone/salmeterol, budesonide, thyroxine, sulfasalazine, paracetamol and hydroxychloroquine.⁵ Rural pharmacies may be particularly affected.6 The Australian Competition and Consumer Commission has given permission for wholesalers of medications to cooperate to ensure that supply of essential medications is maintained.7 Changes in demand have prompted changes to Commonwealth and state legislation to promote ongoing access to medications for acute and chronic conditions in primary and residential aged care settings. At the

time of writing, pharmacies have been asked to limit patient supply of certain prescription medications to one month's supply at the prescribed dose, and to impose a limit of one unit per purchase for specific non-prescription medications.8 The supply of salbutamol inhalers as a

pharmacist-only (Schedule 3) medication has been subject to additional restrictions, assessment and recording requirements.8 Anecdotally, these measures have reduced panic buying and assisted to maintain equity of supply to those who need access to essential medications.

Change	Description
Digital image prescriptions	Following a telehealth consultation, prescribers are now able to send a digital image of an original prescription (eg via fax, email, text message) directly to the patient's preferred pharmacist.8
	These are interim arrangements prior to the implementation of electronic prescribing.8
	Prescribers must send a clear copy of the entire signed prescription. In most circumstances, the prescriber must retain the original paper prescription (or copy) for two years. ^{8,15}
	This initiative does not apply to medications in Schedule 8 or Appendix D of the Poisons Standard, although requirements differ according to state and territory legislation. ^{8,15}
	All jurisdictions have enacted the necessary regulatory changes to allow dispensing from a digital image.8
Electronic prescribing (ePrescribing)	The implementation of electronic prescribing has been accelerated by the Commonwealth Department of Health in response to COVID-19.
	It is currently being introduced to Australian communities in a steady and managed approach. ¹⁶
	This initiative permits general practitioners to issue an electronic prescription that the patient electronically shares with their pharmacy. ¹⁶
Continued dispensing	This arrangement has been temporarily expanded during the COVID-19 pandemic following a similar expansion in areas affected by Australia's bushfire crisis earlier in the year.
	A pharmacist may supply a full Pharmaceutical Benefits Scheme (PBS) quantity (usually 30 days) of a previously prescribed medication in the case of immediate need when a patient is unable to obtain a prescription. ⁸
	Prior to expansion, this arrangement applied to PBS-listed oral contraceptives and cholesterol-lowering medications only. The list of medications has now been expanded to include nearly all PBS Schedule 4 medications. Medications able to be supplied may differ according to state and territory legislation. ¹⁵
	Dispensed medications are subsidised by the PBS, and there is no requirement for a person to obtain a prescription for medications supplied under this provision. ⁸
	Medication requested must not have been supplied under the continued dispensing initiative in the previous 12 months. ¹⁷
Medication delivery services	The Home Medicines Service commenced on 16 March 2020 and provides support for pharmacies to provide new or existing home deliveries of PBS/Repatriation PBS items to vulnerable people up to once per month. ¹⁸
	This includes delivery to residents of aged care facilities unless there is a pre-existing delivery contract already in place. ¹⁸
	Australia Post and several other delivery services are supporting the implementation of the Home Medicines Service.

Prescribing and dispensing

A range of measures have been put in place to allow people experiencing symptoms indicative of COVID-19 and those self-isolating in their own homes to access prescription medications (Table 1). These measures complement new telehealth initiatives that permit general practitioners (GPs) to conduct Medicare Benefits Schedule-funded consultations by telephone or video. There are minor differences in the implementation of these measures in each state and territory. The changes stated in this article are current at the time of writing and are subject to change.

Therapeutic substitution

Therapeutic substitution is not a new concept and has been advocated for cost-containment purposes in other jurisdictions. For example, in Alberta, Canada, pharmacists are permitted to substitute a prescribed medication for another within the same therapeutic class (eg switching an angiotensin-converting enzyme [ACE] inhibitor to an equivalent dose of another ACE inhibitor).9 The following substitutions may occur for a medicine subject to a 'Serious Shortage Medicine Substitution Notice':10

- · an alternative strength when the prescribed strength is not available (eg 2×20 mg tablets in place of a 40 mg tablet)
- a different dose form of the same medication (eg capsule instead of a tablet)
- an extended/sustained-release formulation for an immediate-release formulation and vice versa.

Medications for which therapeutic substitution is permitted are published in a Serious Shortage Medicine Substitution Notice on the TGA website (www.tga. gov.au/serious-shortage-medicinesubstitution-notices).10

Medication management review services

Medication management reviews including MedsCheck, Home Medicines Review and Residential Medication

Management Review - are collaborative services provided by pharmacists and GPs to promote quality use of medications. Since 21 April 2020, pharmacists have been temporarily permitted to deliver these services via telehealth arrangements for patients meeting the eligibility criteria. This approach is consistent with the increasing body of evidence to support the value of telehealth medication review services.11

Medication imprest systems in residential aged care

Residents of aged care facilities are a vulnerable population because of older age and multimorbidity.12 Disease severity and mortality due to COVID-19 has been shown to be higher among people with these characteristics.13 Strategies to ensure access to essential medications, including end-of-life medications, are important. This may include ensuring adequate supplies of medications through anticipatory prescribing of end-of-life medications and establishing medication imprest systems within residential aged care facilities that do not currently have a medication imprest. Each state has its own regulations regarding medication imprest systems that outline requirements regarding storage, expiry date checking, audit, recording and resupply.14

Conclusion

The COVID-19 pandemic has resulted in new initiatives regarding how medications are prescribed, dispensed and administered to facilitate ongoing access for the most vulnerable Australians.

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References

- International Pharmaceutical Federation. Report of the international summit of medicines shortage The Hague: FIP, 2013.
- Musazzi UM, Di Giorgio DD, Minghetti P, New regulatory strategies to manage medicines shortages in Europe. Int J Pharm 2020;579:119171. doi: 10.1016/j.ijpharm.2020.119171.
- 3. Therapeutic Goods Administration. Medicine shortages information initiative. Woden, ACT: TGA, 2020. Available at https://apps.tga.gov.au/ prod/MSI/search [Accessed 25 June 2020].
- Phuong JM, Penm J, Chaar B, Oldfield LD, Moles R. The impacts of medication shortages on patient outcomes: A scoping review. PLoS One 2019;14(5):e0215837. doi: 10.1371/journal. pone.0215837
- Bell JS, Bell JA, Creek D. Off-label prescribing in the midst of a pandemic: The case of hydroxychloroquine. Aust J Gen Pract 2020;49 Suppl 6. doi: 10.31128/AJGP-COVID-06. [ePub ahead of print]
- Paola S. COVID-19 has 'exposed' systemic problems: Rural pharmacists. 15 April 2020. Available at https://ajp.com.au/news/ covid-19-has-exposed-systemic-problems-ruralpharmacists [Accessed 25 June 2020]
- Australian Competition and Consumer Commission. Medicine wholesalers to co-operate on access to pharmaceutical products. Canberra. ACT: ACCC, 2020. Available at www.accc.gov. au/media-release/medicine-wholesalers-to-cooperate-on-access-to-pharmaceutical-products [Accessed 25 June 2020].
- Pharmaceutical Society of Australia. Coronavirus disease (COVID-19) information for pharmacists. Deakin, ACT: PSA, 2020. Available at www.psa. org.au/coronavirus [Accessed 25 June 2020].
- Johansen ME, Richardson C. Estimation of potential savings through therapeutic substitution. JAMA Intern Med 2016;176(6):769-75. doi: 10.1001/jamainternmed.2016.1704
- 10. Therapeutic Goods Administration. Serious shortage medicine substitution notices. Woden, ACT: TGA, 2020. Available at https://www.tga. gov.au/serious-shortage-medicine-substitutionnotices [Accessed 25 June 2020].

- 11. Shafiee Haniani L. Caffery LJ. Freeman CR. Peeters G, Peel NM. A scoping review of the use and impact of telehealth medication reviews. Res Social Adm Pharm 2020;16(8):1140-53.
- 12. American Geriatrics Society. American Geriatrics Society (AGS) Policy Brief: COVID-19 and nursing Homes. J Am Geriatr Soc 2020;68(5):908-11. doi: 10.1111/jgs.16477.
- 13. Centers for Disease Control and Prevention. Coronavirus Disease 2019 (COVID-19) - Older adults. Atlanta, GA: CDC, 2020. Available at www.cdc.gov/coronavirus/2019-ncov/needextra-precautions/older-adults.html [Accessed 30 June 2020].
- 14. Department of Health and Ageing. Guiding principles for medication management in residential aged care facilities. Canberra, ACT: Department of Health and Ageing, 2012
- 15. Pharmaceutical Society of Australia. Summary of COVID-19 regulatory changes. Deakin, ACT: PSA, 2020. Available at www.psa.org.au/coronavirus/ regulatory-changes [Accessed 25 June 2020].
- 16. Australian Digital Health Agency. Electronic prescriptions - For prescribers. Sydney, NSW: Australian Digital Health Agency, 2020. Available at www.digitalhealth.gov.au/get-startedwith-digital-health/electronic-prescriptions/ for-prescribers [Accessed 25 June 2020].
- 17. Pharmaceutical Society of Australia. Addendum: Guidelines for the continued dispensing of eligible prescribed medicines by pharmacists. Expanded arrangements to support people affected by the Coronavirus Disease 2019 (COVID-19) pandemic. Deakin, ACT: PSA, 2020.
- 18. Pharmacy Programs Administrator. COVID-19 Home Medicines Service. Melbourne, Vic: Pharmacy Programs Administrator, 2020. Available at www.ppaonline.com.au/programs/ covid-19-home-medicine-service [Accessed 25 June 2020].

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