Medicines information: dwindling support in the age of information overload

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Keywords

drug information, pharmacists

Aust Prescr 2019;42:178-9 https://doi.org/10.18773/ austprescr.2019.068 Patients and their treatments are becoming increasingly complex. Managing these patients requires knowledge and understanding of the medicines used in treatment. Medicines information is therefore an important component of the quality use of medicines. It informs safe and effective practice, optimising outcomes for the individual and the broader population. However, access to specialised medicines information services has reduced in parts of Australia.

There is a lot of medicines information available and it comes from many different sources.² However, not all sources are reliable and an appraisal of their currency and relevance is required to ensure the information is of high quality. Health professionals have variable access to these resources and many require paid subscriptions. While the list of required resources to be held in community pharmacies is mandated by the Pharmacy Board of Australia, there is no similar list for medical practices, where 406,000 patient interactions occur each day.³ Even with access to specific resources, the challenge for health professionals often lies in the time and expertise required to locate, analyse and use medicines information for clinical decision making within a busy practice.

There is no one perfect source of medicines information. Limitations exist with every resource, regardless of currency and provenance. For example, the readily available product information approved by the Therapeutic Goods Administration, which many health professionals rely on for decision support, only provides data for registered indications. It is not useful when considering off-label use. There may be no information about prescribing for children. Obstetric information is often limited to animal data or pregnancy categorisations which can result in misinterpretation of risk.4 Newer drugs will have an incomplete safety profile due to the limited number of patients in premarketing clinical trials, and the product information for older drugs may be out of date.

The challenge lies not only in the identification and analysis of accurate, current, unbiased and evidence-based information, but the formulation of a clear and practical recommendation for each individual at a particular point in time. Complex clinical dilemmas are often not resolved by merely locating information unless there is accompanying

expert interpretation. Electronic decision-support tools do not equate to specialist advice. This is where specialised support services can assist.

There are a number of specialist support services currently available in Australia. They provide a range of medicines information to consumers, health professionals or both. These services are funded independently of each other, by a variety of organisations at a local, state or national level.

Such support services include:

- alcohol and drug information services
- Medicines Line (consumers only)
- Mothersafe
- NSW Cannabis Medicines Advisory Service
- Poisons Information Centres.

Medicines information services, operated by experienced and specialist-trained pharmacists, are located within some major tertiary hospitals. Despite primary care being the source of most prescribing, only some services accept calls from GPs or the general public. The scope of each service is dependent on funding and each service is unique.

While difficult to quantitate the clinical and economic impact, users of these medicines information services report a high level of satisfaction and positive impact on patient care.⁵⁻⁷ A large proportion of users rely on advice before continuing management, with the majority of advice being accepted and acted upon. A model used to determine potential cost savings or 'avoidance' of costs associated with advice estimated annual potential savings of up to US\$2 million.⁸

Without warning or external consultation, the NSW Medicines Information Centre closed in April 2018. Community-based health professionals across New South Wales had relied on the expertise provided by the team of experienced pharmacists who had operated this service since 1980. There were on average 1200 enquiries per year. The health professionals who used this service were left without a satisfactory alternative.

Unfortunately, this is not the first time a medicines information service has been closed. Similar state-based services in Tasmania, Victoria and Western Australia ceased operation or limited their scope, and services in South Australia have been restructured. NPS MedicineWise funded the Therapeutic Advice

and Information Service which was delivered by a consortium of six established medicines information services. From 2000–2010 this service provided responses to over 6000 community-based health professionals a year across Australia, with most enquiries from GPs and community pharmacists. The service capitalised on the shared use of existing infrastructure, expertise, training and resources at individual sites. NPS discontinued funding after concluding that it was not sustainable.

In the absence of these specialised services, a quarter of hospital-based users say they would instead use the internet.⁷ Other alternatives of varying quality include books, or resources provided by pharmaceutical companies. People may also seek complex medicines information from another pharmacist or professional colleague. In addition, only half of clinicians' clinical questions are pursued, due to a number of barriers including a lack of time.¹⁰ Limited access to specialised services could further increase this number, potentially impacting adversely on patient care. In addition, there

will be fewer opportunities for trainee medicines information specialists to gain practical experience. The loss of opportunities for pharmacists to obtain specialised training in medicines information is an important consideration. It could conceivably reduce the quality of information provided.

While access to information may be easier and faster than ever before, there is still a need for competent evaluation of data and individualised management plans. For new drugs the need for information is likely to increase as more drugs will be fast-tracked onto the Australian market.

Despite these needs, funding restrictions are affecting access to medicines information services especially for community health professionals who provide the majority of care for Australians. The need for timely, accurate, current, unbiased, clinically relevant, evidence-based therapeutic advice will continue, but who is willing to pay for this?

Conflict of interest: none declared

REFERENCES

- Smith A. Quality use of medicines are we nearly there yet? Aust Prescr 2012;35:174-5. https://doi.org/10.18773/ austprescr.2012.077
- Day RO, Snowden L. Where to find information about drugs. Aust Prescr 2016;39:88-95. https://doi.org/10.18773/ austprescr.2016.023
- Australian Institute of Health and Welfare. Australia's health 2018. Canberra: AIHW; 2018. https://www.aihw.gov.au/ reports/australias-health/australias-health-2018/contents/ table-of-contents [cited 2019 Nov 1]
- 4. Kennedy D. Classifying drugs in pregnancy. Aust Prescr 2014;37:38-40. https://doi.org/10.18773/austprescr.2014.018
- Innes AJ, Bramley DM, Wills S. The impact of UK Medicines Information services on patient care, clinical outcomes and medicines safety: an evaluation of healthcare professionals' opinions. Eur J Hosp Pharm Sci Pract 2014;21:222-8. https://doi.org/10.1136/ejhpharm-2014-000462
- Bramley D, Mohandas C, Soor S, Erskine D, Oborne A. Does a medicines information service have a positive impact on patient care? Pharm J 2009;282:139-40.
- Hands D, Stephens M, Brown D. A systematic review of the clinical and economic impact of drug information services on patient outcome. Pharm World Sci 2002;24:132-8. https://doi.org/10.1023/A:1019573118419
- Kinky DE, Erush SC, Laskin MS, Gibson GA. Economic impact of a drug information service. Ann Pharmacother 1999;33:11-6. https://doi.org/10.1345/aph.18218
- McGuire T, Patounas M. Goodbye TAIS and thanks for all the information! Aust Prescr 2010;33:147-9. https://doi.org/ 10.18773/austprescr.2010.069
- Del Fiol G, Workman TE, Gorman PN. Clinical questions raised by clinicians at the point of care: a systematic review. JAMA Intern Med 2014;174:710-8. https://doi.org/10.1001/ jamainternmed.2014.368