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# Information scanning for GPs

Information scanning is a very useful skill for general practitioners to have, whether the aim is to keep up-to-date for clinical reasons or to undertake research. It is both easy to learn and adaptable to your information needs. In this article we use a specific example to describe information scanning as GPs may use it, and then discuss the topic more broadly. We also provide some clues on keeping the information useful and manageable.

**Information scanning is the process used to gain new information about what is happening in an area of interest. It has three components:**

- **information needs (the focus and scope of the scan)**
- **information seeking (the tools used to scan), and**
- **information use (to inform practice, for example at the point of care, or as a basis for research).**

### Information needs

Deciding on what you want to know will determine the focus and scope of your information scanning. Key words and phrases will determine what the scan will look for, while where you look will determine the scope of the scanning.

### Information seeking

Tools or sources used to scan are many and varied. We have listed some of the more common sources of information. Most are web based so scanning can be done anytime where there is internet access.

### Information use

Knowing how to search for the relevant information is one thing; deciding how to use it is another. Clinical information (eg. a meta-analysis) on efficacy is useful for your practice as is specific information that you can provide to patients at the point of care; review information can inform further research; research articles show what is being done and what methodologies are used. The latter also include 'for further research' which can assist in choosing a research topic.

Consider the topical clinical problem of an overweight child whose mother has come to see you because she is worried about her child's weight. During the consultation, you may decide that you need professional information. The following are useful for current, brief information for both clinicians and patients:

- Medical Journal of Australia's clinical guidelines – [www.mja.com.au/public/guides/guides.html](http://www.mja.com.au/public/guides/guides.html) – the topic 'nutrition' is relevant
- HealthInsite is the Australian Government website of health information. Content is quality assessed before being posted and information is categorised in various ways. 'Conditions' is a good place to start. From there, click on 'child health' and scroll to information on obesity – [www.healthinsite.gov.au/](http://www.healthinsite.gov.au/)
- The NHMRC website – <http://nhmrc.gov.au/index.htm>. The tabs on the left include publications, which can be viewed by category or subject. Using the subject of health promotion, you will find several publications relating to food and nutrition, including dietary guidelines. The category of nutrition and diet contains some of the same publications as above, plus a guide for GPs on overweight and obesity in adults, children and adolescents
- The Children's Hospital at Westmead's website has fact sheets for parents – [www.chw.edu.au/parents/factsheets/](http://www.chw.edu.au/parents/factsheets/)
- The Turning Research into Practice (TRIP) database at [www.tripdatabase.com/index.html](http://www.tripdatabase.com/index.html) is easily searched and provides resources for evidence based medicine. Using 'child obesity weight loss' as a search, records were found which were both useful for both point of care and further information
- Using the PICO (patient characteristics, intervention under consideration, comparison intervention and outcome of clinical interest) search strategy with Google at [www.google.com.au/](http://www.google.com.au/) or another major search engine will provide useful information. For example, we did a search using 'obese child and weight loss and guidelines and evidence in au' and, although the number of links found was large, the first page contained links to probably all the immediate information needed by both GP and patient.

If you wish to improve your skills in finding guidelines and Australian content in the literature, The Australian Centre for Evidence Based Clinical Practice (ACEBCP) has some valuable resources. *Librarian tips for health professionals: finding clinical guidelines* and *Finding Australian content in health care* are available at [www.acebcp.org.au/tips.htm](http://www.acebcp.org.au/tips.htm).

### What information do I need, and how do I find it?

If you need further information, for example to effect change in your practice, improve the management of a broader patient group including adults and adolescents, share information with colleagues, or undertake your own research, you will need to look further a field. This is where databases, search engines and the like become useful, relevant and important.

#### Databases (Ovid, PubMed)

- PubMed includes links to full text articles and other related resources – [www.ncbi.nlm.nih.gov/entrez/query.fcgi?DB=pubmed](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?DB=pubmed)
- ROAR – Roadmap Of Australian primary health care Research – a database, maintained by PHCRIS, which contains summaries of current and recently completed PHC research projects, information about researchers, and links to research organisations across Australia – [www.phcris.org.au/products/roar.php](http://www.phcris.org.au/products/roar.php)
- The Royal Australian College of General Practitioners (RACGP) provides a literature searching service, free for members at [www.racgp.org.au/library/resource\\_centre/literature/literature.asp](http://www.racgp.org.au/library/resource_centre/literature/literature.asp)
- The Cochrane Library provides evidence to inform health care decision making – [www3.interscience.wiley.com/cgi-bin/mrwhome/106568753/HOME](http://www3.interscience.wiley.com/cgi-bin/mrwhome/106568753/HOME)
- The National Institute of Clinical Studies (NICS) is Australia's national agency for closing the gap between evidence and practice in health care – [www.nicssl.com.au/about.aspx](http://www.nicssl.com.au/about.aspx)
- Some universities provide access to literature as a service for alumni: check this out on your university library homepage.

Searches can be undertaken on an 'as needs' basis or can be set up to run regularly. Results are emailed to you.

The National Library of Health Primary Care Question Answering Service at [www.clinicalanswers.nhs.uk/](http://www.clinicalanswers.nhs.uk/) provides answers to primary care practitioners' clinical questions. Although Australians are not able to ask questions, there is a searchable database of answers on the website. Questions can also be viewed by specialty.

#### Search engines

Search engines (eg. PubCrawler, Google, Google Alerts, Scirus) can alert users on a regular basis when new information meeting the search terms becomes available.

- PubCrawler – <http://pubcrawler.gen.tcd.ie/> – searches peer reviewed journals on a regular basis
- Google can search for other types of information. A Google search will result in a vast amount of information that must be reduced to a manageable amount. This can be done with an advanced search, by a PICO search, or by searching by author using Google Scholar (<http://scholar.google.com/>). Google Alerts ([www.google.com/alerts](http://www.google.com/alerts)) are set up with search terms, type of search required (news, web, groups) and how often you wish to receive an email of the results
- Scirus – [www.scirus.com/srsapp/](http://www.scirus.com/srsapp/) – can search science literature more deeply than some other search engines.

#### Individual journal table of contents alerts

Many journals offer free subscriptions to email their table of contents to readers. The trick is to subscribe to those journals you find most relevant so that you are not overwhelmed with information. Journals often read by GPs include:

- *Australian Family Physician* – [www.racgp.org.au/afp](http://www.racgp.org.au/afp)
- *Medical Journal of Australia* – [www.mja.com.au/](http://www.mja.com.au/)
- *British Medical Journal* – <http://bmj.bmjournals.com/>
- *Family Medicine* – <http://fampra.oxfordjournals.org/>
- *BMC Family Practice* – [www.biomedcentral.com/bmcfampract/](http://www.biomedcentral.com/bmcfampract/)

[www.biomedcentral.com/bmcfampract/](http://www.biomedcentral.com/bmcfampract/)

- *BMC Health Services Research* – [www.biomedcentral.com/bmchealthservres/](http://www.biomedcentral.com/bmchealthservres/)
- *Journal of Health Services Research & Policy* – [www.rsmprss.co.uk/jhsrp.htm](http://www.rsmprss.co.uk/jhsrp.htm).

#### Newspapers and newsletters

Newspapers and newsletters from organisations (eg. divisions of general practice, consumer groups, research organisations) provide information at the grassroots level, are usually easy to scan, and come in either hard copy and/or electronic form. However, if scanning becomes too time consuming, consider ways to share this process such as dividing newsletters between members of your team, or organising a staff member to scan them for you.

#### Media releases

Media releases (government, research, other organisations) are regularly sent by key organisations (most also offer a subscription service). These include:

- Australian Government Department of Health and Ageing – [www.health.gov.au/](http://www.health.gov.au/)
- state level departments – [www.health.gov.au/](http://www.health.gov.au/)
- NHMRC – [www.nhmrc.gov.au/](http://www.nhmrc.gov.au/)
- Australian Institute of Health and Welfare – [www.aihw.gov.au/mediacentre/index.cfm](http://www.aihw.gov.au/mediacentre/index.cfm)
- Australian Bureau of Statistics – [www.abs.gov.au/](http://www.abs.gov.au/)
- ABC Health Updates – [www.abc.net.au/health/](http://www.abc.net.au/health/).

#### Email list servers

As there is many list servers, it is important to limit subscriptions to those most relevant to you. Google and LSoft ([www.lsoft.com/lists/list\\_q.html](http://www.lsoft.com/lists/list_q.html)) enable you to find relevant lists. We find the following list servers useful:

- Evaltalk (Evaluation) – [www.eval.org](http://www.eval.org)
- Update (Alcohol and Drugs Council of Australia) – [www.adca.org.au/DiscussionLines/drugtalk.htm](http://www.adca.org.au/DiscussionLines/drugtalk.htm)
- Family-L (Academic Family Medicine Discussion) at the University of Kentucky – [www.lsoft.com/scripts/wl.exe?SL1=FAMILY-L&H=LSV.UKY.EDU](http://www.lsoft.com/scripts/wl.exe?SL1=FAMILY-L&H=LSV.UKY.EDU).

## Grey literature

Grey literature refers to publications issued by government, academia, business, and industry, in both print and electronic formats, but not controlled by commercial publishing interests, and where publishing is not the primary business activity of the organisation. These publications are often found by searching the websites of the agency that produced them:

- The California State University Library – [www.csulb.edu/library/subj/gray\\_literature/](http://www.csulb.edu/library/subj/gray_literature/)
- New York Academy of Medicine Grey Literature – [www.nyam.org/library/grey.shtml](http://www.nyam.org/library/grey.shtml)
- OAlster – The University of Michigan Digital Library Production Service – <http://oaister.umdl.umich.edu/o/oaister/>
- The Canadian Evaluation Society's Unpublished Literature Bank – [www.evaluationcanada.ca/site.cgi?s=6&ss=8&lang=en](http://www.evaluationcanada.ca/site.cgi?s=6&ss=8&lang=en).

## Personal contacts

Personal contacts can provide you with useful information. You can also find who is researching in what area by searching the ROAR (see above).

## Avoiding information overload

Most people find it challenging to reduce the information to a manageable amount while still being confident that important information is not missed. The following tips have proven useful:

- For a defined purpose, such as for use in your practice, search where you will find the most relevant information quickly. The *MJA* guidelines, HealthInsite, Westmead Children's Hospital, and the NHMRC have suitable, easy to locate information for the point of care (see above)
- For research, look more widely. Set up regular searches and have the responses emailed to you. Stick to sources that will provide links to the information so it can be retrieved with minimum difficulty. For more detailed searching, use assistance from organisations such as the RACGP.

Useful information appears from some unlikely sources, so if you want to be thorough broaden

the scope of your scanning. Learn to skim the information for relevance and usefulness; review articles are good for this.

## Using the information

Knowing how to search for the relevant information is one thing; deciding how to use it is another. Clinical information such as guidelines and fact sheets are required at the time of the consultation. For optimal use, these need to be easily located, clearly and briefly written, and to the point. Meta-analyses and syntheses of research give you an idea of what works from a body of research, and are useful if you require a deeper understanding of an area. They can guide further research. Original research articles show what is being done and what methodologies are used, and generally include 'for further research' which can assist in choosing a research topic.

## Conclusion

Selecting the best key words and phrases and choosing the most suitable scanning tools and sources for your needs will ensure you find the information you do need without having to spend too much time filtering out what you do not need.

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