

Facilitating access to evidence: Primary Health Care Search Filter

Abstract

Background: The evidence base developed by, and relevant to, primary health care (PHC) is rapidly increasing. With the wealth of literature available, searchers trying to find PHC-specific citations can feel overwhelmed.

Objectives: Flinders Filters and the Primary Health Care Research & Information Service collaborated to develop a search filter enabling efficient and effective retrieval of relevant PHC literature.

Methods: Stage 1 involved developing a PHC Search Filter in the OvidSP Medline platform using a rigorous experimental methodology. The search filter was then translated for web-based 'one click searching' in PubMed during Stage 2. Stage 3 involved planning and implementing a mixed-methods evaluation.

Results: The search filter sensitivity was 77.0% with a post hoc relevance assessment of 78.3%. Four months after its launch a mixed-methods study evaluated the PHC Search Filter. With 90 respondents, analysis of data from the online survey demonstrated overarching benefits and a positive response to the tool, and directions for further refinement of the PHC Search Filter.

Discussion: Designing the PHC Search Filter followed an established method that ensures the tool offers a validated search strategy. Evaluation results suggest that the PHC Search Filter is a useful tool that is easy to navigate. Challenges for the Filter relate to access to full text articles, while challenges for the evaluation relate to the small sample size.

Conclusions: The PHC Search Filter reduces the burden associated with literature searching, increases the value of the results that are received, and provides a useful resource to improve the likelihood of incorporating relevant evidence into policy and practice.

Keywords

Primary health care, information storage and retrieval, information management, evidence-based practice

Key messages

- Promoting access to quality, relevant literature may help to encourage uptake of evidence to inform research, practice and policy development
- Search filters based on validated development methods increase the likelihood of quality retrievals of citations
- The PHC Search Filter retrieves citations from the unindexed and indexed sets of the PubMed database providing searchers with the emerging and established literature
- The PHC Search Filter is able to facilitate easier access to relevant primary health care literature for overwhelmed, time poor researchers, policy makers and practitioners
- Topic searches that are combined with a search filter should be regularly updated to ensure relevance to searchers' needs/interests are incorporated

Primary Health Care

Recent trends in international health reform have seen a shift away from emphasising the acute (hospitals) sector towards a focus on primary health care (PHC), traditionally viewed as the first level of contact individuals and families have with the health system (Alma-Ata, 1978). This move is in response to changing population composition; increasing prevalence of chronic conditions; workforce challenges; advances in technology; and high costs of acute care compared with PHC (Brown, Oliver-Baxter, & Bywood, 2013). Changing the focus to PHC is proposed to both alleviate the pressure on the acute system through local management and address health problems before they escalate to an acute phase (Standing Council on Health, 2013).

For decades general practice has been the 'primary' health care service in the Australian community, attending to the general health concerns of most of the population; yet while recognising the central role of the general practitioner or family physician, over time PHC has extended to a more holistic, social determinants model of health and wellbeing. This model of care is delivered by a wider range of providers, services and functions (Oliver-Baxter, Brown, & Bywood, 2013). In Australia, PHC currently incorporates a number of health services including not only general practice, but also nursing, allied health, community health and Aboriginal community controlled health services (Powell Davies, Perkins, McDonald, & Williams, 2009), in addition to researchers, policy makers and administrators. The literature to support such a diversity of practitioners and stakeholders and to inform multiple clinical and care domains is necessarily diffuse.

Evidence-Based Policy and Practice

It is widely accepted that policy and practice should be based on evidence (Nutley, Davies, & Walter, 2002). As noted by Haynes and Haines (1998), "clinicians and healthcare planners who want to improve the quality and efficiency of healthcare services will find help in research evidence" (p. 273). Such evidence and knowledge translation can inform care, guide decisions and assess value in policy and practice. According to Bowen and Zhi (2005), the 'evidence-informed policy and practice pathway' involves three stages: sourcing, using, and implementing the evidence. This paper focuses on the first of these, as researchers, policy makers and health professionals require access to up-to-date, relevant studies to inform their activities. Among a time poor workforce, streamlining the search process to improve access to resources is of great importance.

With growing numbers of journals, citations and grey literature, searchers can be overwhelmed by the wealth of literature available to them. The PubMed database alone holds over 23 million citations with approximately 500,000 citations added each year (US National Library of Medicine National Institutes of Health, n.d.). Searching literature can be a challenge, requiring specialised skills and knowledge to extract the most relevant resources (Sladek, Tieman, Tyndall, & Phillips, 2013), particularly if individuals are not familiar with the resources available (Tieman, 2012). Given the time pressures faced by health professionals and policy makers, strategies have been developed which make it easier to search for specific topics and identify key studies to inform policy and practice. It has been suggested¹² that "computer-aided literature searching is one of the core skills required for the practice of evidence-based medicine" (p. 2120). This has been reinforced by research citing the benefits of search filters such as the Clinical Queries option added to the PubMed database (Doig & Simpson, 2003), or the heart failure filter for Medline (R. Damarell & Tieman, 2011). Filters are experimentally-created, evidence-based literature search strategies which offer a standardised, systematic, subject-based search with a known level of performance (Flinders Centre for Clinical Change and Health Care Research, 2013; Sladek et al., 2013). They save time, increase the likelihood of quality retrievals of citations, reduce search burden and embed technical expertise.

Objectives

With the PHC literature and evidence base rapidly increasing, organisations from Flinders University of South Australia: Flinders Filters (<http://www.flinders.edu.au/clinical-change/research/flinders-filters/>), the Primary Health Care Research & Information Service (PHCRIS; www.phcris.org.au), and an Expert Advisory Group, collaborated on a project to develop a search filter. Flinders Filters specialises in information retrieval and the development of real world solutions, including filters and search tools. PHCRIS is a knowledge exchange organisation that helps people to find information, share knowledge, build capacity and exchange ideas about PHC. This collaborative project aimed to develop a search system for automated harvesting of the literature (R. A. Damarell, Tieman, & Lawrence, 2012); a 'PHC Search Filter' to support evidence use. The PHC Search Filter was designed explicitly to facilitate easier access to PHC resources for all searchers, by enabling efficient, effective and validated retrieval of relevant articles in peer-reviewed journals. This project also aimed to address the functional utility of search filters through web-based access. Finally, the study aimed to evaluate use and perceptions of the PHC Search Filter. This paper outlines the development of a PHC search filter to facilitate access to peer-reviewed literature to better inform policy and practice. The aims of the paper are to summarise the need for, and process of, developing a search filter; highlight how to translate a filter to web-based access for ease of use; and synthesise mixed-methods data on use, perceptions and uptake of the PHC Search Filter.

Methods

Stage 1: Filter Development

A precise search is a balance between retrieving relevant citations and excluding irrelevant citations. Thus the first phase of development for the PHC Search Filter included scoping of the concepts and defining the characteristics of a representative set of PHC-specific articles. Initially scoping of the PHC literature explored relevant concepts, terminology and indexing sources. An existing set of citations (the PHCRIS National Primary Health Care Strategy Submissions dataset, a dataset comprising references to the literature used in Strategy submissions and commissioned papers (Kalucy & Jackson-Bowers, 2009)) was deconstructed and informed by discussions with the Expert Advisory Group to clarify the nature of PHC. The next step involved identifying suitable options for the Gold Standard set of citations known to be relevant to PHC within which a search filter is developed, tested and validated. Five options for the gold standard were considered (Table 1). With an understanding that the gold standard should closely reflect the type of articles that the Filter is aiming to retrieve, the decision was made to create a Gold Standard PHC Set based on the included references of ten Australian Primary Health Care Research Institute systematic reviews (R. A. Damarell et al., 2012) which focused on PHC and explicitly listed all included and excluded studies. The included items were then randomised into three subsets (Tieman, Sladek, & McIntyre, 2014). The first subset, the term identification set, was used to conduct a frequency analysis of index and textword terms related to PHC, where index terms refer to the National Library of Medicine's Medical Subject Headings (MeSH) terms, and textwords are natural language words. Terms were included if they were perceived by the developers to be central to the PHC concept, and could retrieve citations from the gold standard set. Terms which were not unique to PHC nor extremely important within PHC were automatically excluded as they would retrieve irrelevant results. The search terms that were seen to identify the PHC items were then tested in a number of different combinations in the second subset, the filter development set, to determine which combination retrieved the maximum number of articles. The best performing search comprising eight MeSH terms and three textwords became the OvidSP filter and its retrieval efficiency was determined in the third subset of the gold standard, the filter validation set. The search filter sensitivity was 77.0 per

cent. Finally, in a post hoc relevance test, the Expert Advisory Group reviewed the first 500 articles retrieved by the OvidSP search filter and reported the proportion of articles relevant to PHC to be 78.3 per cent.

Stage 2: Enhancing Functional Utility through Web-Based Access

PubMed offers several advantages over OvidSP Medline in that it is freely available/readily accessible without a paid subscription; enables searches to be converted into hyperlinks for real-time investigation of the database; and provides access to a greater range of content (Primary Health Care Research and Information Service, 2013; Tieman, 2012). Equivalence testing confirmed the performance of the OvidSP filter in the PubMed database following translation for PubMed syntax. In addition, a specific textword version of the filter was developed to ensure that the not-yet-indexed citations in PubMed could also be searched (R. A. Damarell, Tieman, & Sladek, 2013). These two models were combined to form the final PHC Search Filter, which searches PubMed's indexed (i.e., Medline citations indexed with MeSH terms), unindexed (i.e., not selected for MeSH indexing) and not-yet-indexed (i.e., in the process of being indexed with MeSH terms) citations. Figure 1 details the full PubMed search syntax.

Table 1 Options for creating a 'gold standard' set of citations

PHC specialty journals	All articles within a nominated PHC specialty journal title, or set of titles, across a pre-established range of dates
Specific topic subsection of a journal	All articles included in a PHC specific topic subsection of a major journal e.g., the Medical Journal of Australia's General Practice and Primary Care subset or the British Medical Journal's General Practice/Family Medicine subset
Systematic review set*	Studies included in a nominated set of PHC systematic reviews
An existing PHC dataset	Use an existing dataset such as one belonging to a PHC organisation, citations included in relevant submissions to the National Health Reform or those included in relevant National Health Reform final reports
A random selection of citations	Dual review of 10,000 citations randomly selected from the PubMed database

* Option used in development of the PHC Search Filter.

After validating the translation from OvidSP to PubMed and adjusting for the non-indexed search string, the PHC Search Filter was converted into a URL that included instructions to launch the search within the PubMed database. This URL (Figure 1) is held as a publicly available hyperlink on the PHCRIS website (<http://www.phcris.org.au/phcsearchfilter>). This enables anyone with an interest in PHC to find and use the PHC Search Filter and improve their search results. By making the search filter available as a hyperlink in the website, it facilitates access to the underlying evidence base, supporting the potential use of evidence in policy and practice.

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http://www.ncbi.nlm.nih.gov/sites/entrez?cmd=search&db=pubmed&term=((Primary care[tw]
OR General practi*[tw] OR Primary health care[tw] OR Community mental health
services[mh:noexp] OR Family practice[mh:noexp] OR Home care services[mh:noexp] OR
Family physicians[mh:noexp] OR Community health services[mh:noexp] OR Community health
nursing[mh:noexp] OR Community pharmacy services[mh:noexp] OR Community health
workers[mh:noexp] OR Preventive health services[mh:noexp] AND Medline[sb]) OR ((Primary
care[tiab] OR General practi*[tiab] OR Primary health*[tiab] OR Community mental health*[tiab]
OR Family practice[tiab] OR Family medicine[tiab] OR Family physician*[tiab] OR Home
care[tiab] OR Home based[tiab] OR Home health*[tiab] OR Community health*[tiab] OR
Community nurs*[tiab] OR health visit*[tiab] OR Community pharmac*[tiab] OR Preventive
care[tiab] OR Prevention program*[tiab] OR Preventive service*[tiab] OR Preventive health[tiab]
OR Health promotion[tiab]) NOT Medline[sb]) AND English[la])

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Figure 1 Search URL

As well as providing access to the PHC search filter hyperlink, PHCRIS offers two further search options - a selection of 'one-click' topic searches and the capacity to 'build-your-own' search. The one-click topic search enables searchers to select one of 12 PHC relevant topics (Table 2). Clicking on the topic search loads the search for retrieval of PHC literature relevant to that topic. Build-your-own searches allow individuals to create customised topic searches (Figure 2). There are also options to refine searches, including a limit to Australian content, the option to select only high quality research in the form of randomised controlled trials and/or systematic reviews, opportunity to designate a time frame, and a limit to ensure only free, full text articles are retrieved.

Table 2 One-click search topics

Chronic disease management	Heart failure
Continuity of patient care	Indigenous health
Coronary heart disease	Mental illness
Diabetes	Palliative care
General practitioners	Patient experience
Health services accessibility	Rural and remote health

(Insert Figure 2 here)

Figure 2 Build-your-own search options

Stage 3: Evaluation

Four months after the launch of the PHC Search Filter in July 2012, PHCRIS conducted an evaluation to assess users' experiences with the PHC Search Filter to date. The aim of the evaluation survey was to obtain user feedback as an interim summary of how the PHC Search Filter had been received; to assess whether any additional topic searches were required; and to identify user-recommended improvements for the PHC Search Filter to inform updates. The evaluation took a mixed-methods approach combining three components: quantitative web statistics collected through Google Analytics around frequency of use of the PHC Search Filter; quantitative findings from a 12-item online survey, designed to address reasons for using/not using the PHC Search Filter and perceived outcomes; and

qualitative responses to open-ended questions about perceptions of the PHC Search Filter, posed as part of the online survey. The survey (see Appendix A) was actively distributed to almost 5,000 members of PHCRIS subscriber groups (including the PHC Search Filter mailing list) in addition to promotion via social media.

To support the PHC Search Filter launch, the PHC Search Filter mailing list was developed. At the time of writing there were over 650 subscribers to the PHC Search Filter mailing list, including researchers (23%), policy makers (13%), PHC organisations (i.e., Medicare Locals) (12%), allied health organisations (12%), and others (20%). A further 20 per cent consists of smaller proportions of subscriber categories such as overseas health organisations, Indigenous health groups, professional societies, the former Divisions of General Practice^a, general practitioners, private consultants, consumers, and aged care facilities.

Results

Webmetrics show that since its launch in July, use of the PHC Search Filter has increased. The number of page views gives an indication of the amount of web activity and PHC Search Filter access or traffic. To date, there have been over 3,800 general page views, 78 per cent of which were unique page views (i.e., new viewers to the webpage). Web usage comes mostly from Australian IP addresses, with a small proportion (approximately 7%) from overseas.

Ninety individuals from a range of backgrounds and organisations completed the online evaluation survey (Table 3). Analysis illustrated that researchers, practitioners and policy makers make most use of this tool. Fifty per cent of survey respondents had not used the PHC Search Filter, citing reasons such as lack of awareness that the tool was available (56%), perceptions that the Filter was not relevant to their work (16%) or insufficient time to explore the Filter's capabilities (11%). Of the 50 per cent of respondents who had used the PHC Search Filter, most users frequently employed both of the search options (42%) with similar rates of preference for using only the one-click search (29%) or the build-your-own method (27%). The majority of respondents had experimented with the PHC Search Filter (91%) or used it to keep up with the latest PHC literature (67%). In general, almost all survey respondents found the PHC Search Filter had some degree of usefulness (Figure 3), with the consensus that it is a useful/very useful tool (42% and 40% respectively). When asked about ease of use, an overwhelming majority (96%) found the PHC Search Filter easy to navigate. Eighty-two per cent of respondents indicated that they would recommend the PHC Search Filter to others. Survey respondents were also asked to suggest any additional topic searches they would like to see included. Twenty three suggestions for new keyword topics were received, with child/maternal/pregnancy topics and lifestyle/risk factors/prevention-related topics suggested most frequently. Two current PHC Search Filter topic searches (i.e., Aboriginal and Torres Strait Islander health, and rural and remote health) were mentioned in keyword suggestions, despite already being part of the PHC Search Filter's one-click function.

Table 3 Respondents to the PHC Search Filter Evaluation Survey

Role	N	%
Researcher	25	27.8
Practitioner	18	20.0
Policy maker	11	12.2
Consumer	5	5.6
Student	2	2.2

Other role*	29	32.2
Organisation		
University	23	25.6
Federal, State or Local government	18	20.0
Service delivery organisation	11	12.2
PHC support organisation	9	10.0
Consumer group/Advocacy organisation	4	4.4
Other organisation**	25	27.8
Total		
	90	100

* 'Other role' category included roles such as administration officers, practice managers, project officers.

** 'Other organisation' included sites such as community health centres, private practice, Medicare Locals, research units.

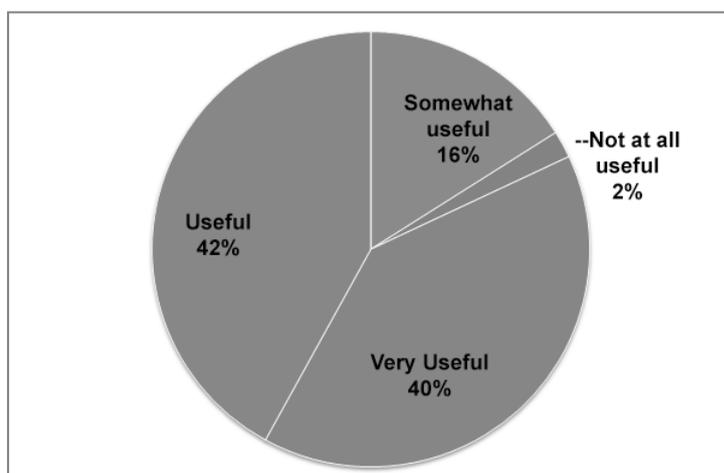


Figure 3 Perceived usefulness of the PHC Search Filter 'In General'

Qualitative responses were provided by 28 participants. Themes common among the 12 responses provided by participants who had not used the Filter centred around the need for increasing awareness, with individuals who had been unaware of the tool beginning to use it after receiving information through their PHCRIS subscriptions, and encouraging additional advertising/publicity activities to further promote the benefits of the PHC Search Filter (e.g., in PHCRIS newsletters, via Facebook).

"The more we hear about it... the more likely I am to use it" [Researcher, Private Consultancy]

Many of these participants thought that the premise was valuable but had not yet had the opportunity to explore the capabilities of the Filter.

"... have not used it to date as I have not needed to do any searches where it would be appropriate. I thought it could be very useful" [Researcher, University]

Qualitative feedback from the 16 participants who had used the PHC Search Filter was generally supportive. Themes emerging from these responses were around the way in which the Filter simplified the search process.

“This tool would be great for a basic search in the primary care context, as it can simplify the search process for people who are unaccustomed to other ways of searching, or who do not have access to alternatives such as university library databases... it certainly won't hurt to add the PHCRIS option to my Favourites for future searches” [Researcher, University]

“I played with the tool, looking for information on a health topic of personal interest – was impressed with the information returned” [Policy maker, Federal Government]

“The search filter is a very useful tool and has the potential to save a lot of time when researching topics” [Practitioner, Service Delivery Organisation]

“I love it – and while being a ‘work in progress’ for you, I've already gained a lot” [Consumer, Consumer Advocacy Group]

Additional feedback centred on the theme of recommendations for future developments. These responses included lists of suggested new topics for inclusion in the one-click search, and comments on the depth of the search. As seen in the policy maker response above, some participants were pleased with the depth of information retrieved, while others felt the Filter was too broad and thus more effective when used in conjunction with other search methods.

“Very useful adjunct search tool, but find I have to search more extensively for specialist literature” [Researcher and Practitioner, University and Service Delivery Organisation]

One theme emerging from responses from both groups was around the challenge of gaining access to the full text of the articles the Filter retrieves.

“It would be great to have direct links to full text articles” [Policy maker, Federal Government]

Discussion

The PHC Search Filter was developed to facilitate easier access to literature for anyone with an interest in PHC. Designing the PHC Search Filter followed an established method with a process that ensures a validated search strategy with a known level of retrieval precision. The number of subscribers to the PHC Search Filter mailing list reflects great interest in both the PHC Search Filter and in accessing the PHC literature more broadly, and illustrates the breadth of stakeholders engaged in PHC. Results from the evaluation study suggest that the PHC Search Filter is a useful tool, with high numbers of individuals exploring the capability of the PHC Search Filter. Consistent feedback was provided that the PHC Search Filter is easy to navigate and useful both to individuals working in PHC-related areas, and in general, with support for the notion that users would recommend it to others. It seems that using both search options was popular. When considering the one-click option, there was great interest in exploring topics around chronic disease management and mental illness, both key considerations in Australian's current reform (Commonwealth of Australia, 2010). Use of these methods provides the opportunity to present the latest trends in PHC through the topic searches, but also ensures that searchers are able to access the literature and evidence that best suits their needs, be it to inform research, policy or practice.

Limitations and Future Directions

The evaluation study was able to provide a snapshot of perceptions of the value of the PHC Search Filter soon after its launch. However, generalisability of the findings was restricted by the small sample size and the likelihood that many respondents were attendees of the launch, hence potentially bringing bias to the results. Similarly, due to the small sample, it was not possible to compare perceptions across different professional groups. Future evaluations will look to recruit individuals from a range of workplace settings and roles to understand the benefits/concerns regarding the PHC Search Filter for specific groups.

While the PHC Search Filter enables quick and easy access to literature using real-time searches, it is not designed to retrieve all literature, thereby decreasing irrelevant results and the searcher's time in number needed to read. A balanced approach to retrieval is important in ensuring that the search results are not overwhelming for PHC professionals, but it may mean that some potentially relevant papers are missed, depending upon their indexing and the nature of their content. Retrieval by the PHC Search Filter is dependent upon the quality of titles, abstracts, keywords and MeSH included in PubMed, and is restricted to English language citations. Further, it must be acknowledged that despite the regular updates and wealth of literature included in PubMed, it does not index the entire world's literature, nor does it include grey literature. There was also an issue with the availability of free full text but this was context-dependent, affected by workplace subscriptions and the current open access movement.

The current version of the PHC Search Filter hosted by PHCRIS does limit searches to PubMed. However, this potential limitation is reduced by making the full URL publicly available. Instructions on the PHCRIS website describe how searchers can make use of this search string in other databases. Although the current research describes validation in the PubMed database, the development process followed a strategic path, resulting in selection of the specific search terms, informed by objective methodology and expert opinion, which is seen in the URL. Content validity can be maintained by searchers choosing to apply these same searches in different databases.

The PHC Search Filter will continue to be updated in the future, in terms of the addition of topic searches based on both users' feedback and records of keywords used in build-your-own searches. It is also possible that scoping of similar tools for use in different databases may be considered; Flinders Filters continue to develop a range of search tools for different literatures e.g., palliative care and Indigenous health. PHC involves a broad range of practitioners types thus there may be further opportunities to develop additional search filters that search for literature about specific professions or disciplines. Combining such search filters with the PHC Search Filter could subsequently provide results on practice of a particular professional group in a PHC setting.

The PHC Search Filter will be constantly monitored and evaluated to inform updates, ensure the product addresses the needs of end users and promote sustainability. The most common reason for not using the PHC Search Filter was a lack of awareness of its availability, hence strategies to promote awareness of the PHC Search Filter must be considered. Further, future evaluations may explore use across different groups and review methods for ensuring that students, policy makers, practitioners, library/information systems professionals and researchers are aware of, and able to readily engage with, the PHC Search Filter.

Conclusions

The PHC Search Filter is able to facilitate easy access to the PHC literature, potentially reducing the burden associated with searching and increasing the value of the literature being retrieved. The ability of the PHC Search Filter to search the latest, not-yet-indexed

citations means that searchers get up-to-date information - a great benefit for policy makers and practitioners requiring timely information. Based on established methods of development and validation, the PHC Search Filter is a valuable tool for encouraging the development of search skills and improving search strategies. With evidence of great interest and perceived benefit, the PHC Search Filter enables efficient and effective access to the PHC literature. With regular monitoring and updates, the PHC Search Filter will continue to be a reliable tool to facilitate access to relevant literature and increase the likelihood of incorporating evidence into both policy and practice.

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Notes

^a The Divisions of General Practice provided services and support to general practice, aiming to improve quality of service delivery and health outcomes for patients by encouraging general practitioners to work together and link with other health professionals. From July 2011 Divisions evolved into, or were substituted by primary health care organisations termed Medicare Locals(Carne, 2014).

Evaluation of the PHC Search Filter

PHC Search Filter

In July PHCRIS launched the Primary Health Care (PHC) Search Filter aimed at assisting researchers, policy makers, practitioners and anyone interested in PHC to find the PHC information they need. Accessed from the PHCRIS website, the search filter – a joint project with Flinders Filters, provides quick and easy access to PHC literature. It uses real-time searches of PubMed – a free database accessing references and abstracts on life sciences and biomedical topics.

At PHCRIS we are interested in your experience with the PHC Search Filter to date. We value your responses whether you are a regular or user of the Filter or have only glanced at it, and ask for your feedback by completing a short survey. The survey includes 12 items and should take no more than 5 minutes of your time.

Be assured that any information provided will be treated in the strictest confidence and none of the participants will be individually identifiable in any resulting report, publication or presentation.

Thank you in anticipation.

1. Have you used the PHC Search Filter?

- Yes
- No (if no, proceed to Question 10)

2. How often and for what purpose have you used the PHC Search Filter?
(>5 times, 2-4 times, Once, Never)

- Had a play
- Kept up-to-date with the literature
- Project work
- Used search URL in another bibliographic database
- Other (please specify)

3. Which of the search options do you prefer to use?

- One-click search
- Build-your-own search
- Both

4. Excluding the 12 topic searches currently included in the PHC Search Filter, are there any other topic searches you would like to see included? Please list.

5. Was the PHC Search Filter easy to navigate?

- Yes
- No – if no, why not?

6. How useful is the PHC Search Filter to you?

- Very useful
- Useful
- Somewhat useful
- Not at all useful

7. How useful do you think the PHC Search Filter is in general?

- Very useful
- Useful
- Somewhat useful
- Not at all useful

8. How did you become aware of the PHC Search Filter?

- Attended the launch
- PHCRIS eBulletin (weekly email alert service)
- PHCRIS Infonet (bi-monthly newsletter)
- Social media (Facebook, Twitter)
- Through visiting the PHCRIS website
- Web search
- Word of mouth
- Other (please specify)

9. Would you recommend the PHC Search Filter to others?

- Yes
- No
- Maybe

10. Why have you not used the PHC Search Filter?

- Didn't know it was available
- Not relevant to my work
- Difficult to navigate
- Other (please specify)

11a. Please select which best describes you.

- Researcher
- Policy maker
- Practitioner
- Consumer
- Student
- Other (please specify)

11b. Please select which best describes your organisation, the principle place of your occupation.

- University
- Research Unit
- Federal Government
- State Government
- PHC Support Organisation
- Service Delivery Organisation
- Consumer Group/Advocate Organisation
- Other (please specify)

12. If you have any further feedback or suggestions to improve the quality and/or usefulness of this tool we would love to hear about them.

We value your responses. Thank you for completing this survey.