

Integrated Care Search: Fast and Reliable Access to Integrated Care Research

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Background

Integrated care (IC) is a prime driver of healthcare policy and practice reform internationally as governments and healthcare organisations endeavour to enhance efficiencies and patient-centred approaches to care.

Why an IC Search Filter?

IC is a multifaceted concept, with a vast range of overlapping terminologies [1]. For example, in 2009, a literature review identified 175 definitions and concepts related to IC [2]. This means the evidence base is diffuse and finding relevant literature is a significant challenge.

Search filters represent one innovative solution to this problem, by enabling brokered access to the underlying evidence base for rapid utilisation. A search filter is an evidence based search strategy, designed to find certain types of articles in a particular database [3]. The search filters developed at Flinders Filters are objectively derived and validated and have a known effectiveness of recall and precision [3].

Methods

The IC search filter, *Integrated Care Search*, was developed according to a well established experimental methodology [4, 5] and with guidance from an Expert Advisory Group (EAG).

A test set of relevant citations (the 'gold standard' set) comprising n=534 citations was developed from four key sources, as highlighted in the table below:

Sources of references	No. contributing references (n)
Handbook Integrated Care and Grey literature from HIC chapters 1-2 (17 titles)	1384
Total after duplicates removed	1195
Total after screening for relevance	488
Supplemented with:	
Dual review of MeSH term (Delivery of health care, Integrated)	46
Final number in gold standard	534

The gold standard set was then divided into the following subsets:

- Term Identification Set (TIS)**
n = 107
• For identifying key text words and subject terms via frequency analysis
- Filter Development Set (FDS)**
n = 213
• For testing the performance of terms, individually and in combination
- Filter Validation Set (FVS)**
n = 214
• For testing the performance of the final search strategy, i.e. *Integrated Care Search*

Integrated Care Search

Integrated Care Search was developed and validated in Ovid Medline and then translated for use in PubMed.

The final PubMed search filter contains the following terms:

Integrated care[tw] OR integrated care[ta] OR (((Integrat*[tw] OR coordinat*[tw]) AND care[tw] AND (health[tw] OR healthcare[tw])) AND (og[sh] OR services[tw] OR delivery[tw] OR management[tw] OR systems[tw] OR model[tw] OR organisational[tw] OR organizational[tw] OR quality[tw])) OR ((Disease management[tw] OR Case management[tw]) AND (care[tw] OR health[tw] OR healthcare[tw]) AND (og[sh] OR services[tw] OR delivery[tw] OR model[tw] OR quality[tw]))

Filter Performance

Integrated Care Search has a high rate of recall (i.e. the ability to retrieve a high proportion of relevant citations within PubMed):

- Final recall in the FDS (n=213) = 188/213 or 88.26%
- Final recall in the FVS (n=214) = 184/214 or 86.00%

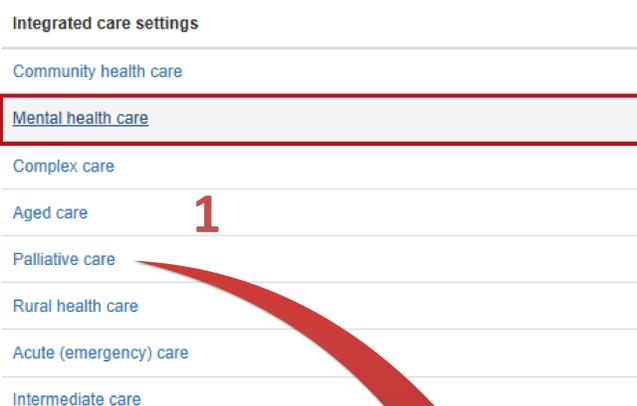
Members of the EAG will now assist the project with post hoc relevance testing. This involves screening a sample of citations retrieved by *Integrated Care Search* across the full database and indicating which citations have been correctly retrieved. From this information it is possible to get an estimation of 'precision', or the proportion of relevant citations the filter can be expected to retrieve.

Implementation

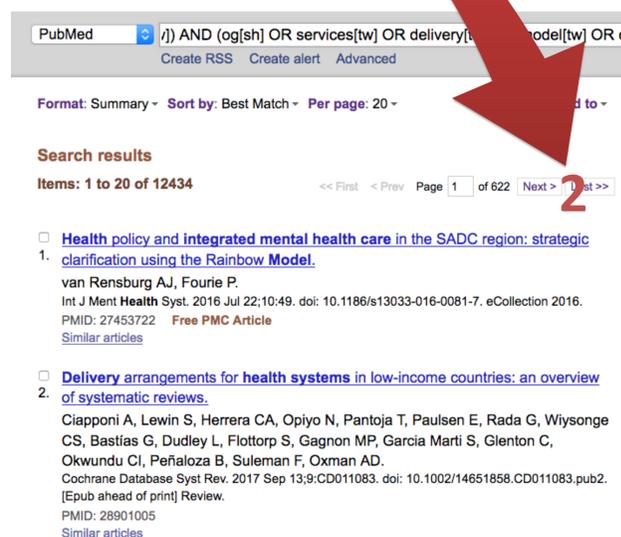
Integrated Care Search was designed to be used as a standalone search strategy and/or to be combined with 'expert searches' on topics relevant to IC, to further refine results.

Using *Integrated Care Search* will be a **simple two-step procedure**:

1. Click the topic of interest from the list provided (e.g. mental health)



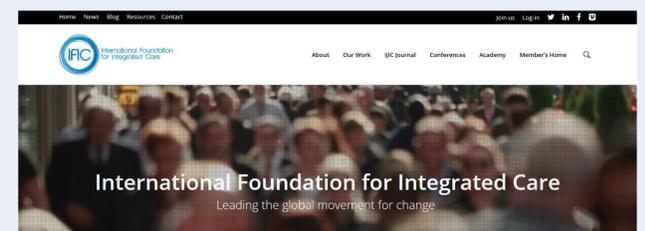
2. View your results in PubMed:



Conclusions

A simple-to-use, one-click search tool for finding relevant integrated care literature in PubMed is currently in development.

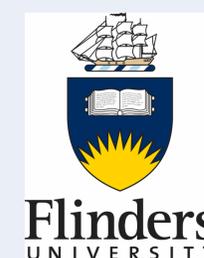
This search filter—*Integrated Care Search*—will be made freely available on the website of the International Foundation for Integrated Care: <https://integratedcarefoundation.org/>



References

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Project Partners



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