Economic Sources for Systematic Reviews of Health Policy

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Background

Economic outcomes are commonly evaluated along with clinical outcomes in health policy research. When published in business or economics sources, such articles may not be indexed in databases traditionally consulted for clinical systematic reviews. The goal of this dual case study was to explore the significance of non-health sources, especially databases that index economic research, in comprehensive searching for a systematic review of health policy interventions.

Methods

We are performing case studies of two literature searches for systematic reviews of health policy interventions: one on Formulary-Based Drug Coverage Policies and one on Direct to Consumer Advertising of Pharmaceuticals.

All citations retrieved for the reviews were tagged with their source(s) of origin (typically database name). Absolute number and percentage of relevant citations were tracked after the initial "weed," after the full-text weed, and after the reviewers had assessed full-text articles for meeting review inclusion criteria. Citation sources were analyzed for number of results used in the review, number of unique results used in the review, and "missed" results (that turned up in another database search and "should" have been duplicated in that database as well).

Results*

Results indicate that **Medline** and **EMBASE**, while highest in number of citations, had very few unique citations. Non-biomedical sources, such as economic and business databases, on the other hand, garnered relevant results not indexed in biomedical databases. Citation tracing garnered more unique results than any database.

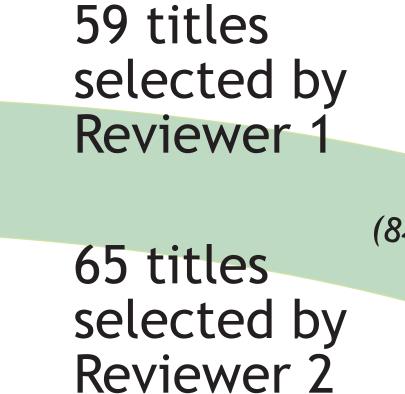
Of the twelve articles included in the Formulary-Based Drug Coverage Policies review, only three were unique to a particular database. Those databases were EconLit, ABI-Inform, and Digital Dissertations. Five additional articles were uniquely identified through citation searching. The remaining four articles appeared in multiple data sources.

SYSTEMATIC SEARCH AND WEEDING PROCESS

Formularybased policies systematic review

1301 titles selected for title review

384 titles (30%) relevant for abstract review (duplicates removed; 914 titles rejected)



Unique origin of included article

- Missed origin of article "Missed' origin of included article

X

59 titles (15%) requested for full text screening

after R1 and R2 compared

14 new articles from hand and citation searching (1 not obtained)

72 titles full text screened

42 titles sent to

reviewers

12 titles

included

in review

Where did the final review articles originate?

ABI/Inform - 1*

Digi Diss - 1* EconLit - 1* EMBASE - 4

IPA - 3 Medline - 2 **WoS** - 1

Citation searching - 6 (5*) *unique to that source

Less than 1% of the original

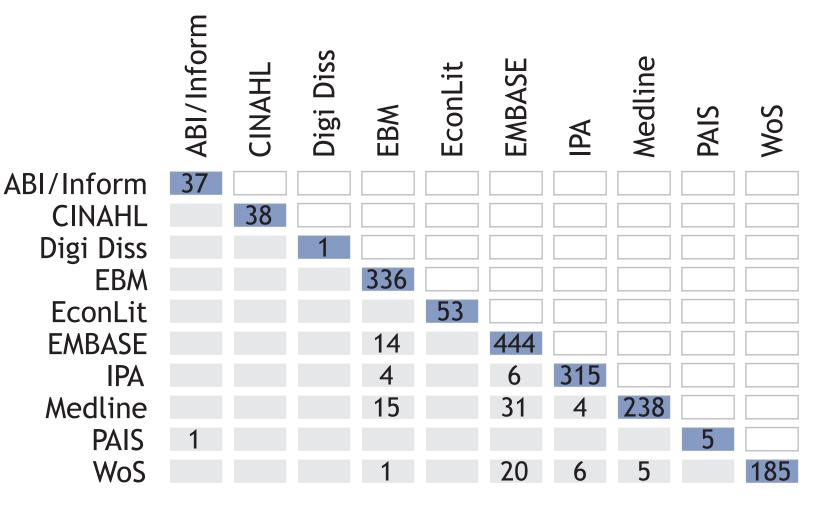
Where were the articles from?

ABI/Inform - 37 CINAHL - 38 Digi Diss - 1 EBM - 336 EconLit - 53 EMBASE- 444 IPA - 113 Medline - 89 PAIS - 5 WoS - 185

The only sources that were

appropriate articles in MEDLINE and CINAHL in our initial ity with some subject headings predominantly private health missed articles.

DUPLICATE CITATIONS

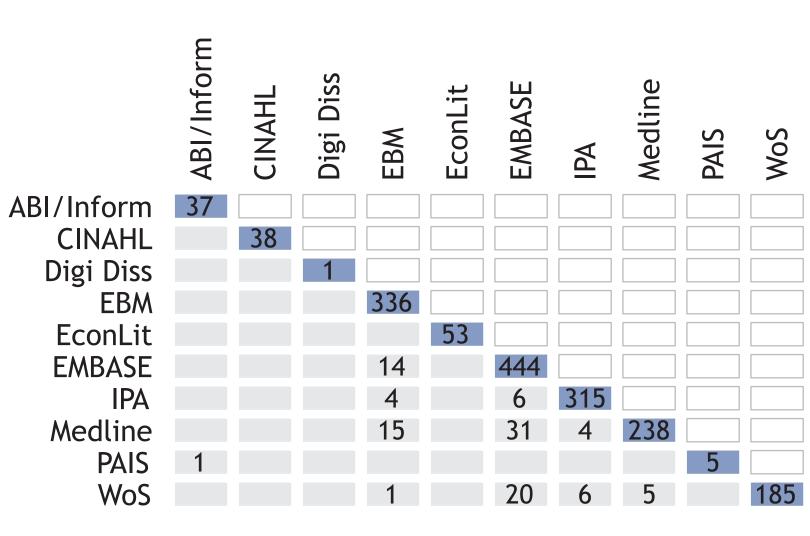


ORIGINS OF INCLUDED STUDIES

unique origins for included studies were ABI/Inform, EconLit, and citation searching/serendipity.

As expected, MEDLINE, EMBASE, and IPA did contain a relatively large number of appropriate citations, but none were unique to

We failed to uncover a number of searches, due to lack of familiarthat are used in the US context of care. Through citation searching, we were able to identify terms to add to our search and then catch



While the Direct to Consumer Advertising systematic review has not yet undergone a final full-text weed, preliminary results indicate that a similar pattern is emerging, where the smaller, non-biomedical sources appear to be providing more unique, nonduplicated citations.

*Results at time of poster are incomplete and preliminary. Fuller results will be available as the second review is completed.

Discussion

Large biomedical databases such as Medline and EMBASE, which are common first sources to consult in a health-related literature review, may not be as essential in identifying unique articles for systematic literature searching as smaller, niche databases in tangential fields, due to the large amount of duplication of content among the large, more comprehensive databases.

Investigators seeking to complete a systematic review of health policy should consider the inclusion of non-biomedical databases, particularly economic databases, in their search strategies. Citation tracing is reaffirmed as a critical element of the systematic review search process.

Key Messages

Large databases of the type that would be most useful for an initial literature search are not necessarily the most important in a systematic review, as they produced few, if any, unique citations.

Business and economics databases can provide articles not indexed in traditional health or medical databases.

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