

# Finding the Evidence on EBSCO*host* research databases

## 在EBSCOhost中查找證據: 以MEDLINE 與 CINAHL 為例

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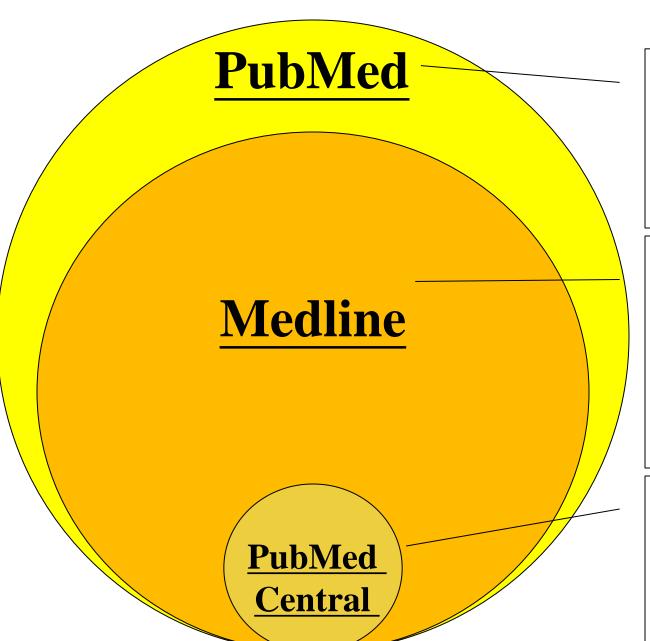
## 大綱

- PubMed, CINAHL, MEDLINE 的不同
- Finding publication types 搜尋出版品類型
- 使用 Clinical Queries
- 使用 Evidenced-Based limiters
- Additional support & guidance

# PubMed, PubMed Central and MEDLINE

- PubMed是美國國家醫學圖書館 (NLM) 所屬的國家生物技術資訊中心 (NCBI) 開發的生物醫學資訊檢索系統,該系統免費提供包括MEDLINE在內的自1950年以來全世界70多個國家4300多種主要生物醫學文獻的書目索引和摘要,並提供部分免費和付費全文連結服務。
- PubMed Central 是 2000 年 2 月由 NLM 與美國國立衛生研究院 (NIH) 聯合建立的一個生物醫學和生命科學期刊文獻全文資料庫,向全球免費開放使用。目前該系統共收錄約400 種期刊
- MEDLINE 是PubMed最主要的內容來源,提供權威性的生物醫學資訊,也由美國國家醫學圖書館(NLM),所維護,MEDLINE 使用MeSH (Medical Subject Headings) 索引。

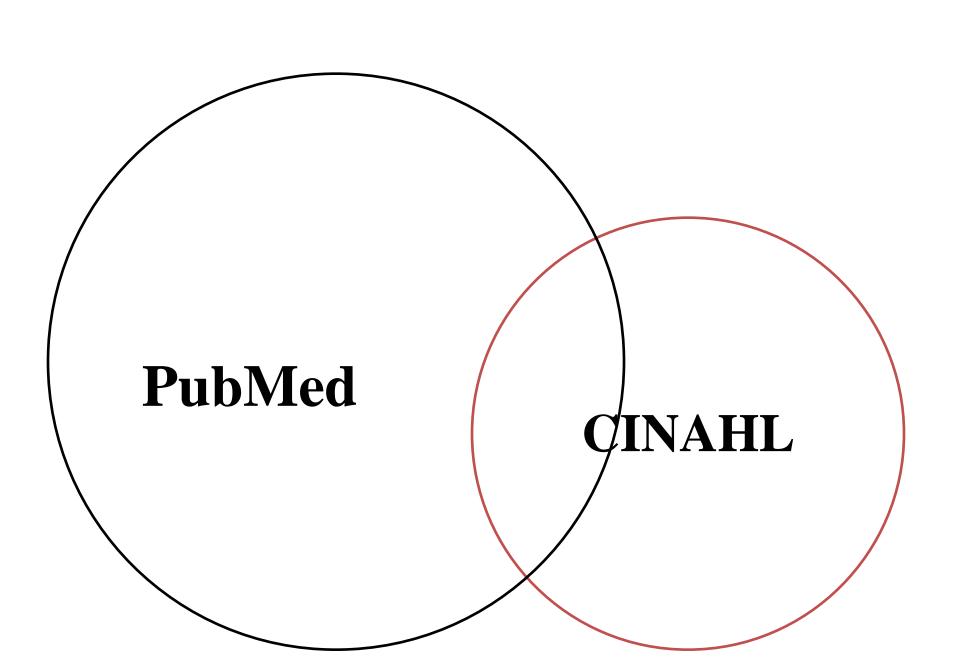
文字部分的來源:https://www.nlm.nih.gov/pubs/factsheets/dif\_med\_pub.html



PubMed has been available since 1996. Its more than 26 million references include the MEDLINE

Provides more than 23 million references to biomedical and life sciences journal articles back to 1946 around the world (Medline資料量約佔PubMed的88.5%)

PMC launched in 2000 as a free archive for full-text. (PubMed中,屬於機構 典藏的角色,儲存免費 全文)



## Differences between versions of

## CINAHL® on EBSCOhost®

	CINAHL'	CINAHL' Plus	CINAHL' with Full Text	CINAHL' Plus with Full Text	CINAHL' Complete	Nursing Reference Center	Nursing Reference Center" Plus
Journals Indexed	3,115	5,073	3,115	5,086	5,448	N/A	N/A
Begin Date of Indexing	1981	1937	1981	1937	1937	N/A	N/A
Comes with PreCINAHL	Yes	Yes	Yes	Yes	Yes	N/A	N/A
Journals with Searchable Cited References	1,321	1,440	1,321	1,440	1,529	N/A	N/A
Begin Date of Searchable Cited References	1993	1985	1993	1985	1985	N/A	N/A
Full-Text Journals	70	78	533	711	1,450	N/A	N/A
Begin Date of Full Text	1992	1991	1981	1937	1937	N/A	N/A
Full-Text Books/Monographs	N/A	N/A	N/A	11	11	11	11
Continuing Education Modules	N/A	170	N/A	170	170	1,601	2,664
Research Instruments Records	106	254	106	254	254	254	254
Full-Text Evidence-Based Care Sheets	N/A	133	N/A	133	133	1,170	1,745
Full-Text Quick Lessons	N/A	169	N/A	169	169	2,753	2,895
Full-Text Drug Guide Information	N/A	N/A	N/A	N/A	N/A	2,730	2,746
Full-Text Patient Education Handouts	N/A	N/A	N/A	N/A	N/A	3,358	8,062
Full-Text Legal Cases	N/A	N/A	N/A	N/A	N/A	791	791
Full-Text Nursing Skills & Procedures	N/A	N/A	N/A	N/A	N/A	1,203	1,478
Full-Text Care Plans	N/A	N/A	N/A	N/A	N/A	N/A	50
Images	N/A	N/A	N/A	N/A	N/A	358	1,302
Videos	N/A	N/A	N/A	N/A	N/A	N/A	689

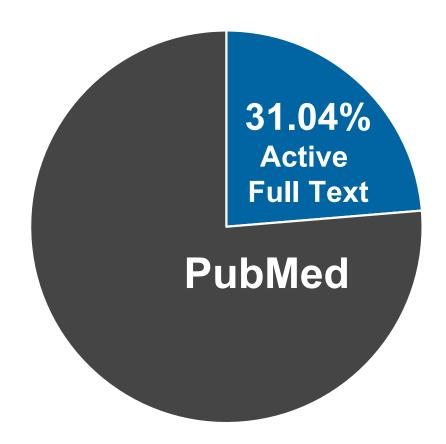
## MEDLINE Complete is the world's largest full-text companion to PubMed

MEDLINE Version	# of Full-Text Journals	# of Full-Text Peer-Reviewed Journals
MEDLINE with Full Text	1,323	1,282
MEDLINE Complete	2,340	2,264

Figures as of March 2017

# MEDLINE Complete Provides Active Full Text for More Than One Third of PubMed's Actively Indexed Journals

MEDLINE Complete provides ongoing full text for 1,748 of the 5,631 journals currently indexed in PubMed



## **Publication Types**

- Systematic Review (SR)
  - CINAHL PT systematic review
  - MEDLINE PT review
- Meta-analysis (M)
  - CINAHL PT Meta Analysis
  - MEDLINE PT Meta-Analysis
- Randomized Controlled Trial (RCT)
  - CINAHL PT Randomized Controlled Trial
  - MEDLINE PT Randomized Controlled Trial
- Guideline
  - CINAHL PT Practice Guidelines
  - MEDLINE PT Guideline

## Publication Types – CINAHL & MEDLINE

Publication Types (PT)	CINAHL	MEDLINE		
Systematic review (SR)	systematic review	review		
Meta Analysis (M)	Meta Analysis	Meta-Analysis		
Randomised Controlled Trials (RCT)	Randomized Controlled Trial	Randomized Controlled Trial		
Guidelines (G)	Practice Guidelines	Guideline		

## What are Clinical Queries?

- Clinical Queries are specific search strategies ("hedges")
   which can be applied to retrieve clinically-relevant and
   scientifically-sound results from the CINAHL® or MEDLINE
   databases.
- Created in collaboration with the Health Information Research Unit (HIRU) at McMaster University, and are designed for clinician use.
- For additional information about ongoing research, please
   visit: http://hiru.mcmaster.ca/hiru/HIRU Hedges home.aspx.

## HIRU "Hedges"



#### Health Information Research Unit Evidence-Based Health Informatics





#### ▼ Home

- McMaster Health
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#### **Hedges**

The focus of the Hedges Project (see attached for additional information), which is funded by the National Library of Medicine, is to investigate ways to develop and harness search filters ("hedges") that will improve retrieval of scientifically sound and clinically relevant study reports from large, general purpose, biomedical research bibliographic databases including MEDLINE, EMBASE, and PsycINFO. The purposes of the search filters are:

- 1, to enable health care providers to do their own clinical searches effectively and efficiently;
- 2. to help reviewers of published evidence concerning health care problems to retrieve all relevant citations;
- 3, to provide resources for librarians to help clinicians to construct their own searches; and
- 4. to provide input to the database producers about their indexing processes and the organization of their databases.

Improved search filters are needed and are important given the inherent problems of indexing and retrieval in large databases, and the widespread and rapidly increasing direct use of these databases by clinicians, researchers, educators, administrators, lawyers, journalists, patients, and the general public, whose interests are primarily directed towards a very small subset of the literature that is of most relevance to the cause, course, diagnosis, prevention, and management of health care problems. Our long-term objective is to harness the highest quality, clinically relevant contents of these electronic databases so that their effects on health care and policy can be enhanced.

Click on the following links to view the search filters for MEDLINE, EMBASE, and PsycINFO.

Our Clinical Hedges database contains data for the year 2000 for each article in each of the issues of 170 clinical journals. 161 of these journals were indexed in MEDLINE and 135 were indexed in EMBASE. Expert and highly calibrated research staff have identified and tagged the records for articles that report original and review studies (definitions shown in Table 1) about the cause (causation [etiology]), course (prognosis), diagnosis, prevention or therapy or rehabilitation, clinical prediction, or economics of human health disorders, as well as studies of quality improvement of health services, the continuing education of health professionals, and studies of a qualitative nature (definitions shown in Table 2). Studies in these "purpose categories", except for qualitative and cost studies, have been further tagged for whether they "pass" or "fail" pre-specified methodologic criteria for applied clinical research (criteria shown in Table 3).

To develop search filters in MEDLINE we assembled a list of search terms and phrases in a subset of MEDLINE records matched with a hand search of the contents of 161 journal titles for the year 2000. The search filters were treated as "diagnostic tests" for sound studies and the manual review of the literature was treated as the "gold standard". The sensitivity, specificity, accuracy, and precision (a library science term that is equivalent to the diagnostic test term "positive predictive value") of single- and multiple-term MEDLINE search filters were determined as shown in <a href="Table 4">Table 4</a>. The sensitivity for a given filter is defined as the proportion of high quality articles that are retrieved; specificity is the proportion of low quality or off topic articles not retrieved; precision is the proportion of retrieved articles that are of high quality; and accuracy is the proportion of all articles that are correctly categorized by the search filter. 49,028 articles were included in the analysis and 4,862 unique single-terms were tested.

To view the MEDLINE strategies click on the relevant article category: Therapy, Diagnosis, Review, Prognosis, Causation

## Clinical Queries - CINAHL

- Searches can be refined using specific search strategies designed to produce results in 5 research areas:
  - Therapy
  - Prognosis
  - Review
  - Qualitative
  - Causation (Aetiology)

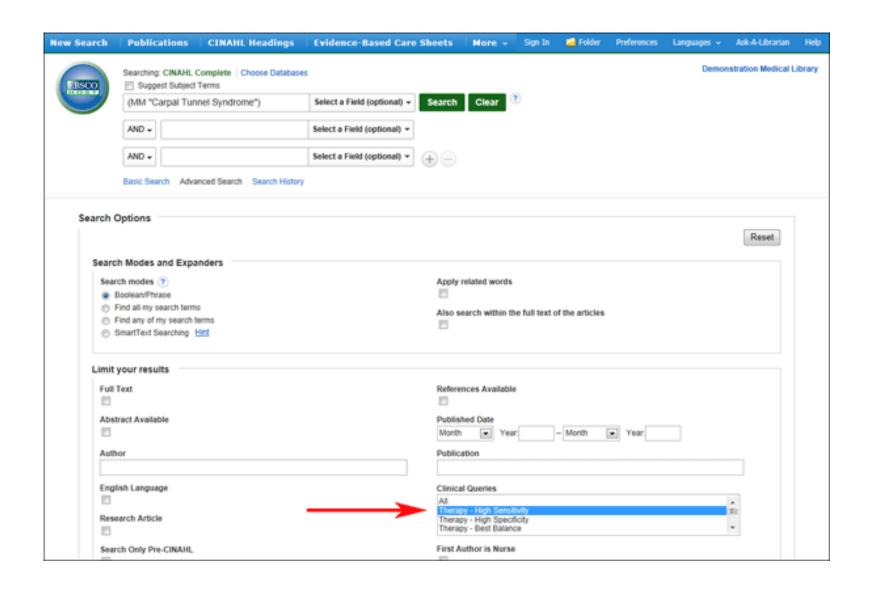
## Clinical Queries - MEDLINE

- Searches can be refined using specific search strategies designed to produce results in 9 research areas:
  - Therapy
  - Diagnosis
  - Prognosis
  - Reviews
  - Clinical Prediction Guides
  - Qualitative
  - Causation (Aetiology)
  - Costs
  - Economics

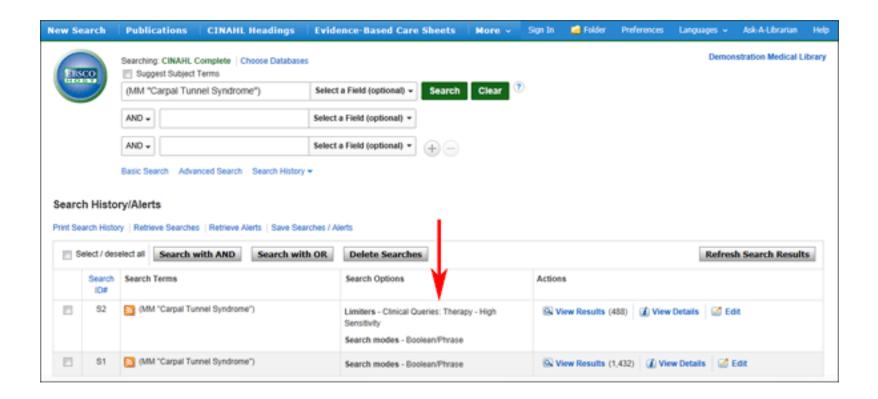
## Clinical Queries - Strategies

- As research may require different emphasis, three strategies are provided for each area:
  - High Sensitivity the broadest search to include <u>ALL</u> relevant material.
     It may include less relevant materials.
  - High Specificity the most targeted search to include only the most relevant result set, may miss some relevant materials.
  - Best Balance retrieves the <u>best balance</u> between Sensitivity and Specificity.

## CINAHL - Advanced Search



## CINAHL – Search History

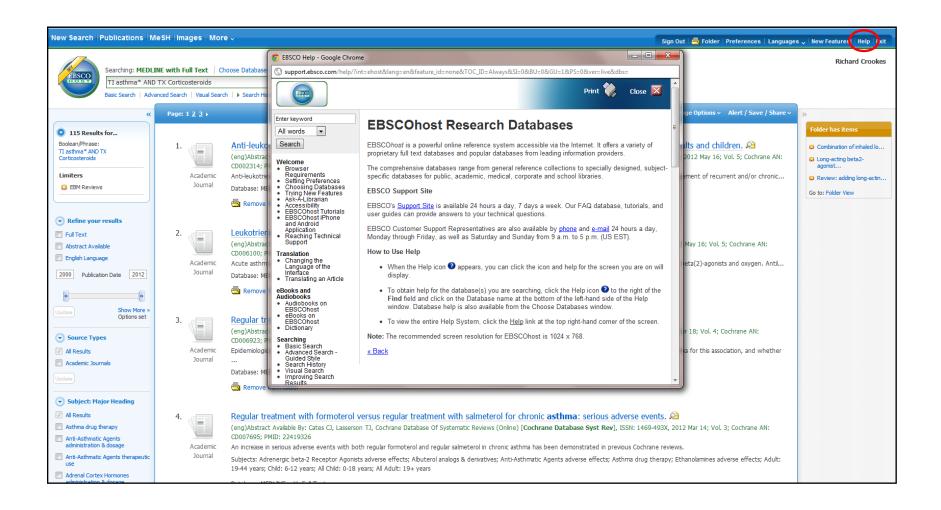


### **Evidence-Based limiters - MEDLINE**

- MEDLINE Evidence-Based Medicine (EBM)
  - The EBM Reviews limiter is a quick method to limit your search to the following 6 titles within MEDLINE:
    - The Cochrane Database of Systematic Reviews
    - ACP Journal Club
    - Clinical Evidence
    - Evidence-based Mental Health
    - Evidence-based Nursing
    - Evidence report/Technology assessment
  - This limiter is valuable as it limits your search to a small set of titles that apply very strict criteria and thus include high-quality evidencebased content, including systematic reviews.
  - You can search for a keyword, e.g. headache, and apply this limiter and retrieve a set of more valuable results quickly.

### **Evidence-Based Limiters - CINAHL**

- CINAHL Evidence-Based Practice (EBP)
  - The Evidence-based practice journal subset is applied to articles from evidence based practice journals including:
    - Cochrane
    - Articles about evidence based practice
    - Research articles (including systematic reviews, clinical trials, meta analyses, qualitative studies)
    - Commentaries on research studies (applying practice to research)
    - Case studies (if they meet the criteria of the use of research)
    - Evidence based practice terms.



At any time, click on the **Help** link to view the complete online help system.



For more information, visit the EBSCO Support Site http://support.ebsco.com

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