

Engaging with Research Practice

Session 3: Fundamentals of Research Literature Search Strategies

1. Developing an effective search strategy
2. Where to search
3. Searching databases
4. Managing results
5. Locating full text resources

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What type of review are you doing?

Bibliometric review

Narrative review

Critical review

Rapid review

Integrative review

Scoping review

Literature review

State of the art review

Mapping review

Systematic review

Meta analysis

Systematic search and review

Mixed methods review

Systematized review

Mixed studies review

Umbrella review

Does a review already exist?

Before starting work on a review first check to ensure that a review doesn't already exist, or is currently under investigation.

Check for protocols and reviews via:

- [Prospero](#)
- [Cochrane](#)
- [JBI](#)
- Plus limit database searches ([Medline](#), [Embase](#), [CINAHL](#), etc) to reviews

More details: libguides.newcastle.edu.au/sysreviews/locatingsr

1. Developing an effective search strategy

What is the effectiveness of bedrails for preventing falls among older adults?

P	Patient , Population or Problem	Older adults
I	Intervention , Prognostic Factor, or Exposure	Bedrails
C	Comparison	No comparison
O	Outcome you would like to measure	Prevention of falls

1. Developing an effective search strategy

Identify synonyms and related terms

- Think laterally – how would someone else describe the same concept?
- Is different terminology used internationally?
- Check search strategies included in Cochrane and other systematic reviews
- Use truncation for capturing words with alternate endings:
 - aborigin* retrieves aborigine, aborigines, aboriginal, aboriginality, etc

What is the effectiveness of bedrails for preventing falls among older adults?

Bedrails

Bedrail, bed rail*, side rail*, cot side*, safety rail*, physical restraint*

Falls

Fall*, accidental fall*, slip*

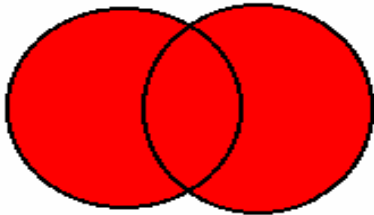
Older Adults

Older person/people/ men/women, elderly, ageing, aging, aged, geriatric*

1. Developing an effective search strategy

Link concepts and words

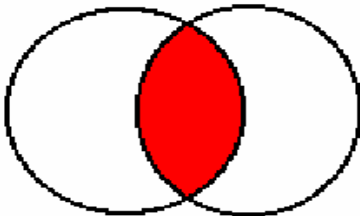
• OR



bed rail* OR bedrail* OR side rail* OR safety rail*

(Used to broaden your search, increasing the number of records)

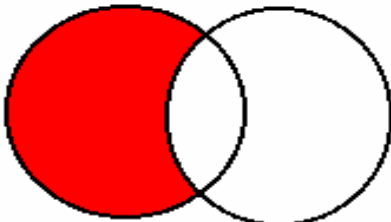
• AND



(all of the bed rail terms) AND (all of the older adults terms) AND (all of the falls terms)

(Used to narrow a search, decreasing the number of records)

• NOT



humans NOT animals

(Used to narrow a search)

2. Where to search

Journal Databases

- Bibliographic
- Citation analysis databases

Grey Literature Sources

- Government documents
- Reports
- Theses
- Clinical Trials Registers
- Conferences

Handsearching

- Key high-yield journals
- Reference lists of included studies

2. Where to search



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Quick Search Guide for Health Databases

	CINAHL (Ebsco)	MEDLINE (OVID)	EMBASE (OVID)	PSYCINFO (OVID)	COCHRANE LIBRARY	INFORMIT HEALTH	SCOPUS	WEB OF SCIENCE
SUBJECT COVERAGE	All areas of nursing and allied health, includes selected titles in alternative therapies and consumer health	Premier international biomedical database covering healthcare, health sciences, nursing and midwifery	Biomedical and pharmaceutical database produced by Elsevier.	Psychological, social, behavioural and health sciences.	7 databases covering evidence based health care	Includes databases covering indigenous health, sports medicine, health & society, drugs, rural & remote health, general Australian health	Multidisciplinary - Scientific, technical, medical and social sciences fields, and arts and humanities	Multidisciplinary - Scientific, technical, medical and social sciences fields, and arts and humanities
DATABASE SIZE	5,200+ journals, full-text for 1,350 titles	5,400 international journals, some full-text	7,500 international journals, some full-text	2,520 current journals, plus coverage of books, book chapters, and dissertations	Cochrane Reviews database includes approx. 5,000 reviews	Varies with database – includes articles, conference papers, books, book chapters, government documents, theses.	19,500 journals, 360 book series	12,000 journals, 150,000 conference proceedings, 275,000 books and book chapters
TIME PERIOD	1937+	1946+	1947+	1806+	Varies with database	Varies with database, starting 1900+	1996+	1956+
UPDATING	Weekly	Daily	Daily	Weekly	Quarterly	Varies with database	Daily	Daily
PHRASE SEARCHING Finding words together in the exact order	Enclose phrase in double quotation marks – eg. “diabetes mellitus”	Two or more words default to a phrase search			Enclose phrase in double quotation marks – eg. “diabetes mellitus”	Two or more words default to a phrase search. To find phrases which include ‘or’, ‘and’, ‘not’ enclose in double quote marks	Enclose phrase in double quotation marks – eg. “diabetes mellitus”	Enclose phrase in double quotation marks – eg. “diabetes mellitus”
TRUNCATION Identify both singular and plural forms of a word, plus words that begin with the same set of letters.	Include asterisk (*) at end of word – eg. child* retrieves all words beginning with child	Include asterisk (*) or dollar symbol (\$) at end of word – eg. child* retrieves all words beginning with child Limited truncation – specifies maximum number of characters that may follow – eg. do\$			Word variants are automatically found – eg. clear finds clear tumour mouse also finds mice run also finds ran, run, runs, running Can use * at beginning of a word to match words with suffix – eg. *tocopherol finds	Include asterisk (*) at end of word – eg. child* retrieves all words beginning with child	Word variants are automatically found – eg. a search for criterion retrieves criteria and criterion. Truncation can also be forced using the asterisk (*) - eg. child* retrieves all words beginning with child. Can use * at beginning of a word to match words with suffix – eg. *tocopherol finds α-	Include asterisk (*) at end of word – eg. child* retrieves all words beginning with child Can use * at beginning of a word to match words with suffix (must type at least 3 letters) - - eg. *tocopherol finds α-tocopherol, γ-tocopherol

libguides.newcastle.edu.au/medicine



3. Searching databases

Develop the search in one databases (usually Medline)

- For each of the PICO elements enter each word or phrase separately
- Use a combination of subject heading and keyword searches
- Combine alternate terms for each PICO element with OR
- Once all terms for each PICO element are entered, combine each of the sets with AND
- Finally, apply any limits required (such as year of publication, language, human)

Database(s): Ovid MEDLINE(R) Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily and Ovid MEDLINE(R) 1946 to Present

#	Searches	Results
1	Restraint, Physical/	11220
2	bed rail*.mp,	119
3	bedrail*.mp,	112
4	side rail*.mp,	85
5	cot side*.mp,	41
6	safety rail*.mp,	6
7	physical immobili*.mp,	106
8	1 or 2 or 3 or 4 or 5 or 6 or 7	11574
9	Accidental Falls/	20607
10	fall*.mp,	221990
11	9 or 10	221990
12	aged/ or "aged, 80 and over"/	2805180
13	((old* or elderly or senior) adj3 (adult* or female* or male* or men or women or people or person*)).mp,	349816
14	(ageing or aging or geriatric*).mp,	412463
15	12 or 13 or 14	3238794
16	8 and 11 and 15	283
17	limit 16 to english language	244

3. Searching databases

Save the search strategy

Each database allows searches to be saved – this is helpful when you need to modify the strategy, or re-run at a later time

Check the results

Check the search results – scan the title and abstract and note any additional terms that could be added to the strategy

Modify the search as required and re-save

Share the strategy with supervisor– they may be able to suggest other terms that might be useful.

Save to Word a copy of the Medline search strategy

Use as a template when searching other databases and include in Appendices

Click *Print > Include Search History > Print Preview*

4. Managing results

Next ...

Use the Medline search strategy as a template for use in other databases

Each database may use different subject headings and search commands – check the *Quick Search Guide for Health Databases*, plus help within databases for details

Download all results to the one EndNote Library

Check [Instructions for downloading from databases to EndNote](#)

Note the number of results across all databases for your PRISMA flowchart

De-duplicate results in EndNote

Firstly, via **References > Find Duplicates**

Then manually (resort records by the *Title column heading* then scan each title)

Note the number of results after de-duplication for your PRISMA flowchart



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4. Managing results: Systematic & scoping reviews



Covidence is a web-based tool that streamlines the production of systematic and scoping reviews.

It supports title and abstract, and full-text screening, risk of bias assessment, the extraction of study characteristics and outcomes, and the export of data and references.

The University has a Covidence site licence – this means all staff and students are able to use Covidence for screening systematic and scoping reviews.

Check the [Systematic Reviews LibGuide](#) for more information about Covidence and how to use

5. Locating full text resources



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a. Using EndNote? First try the 'Find Full Text' command



EndNote X8 - [mindfulness]

File Edit References Groups Tools Window Help

J Advanced Nursing

My Library

- All References (316)
- Configure Sync...
- Recently Added (5)
- Unfiled (0)
- Trash (25)
- My Groups
 - Exclude (276)
 - Include (22)
 - Maybe (18)
- Find Full Text

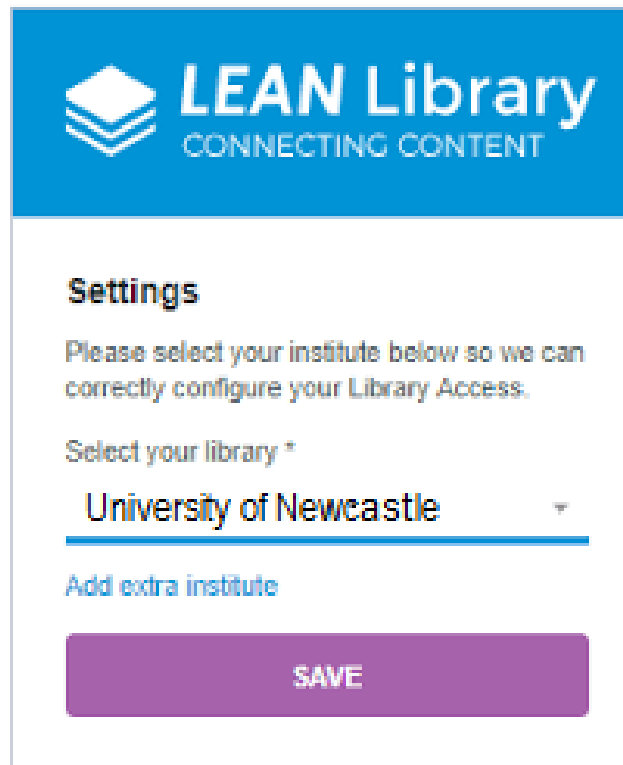
Search Options Find Full Text... Search the Web for full text documents for the selected references. Search Whole Group

Author	Year	Title	Pages	Journal	Name of Data...	Last Upd...	Added to Li...
Simon, S. T.; Ramsenthale...	2009	Core attitudes of professionals in palliative care: a q...	405-411	International Journal of Palliative N...	ccm	5/04/2017	5/04/2017
	2016	Corrigendum to "The Comparison of Experiential Av...	129-129	Archives of Psychiatric Nursing	ccm	5/04/2017	5/04/2017
Reid Ponte, Patricia; Kopp...	2015	Cultivating Mindfulness to Enhance Nursing Practice	48-55	American Journal of Nursing	ccm	5/04/2017	5/04/2017
Myers, Rachel E.	2017	Cultivating Mindfulness to Promote Self-Care and W...	259-266	AORN Journal	ccm	5/04/2017	5/04/2017
Hylton Rushton, Cynda	2017	Cultivating Moral Resilience	S11-S15	American Journal of Nursing	ccm	5/04/2017	5/04/2017
Yeager, Katherine A.; Bau...	2013	Cultural humility: Essential foundation for clinical res...	251-256	Applied Nursing Research	ccm	5/04/2017	5/04/2017
Niessen, Theo; Jacobs, Gaby	2015	Curriculum design for person-centredness: mindfuhn...	1-7	International Practice Developmen...	ccm	5/04/2017	5/04/2017
Song, Yeongsuk	2011	Depression, stress, anxiety and mindfulness in nursi...	397-402	Korean Journal of Adult Nursing	ccm	5/04/2017	5/04/2017
Gallacher, Rose	2014	Depression... This practice profile is based on NS715...	61-61	Nursing Standard	ccm	5/04/2017	5/04/2017
	2014	Developing a Nursing IQ - Part 1 Characteristics of Cr...	6-14	ISNA Bulletin	ccm	5/04/2017	5/04/2017
Scheick, Dawn M.	2011	DEVELOPING SELF-AWARE MLNDFULNESS TO MANA...	114-123	Journal of Professional Nursing	ccm	5/04/2017	5/04/2017
Saeloo, Jamjuree; Hattha...	2012	Development and Evaluation of a Self-Healing Nursin...	64-77	Pacific Rim International Journal of ...	ccm	5/04/2017	5/04/2017
Park, J. S.; Oh, Y. H.	2012	Development and evaluation of the psychosocial dis...	1p-1p	Korean Journal of Adult Nursing	ccm	5/04/2017	5/04/2017
Schwind, Jasna K.; McCay...	2016	Development and Implementation of an Advanced T...	592-597	Journal of Nursing Education	ccm	5/04/2017	5/04/2017
Mercer, Stewart William; ...	2016	The development and optimisation of a primary care...	165-181	Chronic Illness	ccm	5/04/2017	5/04/2017
Phillips, Anne	2014	Diabetes-related grief and distress: recognition in pr...	615-618	Practice Nursing	ccm	5/04/2017	5/04/2017
Rossiter, Rachel; Brownie...	2015	Difficult and frustrating? Caring for those with chroni...	1-1	American Nurse Today	ccm	5/04/2017	5/04/2017
McPherson, Susan; Hiske...	2016	Distress in working on dementia wards - A threat to...	95-104	International Journal of Nursing Stu...	ccm	5/04/2017	5/04/2017
Beddoe, A. E.; Murphy, S....	2004	Does mindfulness decrease stress and foster empat...	305-312	Journal of Nursing Education	ccm	5/04/2017	5/04/2017
Penprase, Barbara	2015	Does mindfulness-based stress reduction training im...	38-45	Nursing Management	ccm	5/04/2017	5/04/2017
Raso, Rosanne	2016	Drinking from the fire hose	6-6	Nursing Management	ccm	5/04/2017	5/04/2017
	2014	Editor's Note...Does mindfulness training reduce the...	43-43	Australian Nursing & Midwifery Jou...	ccm	5/04/2017	5/04/2017

5. Locating full text resources

b. If not found via Find Full Text, load the LEAN LIBRARY plugin to identify UON subscribed resources

www.newcastle.edu.au/library/access/find-ejournals/lean-library



The screenshot shows the LEAN Library settings interface. At the top is a blue header with the LEAN Library logo (a stylized white cube) and the text "LEAN Library" and "CONNECTING CONTENT". Below the header, the section is titled "Settings". A message reads: "Please select your institute below so we can correctly configure your Library Access." Below this is a label "Select your library *" followed by a dropdown menu. The dropdown menu is open, showing "University of Newcastle" as the selected option. Below the dropdown is a link "Add extra institute". At the bottom is a large purple button labeled "SAVE".

5. Locating full text resources

c. If unsuccessful locating the full text via EndNote or Lean Library, request a copy via Get It



Use **get it** to search and request the loan of books, research reports, patents, theses, etc and copies of journal articles, chapters from books not held by the University Library.

Articles are sent as email attachment.

Access:

Via Library Homepage – www.newcastle.edu.au/service/library/

Via the “Borrowing from other Libraries” link