

Finding Evidence

Purpose of this resource

This is an introductory resource for local authority colleagues seeking to identify existing evidence on a research topic or to plan or evaluate a service or intervention. It offers hints, tips and tools to help you take a structured approach to searching for existing research and evidence. This resource aims to support local authority colleagues to conduct their own literature searches to facilitate more evidence-based decision-making.

You may find it helpful look at existing evidence for several reasons, including:

- To find evidence to support the development of a logic or theory of change model for a new service or activity
- To identify evaluation methods for a service, including survey questions you could use
- To find researchers working on a topic who could provide advice/ be interested in collaborating with your local authority
- To find gaps in evidence which your research or project could fill

This guide is written specifically with public health teams in mind but much of the content is relevant for all local authority colleagues. It is structured around the different stages of a search and aims to help you answer the following questions:

- What evidence do I want to find and why?
- Where can I find existing evidence and literature?
- How can I plan my search?
- Can I use artificial intelligence to help me?
- How do I assess relevance, reliability and robustness of existing evidence and literature?
- How do I record the evidence/literature I have reviewed?

More specialist support with literature searching is also available from two external organisations:

UK Health Security Agency (UKHSA) services for local authority colleagues

UKHSA provide access to academic literature for local authority colleagues and can conduct literature searches on their behalf. Services are strictly for public health department staff members due to licensing. When a request is received, UKHSA staff will conduct checks to ensure that requests for Open Athens access and literature searches etc. are from staff members based within the public health department or team. Those in other departments/teams based within the public health directorate may not be eligible for services.

You can read more about the services on offer and how to access them here: [Services for local authority public health staff: UKHSA Knowledge and Library Services - GOV.UK](#)

Local authority public health staff who are based within the public health directorate can register for an OpenAthens account here: [NICE OpenAthens](#). When asked for your organisation name, type 'Public Health Staff in England' and use your workplace email address when registering. You should then receive an email confirmation with a link to create your own password. This activates your account. If not received check your junk email; then contact libraries@kls.ukhsa.gov.uk for support.

Local authority colleagues can request a literature search to be conducted by UKSHA: [Request a literature search](#).

Local authority colleagues can also contact regional specialists to ask any questions about how to do a literature search. [See their regional specialist list](#).

UKHSA Knowledge and Library Services do not cover:

- Reviews (including systematic reviews) of any type. They carry out searches in a systematic way to a high standard, but the searches do not follow the protocols needed for systematic reviews.
- Answering questions relating to publishing, how to conduct research, summarising and evidence synthesis, referencing or the research process beyond the literature search.
- Queries and requests from colleagues in wider local authority departments (including social care), even if received via a PH team member. They only answer public health related queries

Specialist Centre for Public Health Pre-Award Research Design Advice Service

Please contact the Specialist Centre for Public Health Pre-Award Research Design Advice Service if you would like further support or advice on specialist searches: [Pre award research design advice](#).

Our team of methodologists can help local authority colleagues to define their research question and study and can also offer advice to colleagues in departments that fall under the wider determinants of health. If the research is social care related colleagues should request advice from the [Specialist Centre for Social Care](#).

The team can't conduct a literature review or search on your behalf, but they can advise on how to approach different types of review and how to conduct your searches.

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1. Types of evidence

Before starting your search, we suggest you consider what types of evidence you want to find and why.

It is likely your search for existing evidence will focus on:

- **Academic publications** – such as journal articles, books, theses, and conference papers. The quality of academic publications is maintained through a peer review process whereby all journal articles are reviewed by other experts in the area before publication.
- **Grey literature** – documents and reports that are not peer reviewed and often published by non-academic organisations such as central government, local government, charities and non-governmental bodies. As grey literature is not peer reviewed, it can be more difficult to assess quality.
- Local authorities often also call on **other forms of evidence** – sometimes this is captured as an ‘evidence pie’, adapted from Lewing, Gross and Molloy (2022), Early Intervention Foundation. [Read more](#) about how Rhondda Cynon Taf Health Determinants Research Collaboration use the evidence pie.

Some different research disciplines (for example, clinical research) use hierarchies to rank the importance of different kinds of evidence. However, there is recognition that for Public Health, decision-makers may need to call on different forms of evidence to inform policy and practice. [Parkhurst and Abeyasinghe \(2016\)](#) suggest that it may be more helpful to think about the ‘appropriateness’ of the evidence and research for the specific question and policy area you are working on.

2. Where to search

Academic Literature

You may choose different sources to search depending which types of evidence you want to look for. Academic publications (including journal articles, books, theses, and conference papers) are either available on academic databases (only available through organisational subscriptions (usually held by a university) or Open Access Databases (repositories of information that are open to all).

Databases you may find helpful include:

Name	Web link	Notes
PubMed	https://pubmed.ncbi.nlm.nih.gov	Can be used with key words or search strings Medical publications. Available as a phone app.
Europe PMC	https://europepmc.org/	Can be used with key words or a query builder Medical publications, an alternative to PubMed
Core Connecting Repositories	https://core.ac.uk	Open access research papers – key words.
DOAJ - Directory of Open Access Journals	https://doaj.org	Open access research papers – key words
Google Scholar	https://scholar.google.com/	A simple search for literature across a range of disciplines
Open Alex	https://openalex.org/	Free open-source database of scientific papers.
The Lens	https://www.lens.org/	Patents and scholarly research.

UK Health Security Agency research portal	https://researchportal.ukhsa.gov.uk/	It has a simple key word search and a more advanced search tool.
Unpaywall	https://unpaywall.org/articles	Key words, search for journal articles
ResearchGate	Home Feed ResearchGate.	Individual academic profiles and publications.
PHIRST Evaluations Database	Publications - NIHR Public Health Interventions Responsive Studies Teams (PHIRST)	Publications based on evaluations of public health interventions undertaken in local authorities

Some further useful platforms for evidence on health interventions are given below:

Name	Web link	Notes
TRIP Medical Database	www.tripdatabase.com	Searches can consist of key words, PICO* or search strings. Also available as a phone app. Searches for evidence and presents in a hierarchy.
Epistemonikos	www.epistemonikos.org	Searches can consist of key words or search strings Useful for systematic reviews
Cochrane Library	www.cochranelibrary.com	Searches can consist of key words, PICO* or search strings Systematic reviews and clinical trials.
Google/Chatbot tools/Perplexity		Use wisely - ask for references / locate sources rather than trust the answer.

BMJ Best Practice	Homepage BMJ Best Practice	Available as a phone app as well as online. Clinical decision support tool.
Clinical Key	ClinicalKey Elsevier	Available as a phone app. Clinician support tool.

Grey literature

Some useful places to find grey literature include:

Name	Web link	Notes
Local Government Inform	https://lginform.local.gov.uk/	Data collection across a range of themes. Can be searched
Local Government Association	https://www.local.gov.uk/	Searchable Reports/data/publications
Find open data	www.data.gov.uk	Data published by central government, local authorities and public bodies
Office of National Statistics	www.ons.gov.uk	High level data, census collections, possibly part of an initial scoping exercise.
Fingertips data	Fingertips Department of Health and Social Care	Data on a range of public health topics that are drawn on for the Joint Strategic Needs Assessments undertaken by local authorities.

3. Plan your search

Before you start searching, take a few minutes to plan your search topic and what search terms you are going to use.

It can help to think of PICO* to help plan a research question.

P	Population
I	Intervention
C	Comparison
O	Outcome

For searching you only need to use certain parts of the acronym (to plan your research question you need to use more). You should focus on developing search terms for the Population and for the Intervention.

Example: Does music therapy help reduce symptoms of dementia?

Population: People with dementia

Intervention: Music therapy

Depending on your research question you might also want to think about the setting, type of service, country, research design, date.

Other search frameworks and resources that may be useful:

- [Searching using a strategy - PEO, PICO, SPIDER - Developing Research Skills for Evidence and Enquiry for Practice \(HWLS\) - LibGuides at Sheffield Hallam University.](#)
- [Forming a research question with PICO, PEO or PIO - Teeside University](#)

Search terms

There are different ways to combine your search terms together.

- AND and OR are both used routinely to combine searches.
- OR is used to combine synonyms or very similar related concepts and will make the search results bigger.
- AND is used to combine different concepts and will make the search results smaller.

You can use these terms to narrow down your search while targeting all the articles of interest.

Other tips for searching

Synonyms. Consider all the terms an author might have used in their paper, e.g. cannabis or marijuana or hashish or weed. They might not have used the word you are thinking of.

Truncation. A word could have several different endings, e.g. exam, exams, examination, examinations. This could all be covered by searching for exam* which will find all the different possible endings to the word.

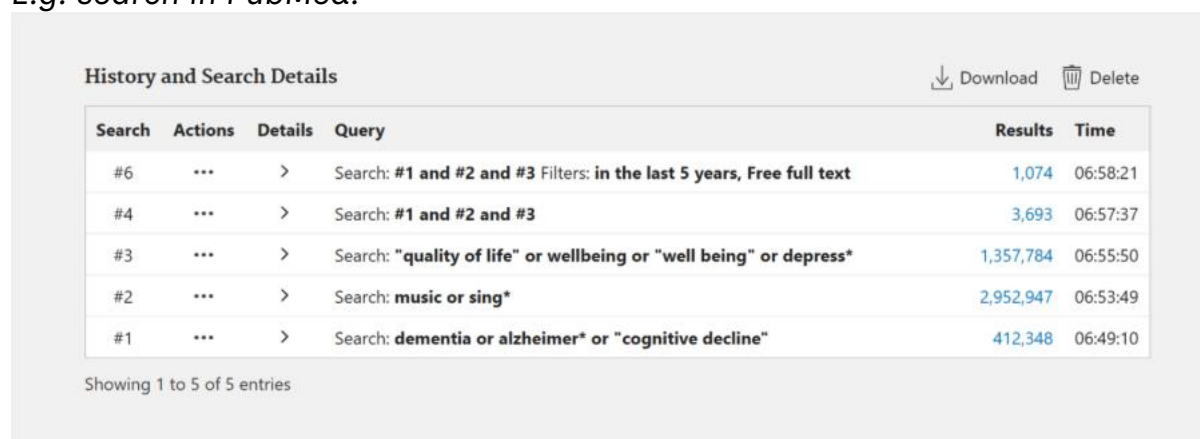
Spelling. Think of American and British spelling variations. E.g. behaviour or behavior.

Abbreviations. Consider whether there are any relevant ones for your subject e.g. search for PTSD as well as for post-traumatic stress disorder.

Quotation marks. Use these to keep a phrase together, otherwise the database may try to combine your words with AND or OR instead. E.g. “care home” (not care OR home).

Line by line searching. It can be better to type each search concept into a separate line of your search, so you can see if the results are useful or not, before combining your search lines with relevant Boolean operators.

E.g. search in PubMed:



History and Search Details						Download	Delete
Search	Actions	Details	Query	Results	Time		
#6	...	>	Search: #1 and #2 and #3 Filters: in the last 5 years, Free full text	1,074	06:58:21		
#4	...	>	Search: #1 and #2 and #3	3,693	06:57:37		
#3	...	>	Search: "quality of life" or wellbeing or "well being" or depress*	1,357,784	06:55:50		
#2	...	>	Search: music or sing*	2,952,947	06:53:49		
#1	...	>	Search: dementia or alzheimer* or "cognitive decline"	412,348	06:49:10		

Showing 1 to 5 of 5 entries

You may find it helpful to plan your search using the search strategy plan template in Appendix 1.

Common problems with searching

Problem	Potential solutions
Too many results	Adjust the time period of the search – so rather than publications of the past 10 years, reducing to 5. Limit to English Language. Limit to a particular publication type if the database allows this. Geography, e.g. UK or Europe rather than worldwide.
Not enough results	Check your search terms, e.g. – include American spellings, terms sometimes change or are updated. Think of synonyms or other ways to describe what you are searching for. Try wider search methods such as grey literature and hand searching.
Missing records	Trying wider search methods such as grey literature and hand searching. Find a similar article and check the reference list.

When do you stop	If you start to see the same articles or resources appear in the searches you have run in multiple resources.
Is this real	Seek to verify it using https://retractionwatch.com/ . Also review the authors – is there only one? What else did they write?

4. Using artificial intelligence for searching

Artificial Intelligence (AI) is a rapidly evolving resource. It can be useful for some initial scoping to understand what is available, to retrieve specific documents or to help with research methods however, it should be used with caution. A manually constructed search strategy is more labour intensive but reduces risk of bias and provides a sufficiently broad range of evidence.

AI will find you answers but they may not be the best quality, or the most reliable pieces of evidence. AI will also make things up sometimes, known as ‘hallucinations’. Answers from AI can seem very confident and reliable but they may not be.

When AI systems recommend research papers, they consistently exacerbate the Matthew effect – the tendency for highly cited work to accumulate even more citations while lesser-known research remains invisible. More than 60% of AI-generated suggestions fall in the top 1% of most-cited articles, more than twice the number seen in human-curated reference lists.

In the current time AI is also known for being at risk of bias in web searches, also vulnerable to cyber-attacks such as prompt injection where sensitive data can be leaked or misinformation is retrieved.

Sometimes generative text AI models like Chat GPT make up facts. This can range from offering incorrect explanations, making up books and articles, or inventing an answer which sounds correct but isn’t factually supported. When AI is ‘searching’ for an answer it is using the massive data sets it has been trained upon, and these will include bias.

Further reading:

The following article in the Lancet considers some of the implications of AI in public health: [Artificial intelligence in public health: promises, challenges, and an agenda for policy makers and public health institutions – The Lancet Public Health](#)

[Cochrane](#) (an independent network which reviews health evidence) have issued a position statement on AI: [Position statement on artificial intelligence \(AI\) use in evidence synthesis across Cochrane, the Campbell Collaboration, JBI and the Collaboration for Environmental Evidence 2025 | Cochrane Library](#)

5. Frameworks to review literature

Before reading this section, you may find it helpful to watch our [webinar – How do I read a paper?](#)

Assessing the quality and relevance of evidence and literature is sometimes called ‘critical appraisal’. The Critical Appraisal Skills Programme offers several detailed [checklists](#) to support you to review different types of literature, however some key considerations you may find helpful are given in a table below:

Overall consideration	A few things to look for
How reliable is the research – where did it come from?	Who undertook the research? Could they have any vested interests that could skew the results (e.g. a fast-food company sponsoring a research study on diet).
How robust is the research – is the way the research was done clear?	Is there a clear explanation of how the research was undertaken (how data was collected and analysed)? If the research involved people – how big was the study and who was involved? Are the findings focused on a particular population (e.g. university students)?
How relevant the research is – does it respond to the context we are working in?	When was the research undertaken? Are the findings recent? Was the research undertaken in a UK context?
How inclusive was the research?	Who took part in this research? Were underserved communities supported to take part in the research? Did public or community contributors help share the research?

6. Recording the evidence and literature reviewed

When writing up a summary of existing evidence, you will need to include a bibliography with ‘citations’ of the documents you have drawn on. This is also sometimes called a list of references.

We highly recommend you keep a record of references as you go as otherwise writing your bibliography can become a very time-consuming process! A reference tool will help with compiling and organising citations. This will help you to build your bibliography as you go.

It may be helpful to think about the format you save references and to keep this consistent. There are commonly three different formats used:

Referencing style	Example
American Psychological Association	Parkhurst, J. O., & Abeysinghe, S. (2016). What Constitutes “Good” Evidence for Public Health and Social Policy-making? From Hierarchies to Appropriateness. <i>Social Epistemology</i> , 30(5-6), 665-679. https://doi.org/10.1080/02691728.2016.1172365
Chicago style	Parkhurst, Justin O., and Sudeepa Abeysinghe. 2016. “What Constitutes ‘Good’ Evidence for Public Health and Social Policy-Making? From Hierarchies to Appropriateness.” <i>Social Epistemology</i> 30 (5-6): 665-79. doi: 10.1080/02691728.2016.1172365 .
Harvard style	Parkhurst, J. O. and Abeysinghe, S. (2016) ‘What Constitutes “Good” Evidence for Public Health and Social Policy-making? From Hierarchies to Appropriateness’, <i>Social Epistemology</i> , 30(5-6), pp. 665-679. doi: 10.1080/02691728.2016.1172365 .

Reference tools can also be used to download and manage literature search results. For example, a search can be carried out in both PubMed and Cochrane (databases), and all the results can be downloaded to Zotero. Duplicate records can then be identified and deleted using the reference management software. Search results can also be stored and screened to determine which records are relevant to the research question.

Different referencing tools you can use include:

Name	Address	Notes
Endnote	https://endnote.com/	A licenced product requiring a subscription; may be available through large organisations, associateship with a university or other large organisation, such as an NHS library.
Zotero	https://www.zotero.org/	Free – Open source and non-profit.

Mendeley	https://www.mendeley.com/	Free – however it is possible to buy ‘premium’.
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You may need to speak to your IT department to get access to these tools.

Quick look up tools

These tools may be useful for looking up one or two citations / references but potentially less time effective for several citations. AI is developing quickly, we’ve experimented with it and found it can create references; however, it currently needs considerable instruction.

Name	Address	Notes
Scribbr	https://www.scribbr.com/	One off citations formatting – Also offers free plagiarism checker. But subscription needed for other document checks.
MyBib	https://www.mybib.com/tools	Maybe more challenging if you need to change a reference style
AI tools	Ask Claude, MS Co Pilot, Chat GTP	This can be used for one off citations however it is laborious as it requires clear instructions which can involve trial and error.

Further resources

- [Retraction watch](#) is a free searchable database which can be used if you are unsure of the reliability of documents in your search. You can check whether a journal article has been retracted here.
- [UKHSA Knowledge and Library service](#) gives access to resources for local authority public health staff. Contact your regional evidence specialist for help with a search, information skills training and access to resources.
- NIHR Applied Research Collaboration West have further details on how to conduct an evidence search – [Looking for evidence – ARC West](#)
- The Specialist Centre for Public Health Research has a number of detailed resources available to support you further within the [Introduction to using published research](#) section of the Training and Development offer.

If you need some help or support with looking for evidence, please contact the SCPH [Pre award research design advice](#).

Appendix 1 – Template search strategy

Search objective	e.g. to find existing evidence/literature on (add topic)
Where to search	Which academic databases will you search? What websites will you use to find grey literature?

Inclusion & Exclusion Criteria

Inclusion	Exclusion
<i>For example:</i> - Local, national and international published academic literature – primary and secondary sources - Books and book chapters - Policies and guidance documents - Peer reviewed articles - Written in English - Quantitative & Qualitative research - UK studies - Literature/ evidence from the last 10 years	<i>For example:</i> - Non-English language papers - Studies taking place outside of the UK

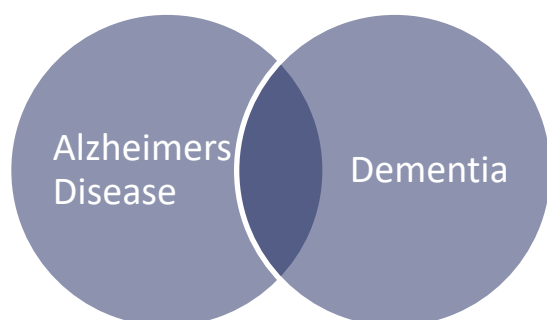
Database search terms

Concept	Search terms
<i>For example:</i> Partnership working	“Partnership working” OR collaboration* OR “joined up working” OR “joined up practice” OR alliance OR “team working”
Public health	“Public health” OR “Community health”

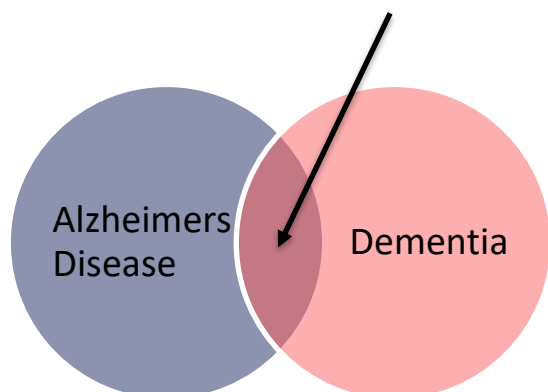
There are different ways to combine your search terms together.

AND and OR are both used routinely to combine searches. These are called 'Boolean operators'.

OR is used to combine synonyms or very similar related concepts and will make the search results bigger.



AND is used to combine different concepts and will make the search results smaller.



You may find it helpful to use a table to explore how different search terms can be combined:

Combine different concepts with AND →

Population	Intervention
Dementia	Music
Alzheimer	Singing
Cognitive decline	Orchestra

**Combine synonyms/
similar concepts with OR**

