Search Tips

→ How to find the information you need
We all know it can be difficult to find the information you need to answer a question.

- What do I need to know?
- Where should I look?
- How do I know if I can trust the information I’ve found?

This short guide will take you through a series of tips and advice to help you find the answers in the time you have. An example is also included at the end of the resource.

Click on the sections below to get started...

Sections

- What do you need to know?
- Different sources for different questions
- Assessing quality
- What next?
- Worked example

About this resource
What do you need to know?

It helps to put a bit of thought into this to save you time later on.

Click the headings below for advice on what to think about and how you can build your question so that you can be confident the information you find is relevant and useful.

- What do you want to achieve?
- Planning your search
- Tips for searching
What do you want to achieve?

Thinking about why you're looking for information and what you want to do with the answer is important as it will change how you go about searching for it.

For example, spending a few minutes to find a specific fact is very different from planning a report or research project - and chances are the people you expect to share the results with will also differ significantly. Please find below some possible types of question:

- Get an overview of a topic for background information
- Find a fact or specific piece of information or the latest evidence
- Find information to give to a patient or client / another person
- Conduct some research
- Compare local practice with published evidence
- Find people to learn from the experiences of others or experts
Planning your search

Remember, you have to ask the right question to get the right answer! The more careful you are in wording your question (or search strategy), the more likely it is that your search will return results you can use.

- **Concepts:** Start by breaking your question down into concepts or component parts.
  
  Think about:
  The setting, the people and the actions in your question. If you need to be more specific, try using exercises like PICO (Population, Intervention, Comparison, Outcome) to think more about your question. Click here for more information on PICO and other tools. Keep in mind the purpose of your search and what you want to achieve.

- **Key words:** It’s important to know what you’re asking, but most of the websites you will use to search for information will work better if you describe what you want to know in a selection of key words, rather than a long sentence.
  
  Think about:
  Which words are “key” to each of the concepts in your question? Synonyms – words which mean nearly the same thing, e.g. pain vs ache
  Stop words – words like ‘the’ and ‘a’ which can be removed without losing any of the essential concepts
  Other spellings – especially UK vs US – eg colour vs color

  TIP: make a table of key words in your question, together with some alternative terms. This can cut down on search time and make sure you don’t miss anything important!

- Now you have a selection of key words which will become your search terms.
Tips for searching

- **Combining key words/search terms:** A lot of search engines will do this for you in the background, but sometimes using simple tricks to combine your search terms can get you much better results.

- **Boolean Operators:** If you know what a Boolean Operator is congratulations! If not, don’t worry, you have likely encountered them before without ever realising it and they are very easy to get the hang of.

  There are three Boolean operators, AND OR NOT (often entered in ALL CAPS), and putting them in between your search terms will change your list of search results.

- **Help pages:** Many search engines and web sites offer help and guidance for searching, which can include shortcuts to improve your search. Look for the help pages for shortcuts specific to that site.

  For example:

  - **Filters:** a menu of options which allows you to add limits like date range to reduce the number of search results (don’t add too many or you’ll end up with zilch)
  
  - **Truncation:** use * or ? to search singular, plural and other versions of a term, e.g. Nurs* - to find nurse, nurses, nursing
  
  - **Quotation marks:** use “” to search a phrase, e.g. “social media” – to find only the two words together
  
  - **Brackets:** use () to link concepts, e.g. (nurs* AND “social media”) – to find all of above combined

[Click here to view a graphic of Boolean Operators]
Different sources for different questions

There are lots of different sources which you can use to find the information you need and it helps to consider which is most appropriate for the question you are asking.

- Selecting your source
- Using Google
Selecting your source

You’ve already spent some time thinking about the purpose of your search to help build your question and this will also help you to choose which source to use (we told you it would come in handy!). There are no hard and fast rules, so consider the below to help you run a more focussed search, but remember these are only suggestions.

<table>
<thead>
<tr>
<th>Type of Question</th>
<th>Type of Source</th>
<th>Find out more</th>
</tr>
</thead>
<tbody>
<tr>
<td>Get an overview of a topic</td>
<td><strong>Know about</strong> - less specific background questions which give you information about a topic. Useful sources include text books and summaries.</td>
<td><img src="image" alt="Learn More" /></td>
</tr>
<tr>
<td>Check a fact or specific piece of information or evidence</td>
<td><strong>Know what to do</strong> – specific and focused. High quality sources that help you to base your decisions on latest evidence.</td>
<td><img src="image" alt="Learn More" /></td>
</tr>
<tr>
<td>Conduct some research</td>
<td><strong>Research</strong> – systematic. Usually needs to be transparent and include a record of sources.</td>
<td><img src="image" alt="Learn More" /></td>
</tr>
<tr>
<td>Compare local practice with the latest published evidence</td>
<td><strong>Know how</strong> – practical. Use the sources highlighted in Know what and combine with data and information about local environment and circumstances.</td>
<td><img src="image" alt="Learn More" /></td>
</tr>
<tr>
<td>Find people to learn from the experiences of others or experts</td>
<td><strong>Know who</strong> – experience. Talking to a person who knows about the area you’re investigating, like a colleague, community, etc.</td>
<td><img src="image" alt="Learn More" /></td>
</tr>
<tr>
<td>Find suitable information to give to a patient or client / another person</td>
<td><strong>Sharing with others</strong> - NHS, local authority and the government, plus many Scottish organisations and charities provide a range of quality information which you can share with others.</td>
<td><img src="image" alt="Learn More" /></td>
</tr>
</tbody>
</table>
Know about

Selecting a source to get an overview or background information about a topic depends on how much information you need.

Evidence summaries and Point of Care resources are useful, see ‘Know what to do’ on the table.

Reference books and text books are also useful, search the broad range of health and social care books available via The Knowledge Network.
Sharing with others

It is important to provide appropriate, relevant and up to date information. Useful websites include NHS24, Health Scotland and major UK charities.

The other aspect of sharing information is to ensure the person has understood the information. Lack of understanding is a common cause of poor health. Patients are often confused by information given to them by health and social care staff, even when they say they have understood. This is often due to poor health literacy.

Health literacy is about people having enough knowledge, understanding, skills and confidence to use health information, to be active partners in their care, and to navigate the health and social care systems.

The Health Literacy Place website [http://www.healthliteracyplace.org.uk](http://www.healthliteracyplace.org.uk) provides useful tools to help you.
Research

The internet is a valuable research tool and you can use it but the advantage of using NHS Scotland subscription database is that you can do a more sophisticated search, save searches and easily access full text. You can also be confident that these are valid sources of formal research. See the table below for examples of NHS Scotland subscription databases aimed at particular staff groups or subjects.

<table>
<thead>
<tr>
<th>Specialist Area</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical</td>
<td>Medline, Embase</td>
</tr>
<tr>
<td>Nursing</td>
<td>CINAHL</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>Embase</td>
</tr>
<tr>
<td>Psychology</td>
<td>PsychINFO</td>
</tr>
<tr>
<td>Social Science</td>
<td>Social Work Abstracts</td>
</tr>
<tr>
<td>Public Health</td>
<td>Public Health Database</td>
</tr>
<tr>
<td>Management</td>
<td>GoodPractice.net, Health Management Information Consortium (HMIC)</td>
</tr>
</tbody>
</table>

If you are involved in formally evaluating other people’s research, you may want to know more about critical appraisal click here.

Don’t know what a database is?
A database is an index of published journal articles or records.
Know what to do

Find a specific piece of information or guidance to inform an action. Ideally this could be guidelines, legislation, protocols or evidence summaries. Evidence summaries and practice guidelines are based on reviews of research summarised by experts that help you base your decisions on the latest evidence.

In clinical environments these are often called point of care resources.

*For example you are a healthcare professional and have just had a visit with a patient suffering from a condition which you are not very familiar with. You have some recommendations for the next stage of management of their condition, but want to make sure you aren't missing anything.*
Know who

Finding examples and hopefully someone to talk to about their experiences can be very helpful. Sources here include colleagues, professional networks, social directories, communities of practice and case studies. These days through social media sites and online networks we have access to an incredible range of people and experts.

You are a project administrator who has just started working with a new team working with dementia. You are aware that others in Scotland have done similar projects and want to know if there is any learning or outcomes from their projects that could help with the planning stages. Visit the communities page on The Knowledge Network to find out more.
Using Google

In many cases, you will want to use formal, academic research to answer your question but sometimes the best place to start is a quick Google search. However, you should take the time to reflect on and assess the information you find to make sure it’s correct and will not compromise the quality of your work.

To make better use of Google, try using the Advanced Search by running a search from the Google homepage and then clicking on the cog at the top right of your search results to open the drop down menu where you will find the ‘Advanced Search’ option.

One tip for finding research on the internet is to use Google Scholar which can be used to search for and access journal articles. You can set it up to get easy access to online journal articles subscribed to by NHS Education for Scotland by following these steps:

1. Access the Google Scholar settings web page.
2. In the ‘Library Links’ section enter ‘NHS Scotland’ in the search box and click on the search icon.
3. When the results appear below the search box check the box next to the result ‘NHS Scotland Full Text’ and uncheck any other boxes.
4. Then click on the ‘Save’ button (at the bottom of the page).
5. Now when you search Google Scholar you will usually see, in the row of links underneath each result (or to the right), an ‘NHS Scotland’ link. When you click on this link you will be able to access the full text of an article immediately, if online access is available.

Speaking of quality assuring, we’ll address how you can assess quality in the next section!
Assessing Quality

We’ve discovered that information is available to us from lots of different sources. Now it’s time to think about how well it answers our question - is it relevant and comprehensive enough? We also need to assess the trustworthiness, particularly in the case of research or evidence. Part of figuring this out is often called ‘critical thinking’ and is a really useful skill for professional development, as well as for everyday problems. Use the links below for hints on what to look out for.
No matter where the information you have found has come from, there are a few things you can consider to help you evaluate and decide whether to base your decisions on it, or include it in your bibliography or project.

- **Relevancy**: does the information help to answer your question?
- **Validity**: are the arguments logical and has the author given evidence to support them?
- **Accuracy**: is the evidence used to support the arguments relevant and correct?
- **Bias**: has the author given both sides of the story or do they seem to be trying to force a particular viewpoint on the reader?
- **Evidence**: how was this collected and are there references you can check? You might want to check this yourself instead of relying on the interpretation of others.
Who

Not all sources are created equal and it can be difficult to know if we can trust the information we find, particularly on the Internet. When accessing information from a trustworthy starting point, like the Knowledge Network or a library, we know that some quality checks have taken place – not so on the Internet, so here are some things to look out for to help you decide what to trust.

- Who wrote the information? Look for an ‘About’ page or similar, which should detail who is responsible.

- Are they qualified or knowledgeable enough to provide information on this subject? Look for information about the author’s educational and professional background and other publications by doing a web or library search.

- What is the aim of the website? Does it represent an organisation with particular motives or agendas? Is it trying to sell a product or promote a campaign? Look for any advertising which might provide a clue.

- Is it formal research or a personal blog or social media site? Consider how this might affect the reliability.

- It’s really easy for anyone to publish material like books and articles on the web these days, without having it checked by an editorial process. Look for logos or an ‘About Us’ page to check this.

- Has it been reviewed, who by and how well? Look for references to trustworthy sources like formal research, policy documents, legislation, etc.
When

On the Internet, there are no obligations for information to be revised or updated at any point, so it’s worth considering how up-to-date the information is.

- Start by looking for dates the information was produced and published.
- Can you tell when it was last updated? Look for copyright information at the very bottom of the homepage.
- Use your own knowledge of the field if you can – is the information presented still useful or has it been superseded?
A URL is the web address for the information you are assessing. There are a few things which can give you an idea of the reliability of your source. See the table below, but remember this is only a guide and some sites will not use any of these:

- `http://www.harvard.edu`: educational institution (non-UK)
- `http://www.strath.ac.uk`: academic institution (UK)
- `https://www.gov.nz`: secure version of `http`, location e.g. New Zealand
What next?

We have developed our question, chosen our sources and assessed the quality of the information we have found. So what next? We already put some thought into the purpose of our search back at the beginning, so this should help with deciding what to do with the knowledge you have collected. We may need to collate and share this knowledge, or it may feed into a project, or inform an output.

If you would like more support for making knowledge usable, sharing and spreading and much more, visit our K2A Support Centre

Or contact us at knowledge@nes.scot.nhs.uk

Or get in touch with your local NHS library service

Click here to see an example
Susan wants to find out:
How to improve communication within an integrated health and social care team

There could be several purposes or reasons behind Susan’s search, a list of these is shown below:

<table>
<thead>
<tr>
<th>Purpose</th>
<th>What Susan will do with the information</th>
</tr>
</thead>
<tbody>
<tr>
<td>To get an overview for background information</td>
<td>Personal interest</td>
</tr>
<tr>
<td>To find the latest research on the role of the manager</td>
<td>Submit as reflection for recent course attended</td>
</tr>
<tr>
<td>To find out how other integrated teams in the partnership are managed</td>
<td>Inform practice</td>
</tr>
<tr>
<td>To identify some tools to suggest at the next team meeting that could be used in practice</td>
<td>Take to team meeting</td>
</tr>
<tr>
<td>To find a suitable handout to engage others in the team</td>
<td>Share with the team</td>
</tr>
<tr>
<td>To compare good practice in teams against current experience of the team</td>
<td>Share with the team and senior management</td>
</tr>
</tbody>
</table>

Susan has decided her search question can be broken into three concepts:

- Teams
- Communication Techniques
- Health and Social Care

View search terms
Each of the key concepts have a number of keywords and two have synonyms that Susan can search:

### Teams
- **Keywords:** multidisciplinary team, integration, combined, workplace teams, successful teams
- **Synonyms:** work groups

### Communication Techniques
- **Keywords:** Communication, team building, internal communication, effective communication, group dynamics
- **Synonyms:** dialogue

### Health and Social Care
- **Keywords:** Social care, social services, healthcare

Susan can combine these terms and concepts in the following way, using OR and AND:

#### Teams
- multidisciplinary team OR work groups
- OR integration OR combined OR workplace teams OR successful teams

#### Communication Techniques
- communication OR team building OR internal communication OR effective communication OR group dynamics OR dialogue

#### Health and Social Care
- Social care OR social services OR healthcare

What next? > Worked example

View Sources
Susan is now happy with her question and search terms. She now needs to decide which source or sources to use.

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Sources Identified</th>
</tr>
</thead>
<tbody>
<tr>
<td>To get an overview for background information</td>
<td>Books, evidence summaries, GoodPractice.net</td>
</tr>
<tr>
<td>To find the latest research on the role of the manager</td>
<td>Research databases for up to date articles</td>
</tr>
<tr>
<td>To find out how other integrated teams in the partnership are managed</td>
<td>People and networks</td>
</tr>
<tr>
<td>To identify some tools to suggest at the next team meeting that could be used in practice</td>
<td>Google, People, networks and databases</td>
</tr>
<tr>
<td>To find a suitable handout to engage others in the team</td>
<td>Google, People, networks and databases</td>
</tr>
<tr>
<td>To compare good practice in teams against current experience of the team</td>
<td>Databases, GoodPractice.net</td>
</tr>
</tbody>
</table>
Boolean Operators

**OR**
- Search for resources containing either term

**AND**
- Search for resources containing all terms

**NOT**
- Search for resources excluding a term
This resource may be made available, in full or summary form, in alternative formats and community languages. Please contact us on 0131 656 3200 or email altformats@nes.scot.nhs.uk to discuss how we can best meet your requirements.