

Royal Papworth Hospital Library Services

**A step-by-step guide to conducting
an advanced literature search using a
healthcare database**



<input type="checkbox"/> Select All	<input type="checkbox"/> AMED	<input type="checkbox"/> BNI	<input type="checkbox"/> CINAHL
<input type="checkbox"/> EMBASE	<input type="checkbox"/> HBE	<input type="checkbox"/> HMIC	<input type="checkbox"/> Medline
<input type="checkbox"/> PsycINFO	<input type="checkbox"/> PubMed		

Identify your key terms

Before you log in, it is important to think about the different aspects of your topic.

TIP: Databases do not work well with sentences. You will need to identify and search separately for the **keywords/phrases** in your search topic.

Having identified your keywords/phrases, consider synonyms, US spellings or alternative terminology e.g. medical vs general terms.

Example topic:

Is the flu vaccine effective in reducing sick leave?

Synonyms /Alternative terminology	Keywords/phrases	
	Flu vaccine	Sick leave
	Influenza vaccine	Time off work
	Influenza immunisation	Absent
	Influenza immunization	Absenteeism

After planning your search, access the databases at:

<http://hdas.nice.org.uk>



Search the Databases



Find a Journal

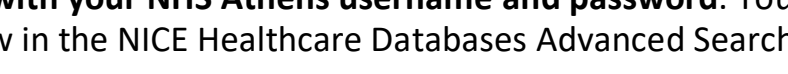


Find a Book

Select your database

Log in with your NHS Athens username and password. You are now in the NICE Healthcare Databases Advanced Search.

Select the relevant database for your topic.



The screenshot displays the NICE Healthcare Databases Advanced Search interface. At the top, there is a header bar with the text "Log in with your NHS Athens username and password. You are now in the NICE Healthcare Databases Advanced Search." Below this, a red arrow points to the "AMED" button in the grid of database selection options. The grid includes buttons for "Select All", "AMED", "BNi", "CINAHL", "EMBASE", "HBE", "HMIC", "Medline", "PsycINFO", and "PubMed".

<input type="checkbox"/> Select All	<input type="checkbox"/> AMED	<input type="checkbox"/> BNi	<input type="checkbox"/> CINAHL
<input type="checkbox"/> EMBASE	<input type="checkbox"/> HBE	<input type="checkbox"/> HMIC	<input type="checkbox"/> Medline
<input type="checkbox"/> PsycINFO	<input type="checkbox"/> PubMed		

Select the relevant database for your topic.


<input type="checkbox"/> Select All	<input type="checkbox"/> AMED		<input type="checkbox"/> BNI	<input type="checkbox"/> CINAHL
<input type="checkbox"/> EMBASE	<input type="checkbox"/> HBE		<input type="checkbox"/> HMIC	<input type="checkbox"/> Medline
<input type="checkbox"/> PsycINFO	<input type="checkbox"/> PubMed			

Use the thesaurus to search your keywords

Each database uses controlled subject headings to 'tag' articles with their relevant subjects. These headings can help you locate articles that use different synonyms for your keywords/phrases.

Type your first keyword/phrase into the search box and click

on 'Thesaurus'.



on 'Thesaurus':

Search

flu vaccine

Search

Thesaurus

Thesaurus

Term

- Flu Vaccines
- Haemophilus influenzae Vaccines
- Influenza Vaccine
- Influenza Vaccines

This will display the best matches for your term. Select the most relevant option to see the thesaurus features in more detail.

Thesaurus	Select	Explode	Major	Term	Broad	Narrow	Sibling	Used For	Related	Subheadings	Notes
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Viral Vaccines						Subheadings	Scope
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Influenza Vaccines	1			10		Subheadings	Scope
				Used For							
				Afluria							
				CAIV-T vaccine							
				Flu Vaccines							

Using the thesaurus

Your selected term will appear beneath its broader term (shown in blue). At the bottom of the table, you can see other variants of this term that the thesaurus heading is used for.

Thesaurus	Select	Explode	Major	Term	Broad	Narrow	Sibling	Used For	Related	Subheadings	Notes
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Viral Vaccines						Subheadings	Scope
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Influenza Vaccines	1			10		Subheadings	Scope
				Used For							
				Afluria							
				CAIV-T vaccine							
				Flu Vaccines							

If you are unsure about whether a thesaurus heading is relevant to your search, click on '**Scope**' for a description of the heading.

There are three options next to each heading. Use '**Select**' to locate any articles that are tagged with this heading, or '**Major**' to locate only articles which have this heading as a primary focus. '**Explode**' is covered on the next page.

For an even more specific search, click on '**Subheadings**' to see different aspects of the topic, which can be individually selected.

Thesaurus	Select	Explode	Major	Term	Broad	Narrow	Sibling	Used For	Related	Subheadings	Notes
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Viral Vaccines						Subheadings	Scope
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Influenza Vaccines	1			10		28	Scope
				ad administration & dosage		ae adverse effects		ag agonists			
				ai antagonists & inhibitors		an analysis	bi biosynthesis	bl blood			
				cf cerebrospinal fluid	ch chemistry	cl classification	cs chemical synthesis				
				ct contraindications	ec economics	ge genetics	hi history	im immunology			
				ip isolation & purification	me metabolism	pd pharmacology	pk pharmacokinetics				
				po poisoning	re radiation effects	sd supply & distribution	se secretion				
				st standards	to toxicity	tu therapeutic use	ur urine				

The thesaurus tree

Selecting **‘Explode’** will locate articles tagged with the selected heading and any narrower headings (where these exist). In the previous example, there are no narrower terms available for the heading **Influenza Vaccines**, so selecting **‘Explode’** would return the same results as **‘Select’**.

However, clicking on the broader heading **Viral Vaccines** shows that this heading has 23 narrower terms. Exploding this heading would include the original broad heading plus all of these options.

Alternatively, relevant headings can be individually selected using **‘Select’**.

Select	Explode	Major	Term	Broad	Narrow	Sibling	Used For	Related	Subheadings	Notes
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Vaccines						Subheadings	Scope
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Viral Vaccines	1	23				Subheadings	Scope
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Adenovirus Vaccines						Subheadings	Scope
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	AIDS Vaccines						Subheadings	Scope
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Cytomegalovirus Vaccines						Subheadings	Scope
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Dengue Vaccines						Subheadings	Scope
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Ebola Vaccines						Subheadings	Scope
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Herpesvirus Vaccines						Subheadings	Scope
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Influenza Vaccines						Subheadings	Scope

After choosing your desired option(s), click on **‘Search Now’** and then close the thesaurus (top of page).

Clear Selection

✖ Close Thesaurus

"INFLUENZA VACCINES"/

☒ Or ☐ And

Search Now

Search as Individual Queries

Thesaurus	Select	Explode	Major	Term	Broad	Narrow	Sibling	Used For	Related	Subheadings	Notes
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Viral Vaccines						Subheadings	Scope
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Influenza Vaccines	1			10		Subheadings	Scope

Free text searching







You can also enter your own search terms, which is called free text searching. This ensures that your search is comprehensive, particularly as recent articles added to the database may not yet have been tagged with thesaurus headings.

Things to consider:

Phrases: Put quotation marks (" ") around any phrases. This will ensure that the database searches for the exact pattern of words e.g. **"influenza vaccine"**.

Wildcards: To search for different word endings you can use a wildcard (*). Consider carefully at which point to use the wildcard. For example, searching for **vaccine*** would locate articles containing **vaccines**, but using **vaccin*** would also cover **vaccination**, **vaccinations** and **vaccinated**.

Acronyms: Acronyms are common within healthcare so it can be useful to search for these separately. However, **be aware** that acronyms may have multiple meanings, so the search could return results that are irrelevant to your topic. For example, AIDS could signify either the condition or equipment like walking aids.

	Database(s)	Search Term			
<input type="checkbox"/> 1	Medline	"INFLUENZA VACCINES"/	View Results (18,241)	Edit	
<input type="checkbox"/> 2	Medline	("flu vaccin").ti,ab	View Results (930)	Edit	
<input type="checkbox"/> 3	Medline	("Influenza vaccin").ti,ab	View Results (13,307)	Edit	
<input type="checkbox"/> 4	Medline	("influenza immunisation").ti,ab	View Results (146)	Edit	
<input type="checkbox"/> 5	Medline	("Influenza immunization").ti,ab	Viewing (986)	Edit	
<div><input type="checkbox"/> All Rerun Searches Copy  <input checked="" type="radio"/> AND <input type="radio"/> OR Combine Delete Selected Export Options</div>					

Search each of your keywords/phrases individually: type them into the search box, make sure **'Title and Abstract'** are selected and click on **'Search'**.

The search structure

Having searched separately for the keywords/phrases relating to the first aspect of your topic, you will now need to combine these search lines to produce a single set of results for this part of the search.

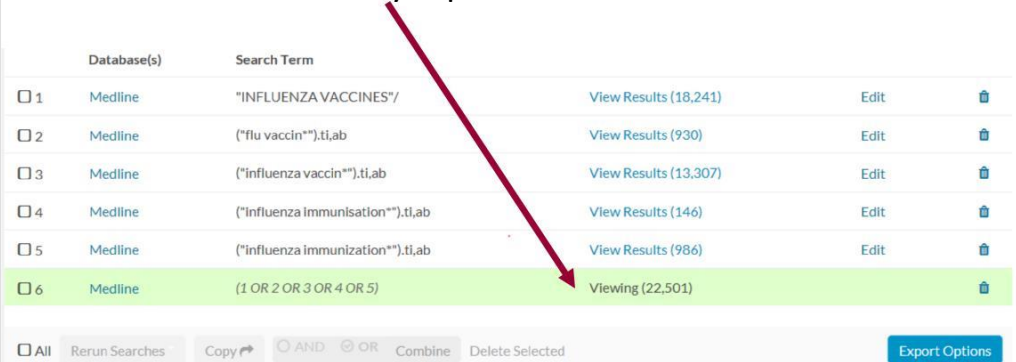
Tick the boxes next to each line, select **OR** and click '**Combine**'.



	Database(s)	Search Term		
<input checked="" type="checkbox"/> 1	Medline	"INFLUENZA VACCINES"/	View Results (18,241)	Edit
<input checked="" type="checkbox"/> 2	Medline	("flu vaccin").ti,ab	View Results (930)	Edit
<input checked="" type="checkbox"/> 3	Medline	("influenza vaccin").ti,ab	View Results (13,307)	Edit
<input checked="" type="checkbox"/> 4	Medline	("influenza immunisation").ti,ab	View Results (146)	Edit
<input checked="" type="checkbox"/> 5	Medline	("influenza immunization").ti,ab	Viewing (986)	Edit

☒ All [Rerun Searches](#) [Copy](#) ☐ AND ☒ OR [Combine](#) [Delete Selected](#) [Export Options](#)

This combined line collates the results of the individual searches and removes any repeated results.



	Database(s)	Search Term		
<input type="checkbox"/> 1	Medline	"INFLUENZA VACCINES"/	View Results (18,241)	Edit
<input type="checkbox"/> 2	Medline	("flu vaccin").ti,ab	View Results (930)	Edit
<input type="checkbox"/> 3	Medline	("influenza vaccin").ti,ab	View Results (13,307)	Edit
<input type="checkbox"/> 4	Medline	("influenza immunisation").ti,ab	View Results (146)	Edit
<input type="checkbox"/> 5	Medline	("influenza immunization").ti,ab	View Results (986)	Edit
<input type="checkbox"/> 6	Medline	(1 OR 2 OR 3 OR 4 OR 5)	Viewing (22,501)	

☐ All [Rerun Searches](#) [Copy](#) ☐ AND ☒ OR [Combine](#) [Delete Selected](#) [Export Options](#)

You should now follow the same search process with the other aspects of your search topic, using headings and free text.

In this example, the next aspect of the search is sick leave. Search for your keywords/phrases individually and then combine with **OR** as above. The next step is to combine the different aspects of your topic.

The search structure continued...

Use **AND** to combine the different aspects (shown in green) of your topic:

	Database(s)	Search Term			
<input type="checkbox"/> 1	Medline	"INFLUENZA VACCINES"/	View Results (18,241)	Edit	
<input type="checkbox"/> 2	Medline	("flu vaccin").ti,ab	View Results (930)	Edit	
<input type="checkbox"/> 3	Medline	("influenza vaccin").ti,ab	View Results (13,307)	Edit	
<input type="checkbox"/> 4	Medline	("influenza immunisation").ti,ab	View Results (146)	Edit	
<input type="checkbox"/> 5	Medline	("influenza immunization").ti,ab	View Results (986)	Edit	
<input checked="" type="checkbox"/> 6	Medline	(1 OR 2 OR 3 OR 4 OR 5)	View Results (22,501)		
<input type="checkbox"/> 7	Medline	"SICK LEAVE"/	View Results (4,450)	Edit	
<input type="checkbox"/> 8	Medline	("sick leave").ti,ab	View Results (3,901)	Edit	
<input type="checkbox"/> 9	Medline	("time off work").ti,ab	View Results (701)	Edit	
<input type="checkbox"/> 10	Medline	(absent*).ti,ab	Viewing (133,376)	Edit	
<input checked="" type="checkbox"/> 11	Medline	(7 OR 8 OR 9 OR 10)	View Results (140,095)		
<input type="checkbox"/> All <input type="button" value="Rerun Searches"/> <input type="button" value="Copy"/> <input checked="" type="radio"/> AND <input type="radio"/> OR <input type="button" value="Combine"/> <input type="button" value="Delete Selected"/> <input type="button" value="Export Options"/>					

TIP: We search with **AND** to combine different parts of the search. We only use **OR** to combine keywords/phrases that are similar.

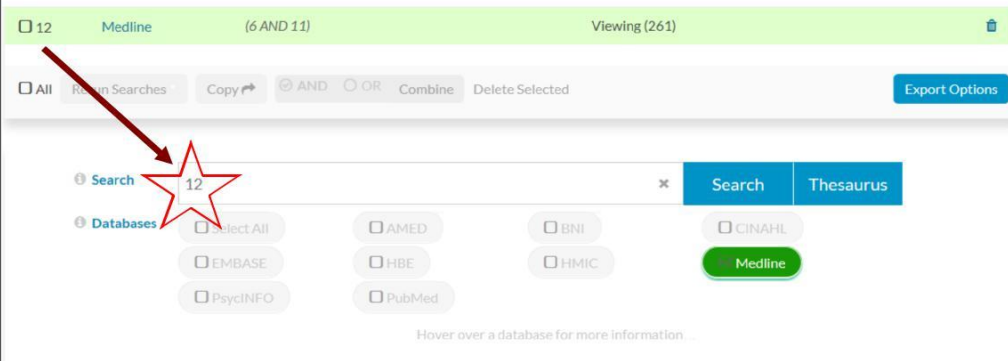
This produces a final search line combining the different parts of the search topic.

	Database(s)	Search Term			
<input type="checkbox"/> 1	Medline	"INFLUENZA VACCINES"/	View Results (18,241)	Edit	
<input type="checkbox"/> 2	Medline	("flu vaccin").ti,ab	View Results (930)	Edit	
<input type="checkbox"/> 3	Medline	("influenza vaccin").ti,ab	View Results (13,307)	Edit	
<input type="checkbox"/> 4	Medline	("influenza immunisation").ti,ab	View Results (146)	Edit	
<input type="checkbox"/> 5	Medline	("influenza immunization").ti,ab	View Results (986)	Edit	
<input type="checkbox"/> 6	Medline	(1 OR 2 OR 3 OR 4 OR 5)	View Results (22,501)		
<input type="checkbox"/> 7	Medline	"SICK LEAVE"/	View Results (4,450)	Edit	
<input type="checkbox"/> 8	Medline	("sick leave").ti,ab	View Results (3,901)	Edit	
<input type="checkbox"/> 9	Medline	("time off work").ti,ab	View Results (701)	Edit	
<input type="checkbox"/> 10	Medline	(absent*).ti,ab	View Results (133,376)	Edit	
<input type="checkbox"/> 11	Medline	(7 OR 8 OR 9 OR 10)	View Results (140,095)		
<input type="checkbox"/> 12	Medline	(6 AND 11)	Viewing (261)		

Apply limits to your search

You may also wish to 'Limit' the results, such as by date range, language etc.

In the search box, enter the line number (in this example 12) to which you want to apply limits and tick the '**Limits**' box.



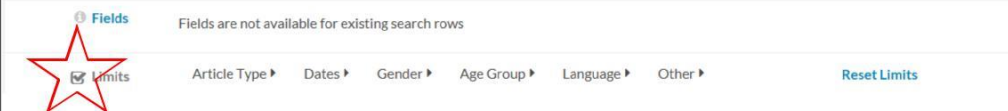
12 Medline (6 AND 11) Viewing (261)

All Boolean Searches Copy AND OR Combine Delete Selected Export Options

Search 12 Search Thesaurus

Databases Select All AMED BNI CINAHL EMBASE HBE HMIC Medline PsycINFO PubMed

Hover over a database for more information



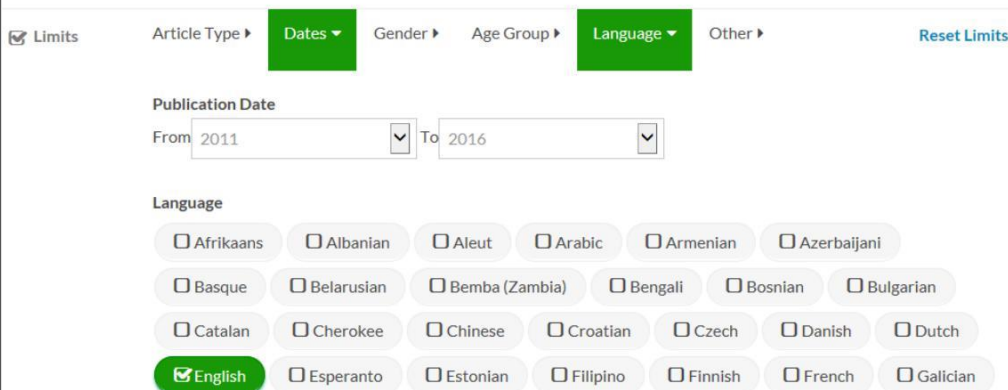
Fields Fields are not available for existing search rows

Fields Article Type Dates Gender Age Group Language Other Reset Limits

Limits

This will show the limits available in your chosen database. Use the headings to select the required limits and click on '**Search**'.

Here, the search has been limited by date range (2011-2016) and language (English).



Limits Article Type Dates Gender Age Group Language Other Reset Limits

Publication Date

From 2011 To 2016

Language

Afrikaans Albanian Aleut Arabic Armenian Azerbaijani Basque Belarusian Bemba (Zambia) Bengali Bosnian Bulgarian Catalan Cherokee Chinese Croatian Czech Danish Dutch English Esperanto Estonian Filipino Finnish French Galician

Viewing, saving and exporting your results

This produces a final line in your search strategy, with the limits applied to your search.

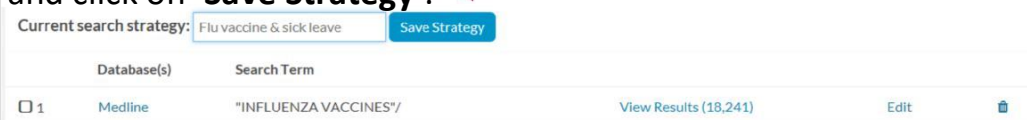


<input type="checkbox"/> 12	Medline	(6 AND 11)	View Results (261)	
<input type="checkbox"/> 13	Medline	12 [DT 2011-2016] [Languages English]	Viewing (73)	

☐ All [Rerun Searches](#) [Copy](#) [AND](#) [OR](#) [Combine](#) [Delete Selected](#) [Export Options](#)

Once you are happy with your search, you should save your search strategy. This allows you to revisit your search at a later date, and makes it easier to save your results.

Give your search a name in the box above the search history and click on **'Save Strategy'**.



Current search strategy: [Save Strategy](#)

	Database(s)	Search Term		
<input type="checkbox"/> 1	Medline	"INFLUENZA VACCINES"/	View Results (18,241)	Edit

Scroll down the page to view your results, or click on **'View Results'** in your final search line if they have not automatically appeared. You can change how the results are sorted, how many to view per page and show/hide abstracts.



[Medline](#)
73
1.84 seconds

☐ All on this page [Add to Saved](#) [Show Abstracts Titles Only](#) [Expand Full-Text](#) View: 10 25 50 100 Sort: [Unsorted](#)

1 2 3 Next >

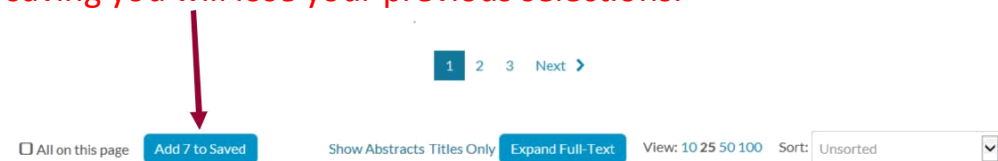
☐ 1. [Improving influenza vaccination coverage in pregnancy in Melbourne 2010-2011.](#)

Author(s) McCarthy, Elizabeth A; Pollock, Wendy Elizabeth; Nolan, Terry; Hay, Sarah; McDonald, Susan
Source The Australian & New Zealand Journal of obstetrics & gynaecology; Aug 2012; vol. 52 (no. 4); p. 334-341
Publication Date Aug 2012
DOI [10.1111/j.1479-828X.2012.01428.x](#)
Accession Number 22486173
ISSN 1479-828X
Database Medline
Show Abstract
Available in full text from EBSCOhost

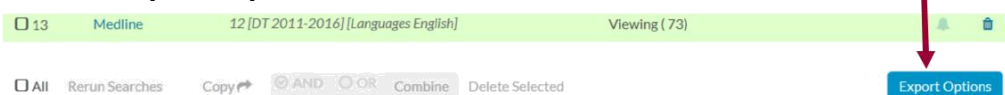
☐ 2. [Circulating CXCR5+PD-1+ response predicts influenza vaccine antibody responses in young adults but not elderly adults.](#)

As well as saving the search strategy, you can also save selected results.

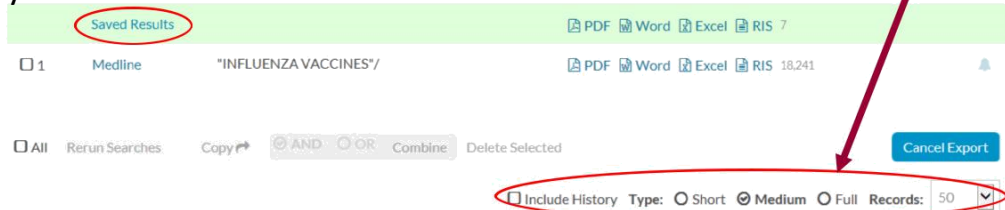
As you review your results, tick those you wish to save and click on **'Add to Saved'** at the bottom of each page before moving to the next page. **If you move to the next page without saving you will lose your previous selections.**



To export your results, scroll up to your search history and select **'Export Options'**.



This will display the format options next to each search line and display options at the bottom (e.g. **short** to show citation only, **medium** to include abstracts). Select your desired display options **first** and then click on the preferred output format for your **'Saved Results'** line.



TIP: Not all articles will be immediately available to you.

Contact the library to request any articles you require that do not have a full text option or if you have any problems accessing them. We can usually obtain articles for you through our interlibrary loan service, which is free of charge.

Library Services Enquiry Desk

Usually staffed Monday - Friday: 9:00 – 16:00

Contact

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<https://royalpapworth.nhs.uk/research-and-development/library-services>



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