

# Evidence search services user research

Health Education England

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# 1. User research overview

## 1.1. Executive summary

This user research was conducted by Lagom Strategy between April and June 2021.

The research focussed on the needs of people who request evidence searches from their NHS Knowledge and Library service.

Users of evidence search services are a broad group, covering a number of different job roles including healthcare professionals, managers and commissioners. They request evidence search services for a range of reasons such as informing service development, research, and clinical practice.

Users of these services emphasised the importance of being able to access current evidence to support evidence-led work, and indicated that requesting expert searches from a librarian is a vital part of this. These services are highly valued by users, who often have close working relationships with specific librarians.

Our research highlights users' satisfaction with evidence search services. While users expressed a desire to see these services used more widely, librarian capacity may be a barrier to this.

The research has concluded with a validated, and prioritised user story backlog which can be used to inform HEE decisions about how to proceed with evidence search services.

The key research findings of this report are organised by the following themes:

- ◆ 2.3.1. Context
- ◆ 2.3.2. Requesting searches

◆ 2.3.3. Search results

◆ 2.3.4. Satisfaction

## 1.2. User research goals

At the start of the research we agreed on these goals with the Health Education England team:

1. Understand who 'users of evidence-search services' actually are
2. Understand and articulate the common scenarios and user journeys for users of evidence-search services
3. Identify the user needs in those scenarios
4. Understand how users currently meet these needs
  - a. How do they approach expressing their search needs?
  - b. What are the current range of processes, tools and systems that they use?
5. Understand how well they meet these needs?
  - a. What do they think about what they are getting?
  - b. How much digesting/summarising and synthesising do they expect/need?
  - c. What format do they need information in?
  - d. How do they use the evidence they get?
  - e. Do they have unmet needs?
6. Why do they do it this way? E.g. training, access to tools, available licences
7. Validate the significance and impact of those needs to users of evidence-search services

8. Prioritise which of these needs should be met by HEE and evidence-search services

## 1.3. The scope of the user research

The scope of the work was limited to understanding the needs of people who request literature and evidence searches from their NHS Knowledge and Library service.

It builds on previous research into the needs of non-expert searchers and expert searchers, which was used to inform decisions about national discovery services.

This work provides findings from the research, rather than making any recommendations about how to proceed.

## 1.4. Project team

### 1.4.1. Lagom Strategy

- ◆ Stephen Hale - Lead Digital Strategist and Project Lead
- ◆ Dr Helen Taylor - Delivery Manager
- ◆ Dr Charlotte Jais - Lead User Researcher
- ◆ Adam Spencer - User Researcher

### 1.4.2. Health Education England

- ◆ Lucy Reid - Deputy Head of Knowledge and Library Services

## 1.5. User research activities

The user research was conducted during April and May 2021.

The activities allowed us to generate the insights in this report and the other user research outputs:

1. **Kick-off workshop** with key project stakeholders
2. Reviewed online and documentary sources (see Annex I)
3. Conducted **13 one-to-one user interviews**
4. Ran a **user needs workshop** with a range of stakeholders and end user role representatives, to generate user journey maps
5. Analysis of a **user needs validation survey** with 342 responses
6. Observed **5 online observation sessions**
7. Developed **journey maps** for 3 user journeys
8. Developed **4 user proto-personas**
9. Created and prioritised **16 user stories** with the HEE team
10. Presented a project **show-and-tell**

### 1.5.1. User research participation levels

Participation levels in the user research activities were satisfactory for the level needed for a thorough user research process.

## 1.6. Key associated documents

- ◆ Proto-persona profiles
- ◆ Experience maps
- ◆ User story backlog

Note: **all** project documentation has been gathered and shared with the HEE team.



## 1.7. Background to this user research

Health Education England wants to better understand what end-users want from evidence-search services.

End users make search requests to library services in the NHS. This research has been designed to understand why they use the services, how they express their search needs, what they think about the results they get back, and any unmet needs.

This work is related to, and complementary to, two previous pieces user research:

- ◆ National Discovery services (April 2019)
- ◆ Expert searchers (March 2020)

The work will inform decisions about the ways in which the needs of end users are met.

## 2. User research

### 2.1. Method

Our researchers consulted with a range of users during the user research to explore their context, needs, emotions, and behaviours.

#### 2.1.1. Qualitative research

- ◆ 13 one-to-one interviews with user representatives
- ◆ 4 user participants in a user needs workshop including journey mapping
- ◆ Observed 5 participants in observational sessions
- ◆ Reviewed open text comments in 342 online survey responses

#### 2.1.2. Quantitative research

- 342 respondents to the online user needs survey

Note: due to time restraints, surveys were online, with links cascaded digitally. It is appreciated that this may bring a bias toward users with a higher level of digital literacy. This was considered when interpreting the results.

## 2.2. User roles

The user research explored these user roles, identified during the inception phase:

### 2.2.1. Primary roles

#### 2.2.1.1. Healthcare professionals

- ◆ Doctors
- ◆ Nurses
- ◆ Allied health professionals
- ◆ Technical professionals
- ◆ Clinical scientists
- ◆ Pharmacists

#### 2.2.1.2. Healthcare managers

- ◆ Medical directors
- ◆ HR
- ◆ C-level managers

#### 2.2.1.3. Commissioners

## 2.3. Key findings from the user research

### 2.3.1. Context

#### 2.3.1.1. Users have a consistent range of reasons for requesting searches

While there are several different reasons why a user may need to request a search, these were relatively consistent across the users we spoke to.

Users described requesting searches for their research, for example to support studies they were conducting.

"I've used it for research, I've used it to support studies, for literature searches" - **Healthcare professional**

"I've just done a couple of projects which have required literature searches" - **Healthcare professional**

Some request searches to inform service development.

"As we're developing services, or undertaking service reviews, I would sometimes use a literature review to inform those pieces of work" - **Commissioner**

Other reasons for requesting searches included needing evidence to support decisions around patient care.

"We've had a patient that's come to our service that's got a very unique condition, and we want to find out more [...] or other people who have presented similar cases or have treated similar patients" - **Healthcare professional**

"I know some of my bosses need it for difficult clinical cases" - **Healthcare professional**

In the validation survey users were asked about their reasons for requesting evidence searches. Users were presented with a

range of options and were able to choose more than one option.

This graph further highlights that many users are requesting evidence searches for a range of reasons:

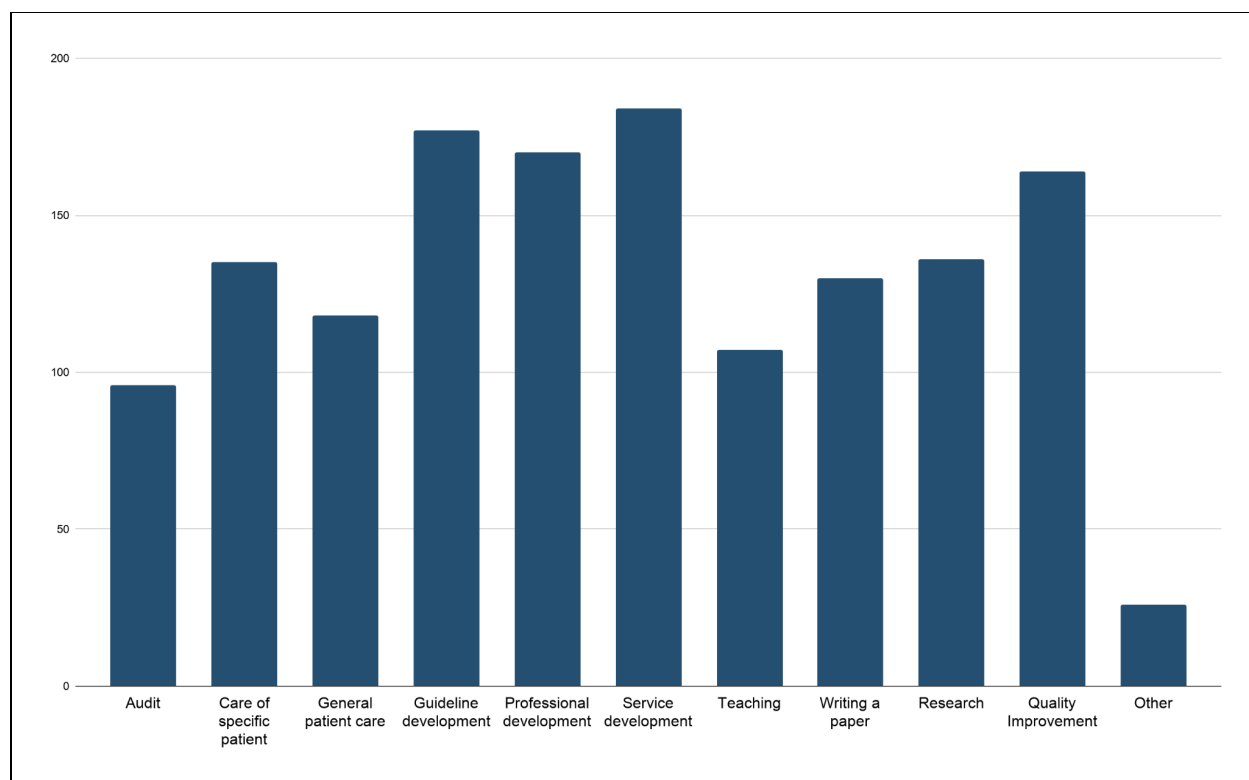


Image: graph showing users' reasons for requesting searches

Users were also able to specify any other reasons why they requested searches.

Responses included requesting searches to support their learning on Masters modules, commissioning decisions, updating policies, and personal reasons.

Examples of *personal reasons* for requesting searches included finding information about how Covid affects people with a particular health condition.

### 2.3.1.2 Users feel it is important to have current evidence to inform their work

When describing the reasons for requesting evidence searches, users often talked about the importance of having current evidence to inform and guide their work.

**"I have to feel that I'm on the cusp of knowledge" - Healthcare professional**

**"We should be data-led, should be evidence-led" - Manager**

**"It helps to provide evidence-based treatment to patients. And that is so important" - Healthcare professional**

### 2.3.1.3. The frequency with which searches are requested varies between users

We found that users have different behaviours when it comes to how frequently they are requesting searches.

Some users are requesting searches relatively frequently.

**"It could be 2, 3, 4, times in a period of a month or two [...] other times it could be a lot less" - Healthcare professional**

**"I would say probably once a month" - Healthcare professional**

For others, requesting a search is a rarer occurrence.

**"Probably every 6 months or so" - Commissioner**

**"I've only done 2 searches in the 2 years I've been here" - Healthcare professional**

In the validation survey, users were asked about how frequently they request evidence searches, for example whether they request these rarely or frequently.

The chart below highlights that there was a relatively even split between users who frequently and occasionally request

searches, with a smaller proportion of users specifying that they rarely request evidence searches.

We also heard from a small proportion of non-users who never request searches.

Other respondents stated that they had made use of this service in the past but did not currently use it, they frequently ran their own searches, or had not previously heard of this service.

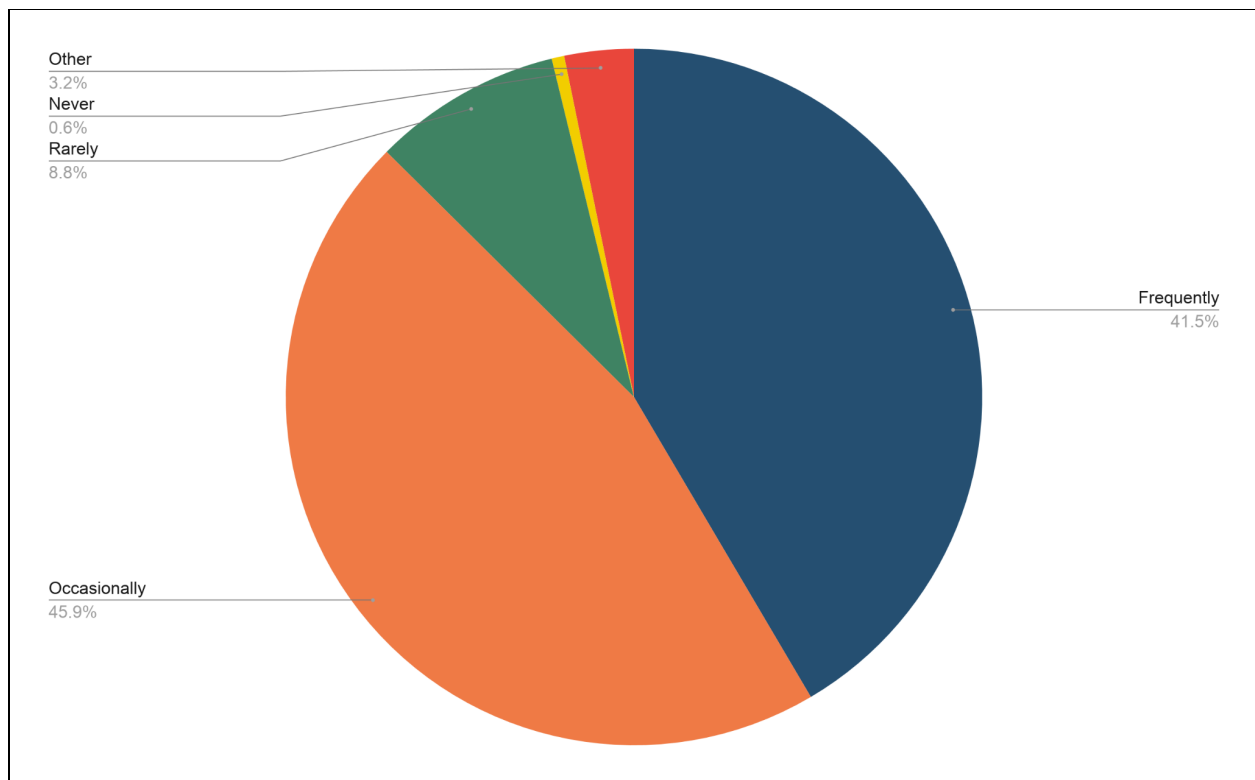


Image: chart showing frequency of users' search requests

#### 2.3.1.4. Some users also carry out their own searches

In addition to making use of literature and evidence search services, some users are carrying out their own searches.

**"Sometimes I'll do my own searches" - Healthcare professional**

**"I always try to do the search myself initially" - Manager**

**"I do both [own searches and request searches] just as good practice now" - Healthcare professional**

Different factors influence whether a user decides to run a search themselves or ask a librarian.

Some users very rarely, if ever, carry out their own searches, and will ask a librarian to search for them because they are not confident in their own searching skills.

**"I just find it really difficult and of course all the ways of doing it keep changing and so I'll completely honest with you, I ask [librarian]" - Healthcare professional**

Some users will attempt to run a search themselves initially, and then request a search from a librarian if they are unable to find the information they are looking for.

**"If I can't quite nail the key words or what it is that I'm looking for then I'll go to a human being" - Manager**

Others are able to do some of their own searching, but tend to request searches from librarians when the task is particularly important and they need to be sure that the search will be thorough and systematic.

**"It depends on how important the task is, the more important it is then I'll ask the library to do it" - Healthcare professional**

This reflects one of the user needs from the research:

*"As a search requester, I need to request a search from a librarian so that I can be confident that my search will be done to a high professional standard."*

This was validated with a high level of need and was prioritised as a need that the service MUST meet.



## 2.3.2. Requesting searches

### 2.3.2.1. Most users are able to easily contact a librarian

Most of the users we spoke to can easily contact a librarian when they need to request a search.

Some work in teams that have a dedicated librarian.

**"I've been lucky in that I've always worked in teams that had specific [library] resource" - Manager**

Others noted that it was easy to get in touch with a librarian via email.

**"I think they're fairly accessible. You can send them an email at any time" - Healthcare professional**

**"I've got them [library team] all in my address box now so I know exactly who I'm contacting" - Healthcare professional**

However, not everyone finds it easy to access library services. We heard that some staff may not have access to a librarian, and others were unsure about how to get in touch with their library services.

**"Many do not have access to a librarian" - Survey respondent**

**"I've just logged onto our current Trust's intranet. I can't even see a library service on here. I mean there probably is one. There will be one. I just can't, that just shows how difficult it is to access" - Healthcare professional**

### 2.3.2.2. Many users described a relatively informal process for requesting searches

Several users described being able to request a search by simply emailing a known member of the library team.

**"I just tend to email [the librarian]" - Healthcare professional**

**"I just email her. So it's a very sort of informal process" - Healthcare professional**

Some users have requested searches over the phone or through Teams.

**"Normally it would be that I would drop her an email. In the olden days we might meet in person, in the new world it might be Teams" - Healthcare professional**

**"I would pick up the phone" - Manager**

Other users described a more structured process, and are submitting their search requests via online forms. However, we heard that these online forms are not always easy to use.

**"It is not particularly easy to complete the form that the library provide when requesting a literature and evidence search" - Survey respondent**

**"The form itself isn't too difficult to use, it's more how we use it I think" - Healthcare professional**

This relates to one of the user needs from the research:

*"As a search requester, I need to easily communicate with the librarian (e.g. via email or form) when I initially request a search so that I can provide them with the details of the search (e.g. disease, treatment, patient age)."*

This was validated with a high level of need and was prioritised as a need that the service MUST meet.

### **2.3.2.3. The information that users provide when requesting a search is consistent**

Users are asked for the same *types* of information when they request a search.

They are asked for the context around the search.

"The context of the piece of work I'm undertaking, what specific search I'm looking for, some keywords" -

**Commissioner**

"I usually give them what I'm looking for and then I give them the context of why I'm looking for it" - **Manager**

They are asked for information about research questions and inclusion criteria.

"I would usually contact the library and say this is the question we're trying to answer, do you think you could run a search, these are the kind of inclusion criteria, these are the dates etc." - **Healthcare professional**

Users may also provide initial search terms as part of their request.

"I normally will give them some search terms based on PICO, basically to help them have a rough idea of what I want" - **Healthcare professional**

"I usually give them what I'm looking for and then I give them the context of why I'm looking for it" - **Healthcare professional**

#### **2.3.2.4. Users often discuss timescales with the librarian when requesting a search**

Users described how part of the conversation around requesting a search involves setting a timeframe for the search.

"They [librarians] do ask me what time span, when do I require the results" - **Healthcare professional**

As part of this, users specify whether or not the search results are needed urgently.

"Generally I go it's not urgent because I'm not gonna get round to it for ages, or I might say it's actually for a current patient, can you try and do it quicker" - **Healthcare professional**

"We'd normally agree a date of when we might need this by as well so that [librarian] can know sort of where it sits in her priorities" - **Healthcare professional**

By agreeing on a timeframe for the search, users have an idea of when they can expect to receive their search results.

"They will always say I will get it to you in such and such a timeframe, is that ok [...] they set expectations" - **Manager**

This relates to one of the user needs from the research:

*"As a search requester, I need to set a timeframe when requesting a search so that I can tell the librarian how quickly I need to receive the results."*

This was validated with a medium level of need, and was prioritised as a need that the service MUST meet.

#### **2.3.2.5. Users occasionally need to refine their searches after submitting the initial request**

Users noted that an initial conversation with the librarian when requesting a search was often enough for them to progress with the search without the need for refinements later on.

"I have a couple of times but that's probably because I've not been clear what I've been asking for" - **Healthcare professional**

"Occasionally but not very often. Like I say they are very good, they're kind of switched on" - **Healthcare professional**

When refinements are needed, users discuss these with the librarian carrying out the search.

For example, users may receive questions from the librarian if more information is needed to refine or progress with a search.

"They [librarians] will send you emails if they've got any extra questions" - **Healthcare professional**

**"If she either finds that she's finding no information she might ask us about how we could widen the search, or if there's too much information, if there's anything that we can help to narrow the topic" - Healthcare professional**

This relates to one of the user needs from the research:

*"As a search requester, I need to easily communicate with the librarian (e.g. via email, phone or Teams) and ask or answer questions about my search so that the search can be refined when necessary."*

This was validated with a medium level of need, and was prioritised as a need that the service must meet.

### 2.3.3. Search results

#### 2.3.3.1. Users tend to receive their search results by email, and in a consistent format

Users expect to receive search results by email, and almost all users refer to receiving their search results by email rather than by any other channels.

**"I think it's usually an email" - Healthcare professional**

**"It's an attachment on an email" - Healthcare professional**

**"She [librarian] tends to send everything through by email" - Healthcare professional**

Although we spoke to users from different NHS Trusts and different organisations, there was consistency in how their search results are formatted.

Many users receive their search results as either a Word document or a PDF document, attached to an email.

**"It's a Word document or a PDF. And there's links for each of the papers which is really really useful" - Healthcare professional**

**"You get an attachment in PDF format" - Healthcare professional**

**"Normally for me Word is the best [...] that's what I tend to receive it in" - Healthcare professional**

Search results documents often include details of the search strategy as well as the list of abstracts or references that were found.

**"It's basically how [librarian] devised the search, the search terms, the databases, and then the list of abstracts" - Healthcare professional**

**"You also have the search strategy on the bottom" - Healthcare professional**

We also heard that search results tend to be provided in the same format, regardless of the type of search that has been carried out.

**"It [format] doesn't vary to be honest. I've been using the library for quite some time, 15 years" - Healthcare professional**

**"It was a template" - Healthcare professional**

This relates to one of the user needs from the research:

*"As a search requester, I need to receive my search results in a format that suits me (e.g. Word, PDF or RIS) so that I can easily access them."*

This was validated with a very high level of need and was prioritised as a need that the service MUST meet.

### **2.3.3.2. Some users value receiving a summary alongside their results**

Some users felt that receiving a summary of what the search found alongside the list of references was particularly helpful.

"I always try and remember to ask for a summary, which is really really helpful" - **Commissioner**

"The summary is really helpful as it allows the findings to be shared more widely with people who don't have time to read all the research" - **Survey respondent**

"I expect to receive a concise analysis of the question that I've asked" - **Manager**

Others did not have a need for this type of summary, and felt that the list of search results met their needs.

"In terms of what all the papers, what they contain, no I don't need that" - **Manager**

"I really just need the papers" - **Healthcare professional**

This relates to one of the user needs from the research:

*"As a search requester, I need to receive a summary of the evidence that the search found so that I can easily see the answer to my question."*

This was validated with a very high level of need and was prioritised as a need that the service SHOULD meet.

#### **2.3.3.3. There appear to be different ways in which users set up and receive updates about relevant literature**

Some users spoke about receiving regular updates about relevant literature. There are a variety of ways in which users receive these updates.

This user described how they had set up regular HDAS alerts with the help of a librarian. This means they now receive automatic updates about their search topic.

"I'm alerted to whatever's out there really, on HDAS. So I've set that up to automatically run off various information" - **Healthcare professional**

Other users noted that librarians regularly provide them with updates when they come across information that is likely to be relevant.

"She's actually one step ahead of me now, she's started sending me updates in the main things that I ask for so she's a mind-reader as well as the original search engine"

**- Healthcare professional**

"They [librarians] provide me with specific, appropriate research updates on a regular basis"

**- Survey respondent**

This relates to one of the user needs from the research:

*"As a search requester, I need to receive regular updates about new search results so that I can be sure I am up to date with developments in my field."*

This was validated with a low level of need and was prioritised as a need that the service SHOULD meet.

#### **2.3.3.4. Users described some level of difficulty with obtaining full text articles**

As we have heard in previous research, access to journals through subscription continues to be an issue for some users.

"Sometimes it's a bit difficult to get papers because for whatever reason, subscriptions etc. you just can't access it"

**- Healthcare professional**

"The login we have with the library doesn't necessarily allow us access [to some journals]"

**- Healthcare professional**

Users have to make an additional request (an extra step in the user journey) in order to access some articles.

However, users were satisfied that librarians helped them to obtain full text articles when this proved difficult.



"I access the library facilities when I am unable to access papers through my work access" - **Survey respondent**

"In those situations, the library's been able to access the papers and send me the PDF documents" - **Healthcare professional**

This relates to one of the user needs from the research:

*"As a search requester, I need to easily request papers that are not included in my NHS or university journal subscriptions so that I can access all the relevant information."*

This was validated with a very high level of need and was prioritised as a need that the service **MUST** meet.

#### **2.3.3.5. Search results are used in a range of different ways**

Users make use of the search results they receive in different ways.

Some described critiquing abstracts to determine which papers were likely to be useful to them, and then retrieving the articles.

"Critiquing abstracts, sort of sifting out what's useful and what's not and then retrieving the articles" - **Healthcare professional**

Some used the papers that had been identified to inform their own journal papers.

"It's just been going through those papers that are identified, and then producing a paper from it really" - **Healthcare professional**

Others forwarded the search results on to their colleagues, who used the information found in the search to inform their practice.

"I send it to the psychologist, just sort of forward it on, and then they use it, I suppose it's to inform practice" - **Healthcare professional**

## 2.3.4. Satisfaction

### 2.3.4.1. Users are highly satisfied with this service

The users we spoke to tended to be very happy with their experience of the literature and evidence search services, and were full of praise for the librarians who run these services.

"You do a great job!" - **Survey respondent**

"Brilliant service" - **Survey respondent**

Many users we spoke to were completely satisfied and did not have any suggestions for how the service could be improved.

"I can get everything I want" - **Healthcare professional**

"I think search service wise, I don't think I can add anything more than what I already have. I think they do a brilliant job" - **Healthcare professional**

It should be noted that the majority of people we spoke with during the research were existing users of evidence search services.

Speaking to more non-users may reveal additional things that would need from this service, that were not identified during this research.

### 2.3.4.2. Expert searches are highly valued and play an important role in the NHS

Users value this service and the quality of the searches that they can obtain through it. Many users expressed that these searches are a very important part of their work.

Users noted that without this service, they would have difficulties with finding the time to keep up to date with current evidence.

**"I would worry about my capacity to keep up to date with both current evidence and my workload if their service was not available" - Survey respondent**

Users suggested that they would also find it more difficult to publish research without this service.

**"I think without that help I definitely wouldn't have been able to publish the research I have done. So it's pivotal really in my career development" - Healthcare professional**

Users also indicated that without this service, they would be reliant on using other sources of information such as Google Scholar.

**"Not having it, you're alone and entirely dependent on Google. And what Google wants to show you" - Manager**

Users emphasised the impact that a lack of this service would have on their work.

**"When I'm in the midst of it, then definitely I think a lack of that service would have a significant impact" - Healthcare professional**

**"I would be lost without them" - Commissioner**

#### **2.3.4.3. Users feel that this service could be used more widely**

The users we spoke to were very enthusiastic about the benefits of being able to request literature and evidence searches, and were keen for this service to be used more widely.

**"Service I had was good - made me think I should use it more often" - Survey respondent**

"I'm not sure that generally people utilise the service as much as they could and should do, and I don't think that the general population of the organisation know just how good and how clever they [librarians] are" - **Manager**

However, it was recognised that more widespread use of the service could create problems with library capacity.

"I think if we were all perhaps using them more, that might have a knock on impact on timescales and things" - **Commissioner**

#### **2.3.4.4. There are people who could benefit from this service and are not aware of it**

Some users indicated that their libraries do promote the services that they offer in order to attract more users.

"She [librarian] attends so many meetings, she's on so many forums, she's very articulate on social media, she's just out there and people know who she is because she works hard" - **Healthcare professional**

"They do lots to make themselves visible and make people aware of what the services that they offer are" - **Healthcare professional**

However, we heard that in some areas, there are people that could be benefitting from this service who are not aware of it.

"I had no idea the service was even available" - **Survey respondent**

"For that very first piece of work, we actually used Imperial College London [...] And that was probably a lack of my understanding of what we'd got available in our system" - **Commissioner**

"This specific service is actually news to me" - **Healthcare professional**

"I have never used such services, but would be interested in finding out whether I have some use cases in my work for doing so" - **Survey respondent**

"How much additional help and support could there be for the areas that don't yet know it?" - **Manager**

#### **2.3.4.5. There were very few suggestions for potential improvements to the service**

As noted above in section 2.3.4.1, we heard very few suggestions for potential improvements to the service.

One suggestion was to encourage staff to participate in journal clubs as good practice.

"The culture is not to review recent research through journal clubs [...] I believe my role and expertise would be enhanced if this was encouraged as good practice" - **Survey respondent**

Users noted that having a central repository in which previous evidence searches could be held would be useful and would prevent duplicate searches needing to be carried out.

"I sometimes think when I'm asking for a literature review [...] do they necessarily need to pull all that information again or is there a central repository where somebody says these are all the evidence reviews that we've done?" - **Commissioner**

In line with the feedback about difficulties in accessing some full text articles, it was suggested that having access to additional journals would be helpful.

"It's not the end of the world but it would make life easier, more access to articles from the login we have with the library" - **Healthcare professional**

Users also felt that it would be useful to more easily find policy and guidance documents from other NHS Trusts.

"Being able to sort of see different policies or different positions at different Trusts would be useful" -

**Healthcare professional**

Finally, users suggested that the service should be more widely promoted so that more people can make use of it.

"NHS Library services are excellent but underutilised and undervalued. More should be done to advertise the library services available as they have a huge amount to offer clinicians and researchers" - **Survey respondent**

"It's a really good service and I think whatever you can do to publicise it and encourage others to use it, I think that'd be great" - **Healthcare professional**

## 2.4. Validating the user needs

Survey respondents were invited to validate a list of 12 user needs identified from the user interviews, remote observation sessions and a user needs workshop.

Full data is in the User needs validation survey.

342 **users** completed the user needs validation survey including:

- 242 healthcare professionals
  - E.g. Consultant, Pharmacist, Midwife, Research Nurse
- 53 managers
  - E.g. Associate Director, Medical Director, General Manager

### 2.4.1. Analysis method and outputs

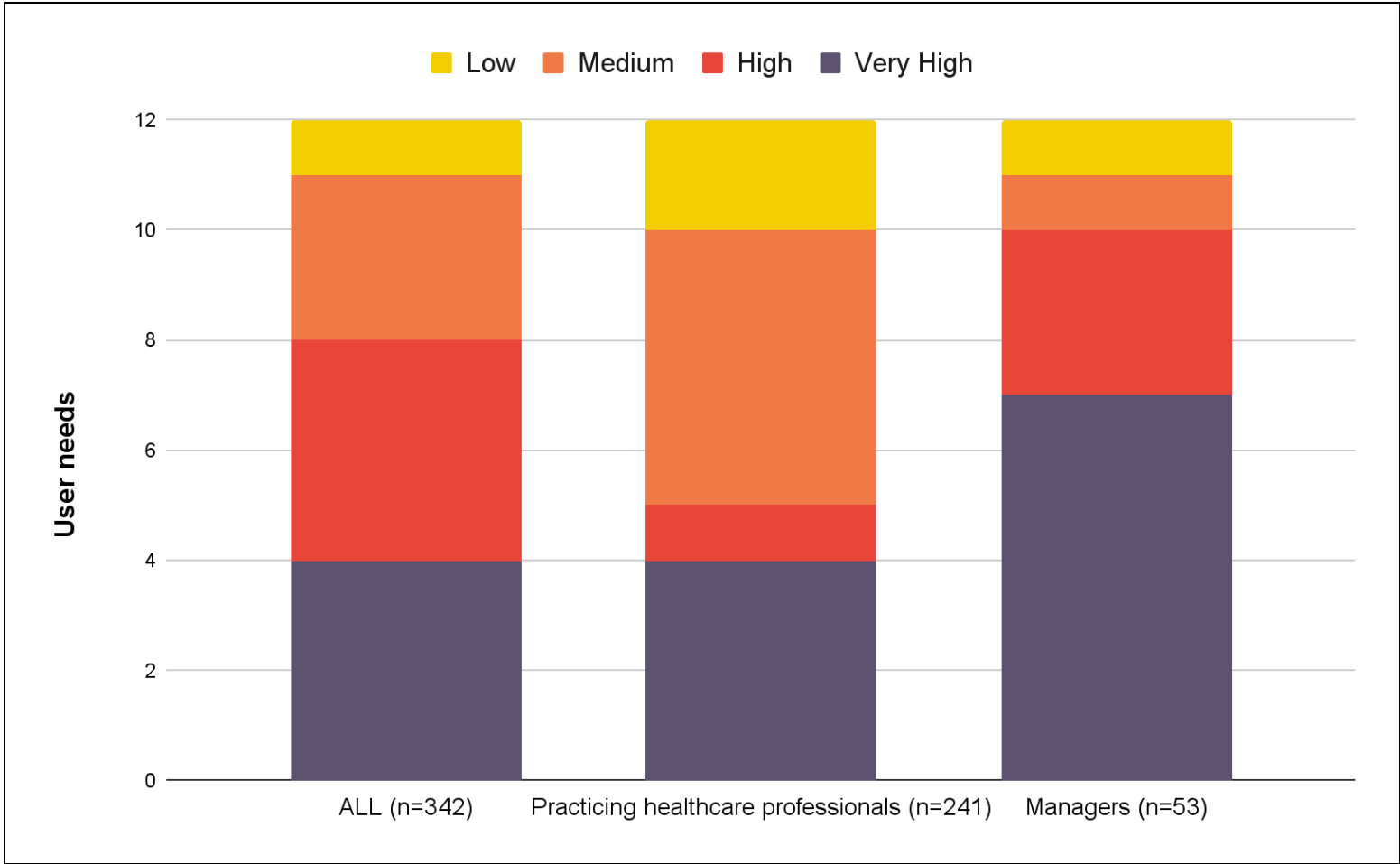
12 user needs were scored by users on a range from **0 - I have no need** to **4 - I definitely need to...**

(Example) *...request a search from a librarian so that I can be confident that my search will be done to a high professional standard*

Each need was then categorised into **Very high, High, Medium and Low priority user needs** depending on the average score of the responses.

Key: **yellow = Low need, orange = Medium need, red = High need, purple = Very high need**

The levels of user need are shown in the chart below:



The level of response to the user needs validation survey was very good.

**Healthcare professionals showed a lower level of need than managers**

The survey data showed that healthcare professionals showed a lower level of need compared to the managers who completed the survey. While healthcare professionals rated 7 needs as either MEDIUM or LOW, managers only rated 2 needs as either MEDIUM or LOW. Similarly, healthcare professionals had 4 VERY HIGH needs, whereas managers had 7 VERY HIGH needs.

It should be noted here that a number of healthcare professionals who took part in the survey (e.g. pharmacists)



described completing many of their searches themselves which may have contributed to this lower level of need.

### **The majority of user stories related to requesting searches or receiving search results**

Of the 16 user needs identified in this discovery:

- ◆ 5/16 were about **requesting searches**
- ◆ 8/16 were about **search results**

These made up 81% of the total needs.

Of the 12 of these needs that were included in the survey, 8 were either VERY HIGH or HIGH.

Although not all of the needs were validated in the user needs validation survey, the number of needs and level of need within these themes demonstrates that these areas are particularly important to users.

## 2.5. Prioritising the user story backlog

The evidence from this survey and other user research was used by the Health Education England team to directly inform their initial round of **user story prioritisation** (see output 8: User stories backlog).

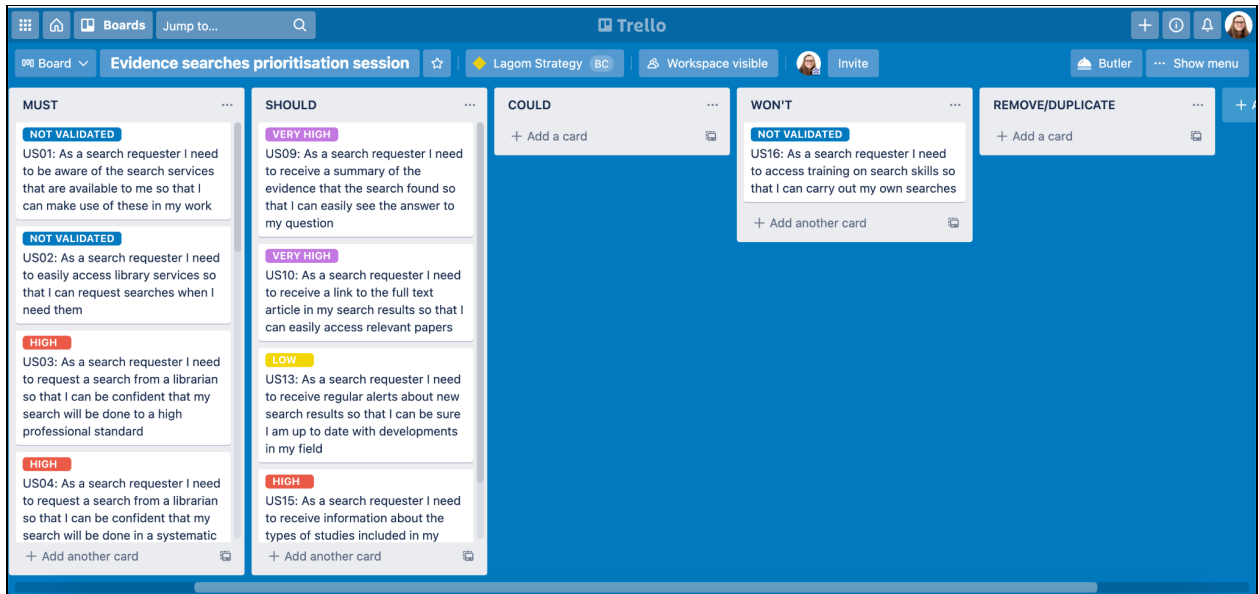


Image: screenshot of the prioritised user stories

## 2.6 Journey mapping

During the user research we mapped out 3 search requester journeys:

- 1) Requesting a search for service management
- 2) Requesting a search for patient care
- 3) Requesting a search for auditing/quality improvement

The evidence gathered through this process was used to inform the research findings.

In particular, these journey maps show that there are several different stages involved in requesting a search. As shown in the maps, the main role involved in each journey is the librarian. There may also be involvement from colleagues and supervisors.

The maps highlight that a range of different tools are used when requesting searches, including email, phone, and Teams.

The maps also reveal opportunities throughout each journey.

PDFs of each of the journey maps are available as an output of the research.

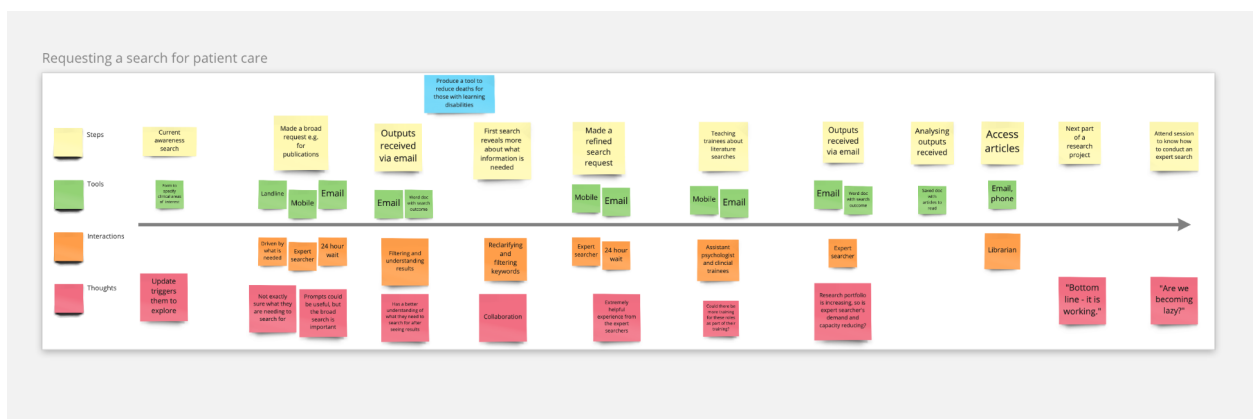


Image: screenshot of a journey map (available as an output of the research)

# Annex I - user research

## Research sources

Some extra material and information has been reviewed during the user research.

1. Charts and graphs of timings data for literature search improvement project.
2. Barts Health NHS Trust searches - 7 examples
3. University Hospital of Derby and Burton searches - 12 examples
4. Lancashire Teaching Hospitals searches - 10 examples
5. Searches ranging from 30 mins to 12 hours - 32 examples

## User participants (in moderated activities)

All the users below were involved in phone interviews, remote observation sessions, or the user needs workshop.

### User interviews

1. Clinician - frequent user of evidence-search services
2. Programme Manager - occasional user of evidence-search services
3. Community Matron - occasional user of evidence-search services
4. Consultant - frequent user of evidence-search services
5. Consultant Physician and Medical School Admissions Tutor - frequent user of evidence-search services

6. Associate Director - a rare user of evidence-search services
7. Deputy Manager - occasional user of evidence-search services
8. Clinical Scientist - non-user of evidence-search services
9. Clinical psychologist - occasional user of evidence-search services
10. Nurse - frequent user of evidence-search services
11. Advanced Nurse Practitioner - a rare user of evidence-search services
12. Clinical fellow in urology - occasional user of evidence-search services
13. Deputy Head of Mental Health Commissioning - occasional user of evidence-search services

## Remote observational sessions

1. Assistant Psychologist - occasional user of evidence-search services
2. Healthcare Manager - occasional user of evidence-search services
3. Registrar - frequent user of evidence-search services
4. Clinical Researcher - frequent user of evidence-search services
5. Population Health Approach PHM Program Manager – Commissioning - frequent user of evidence-search services

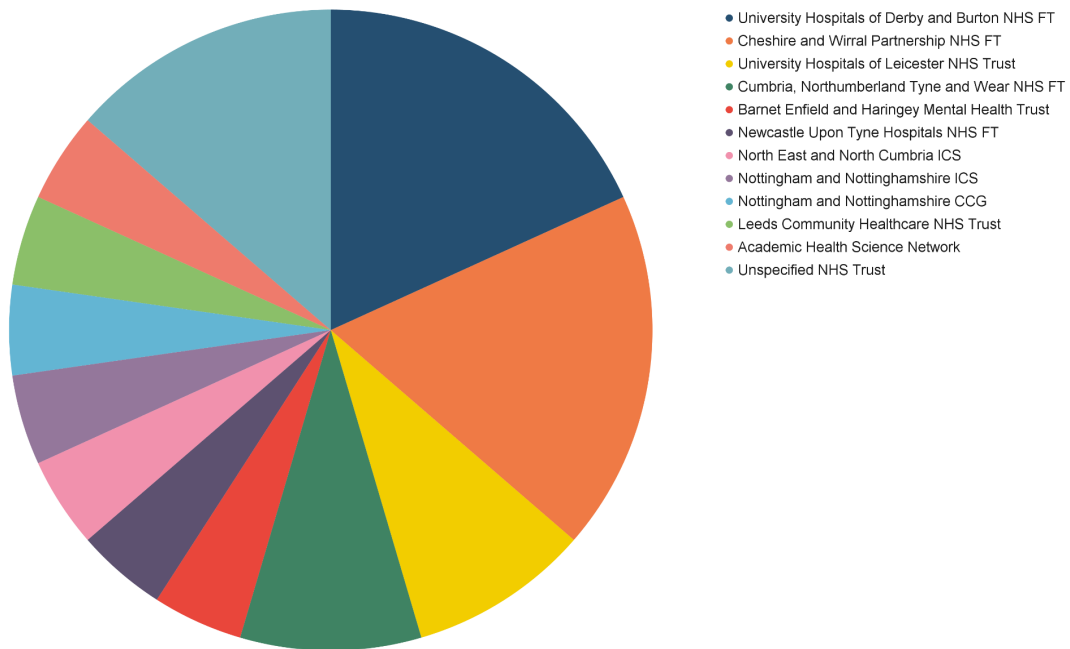
## Workshop

1. Consultant Psychiatrist - frequent user of evidence-search services
2. Assistant Psychologist - frequent user of evidence-search services
3. Speciality Doctor - occasional user of evidence-search services
4. Consultant Clinical Psychologist- occasional user of evidence-search services

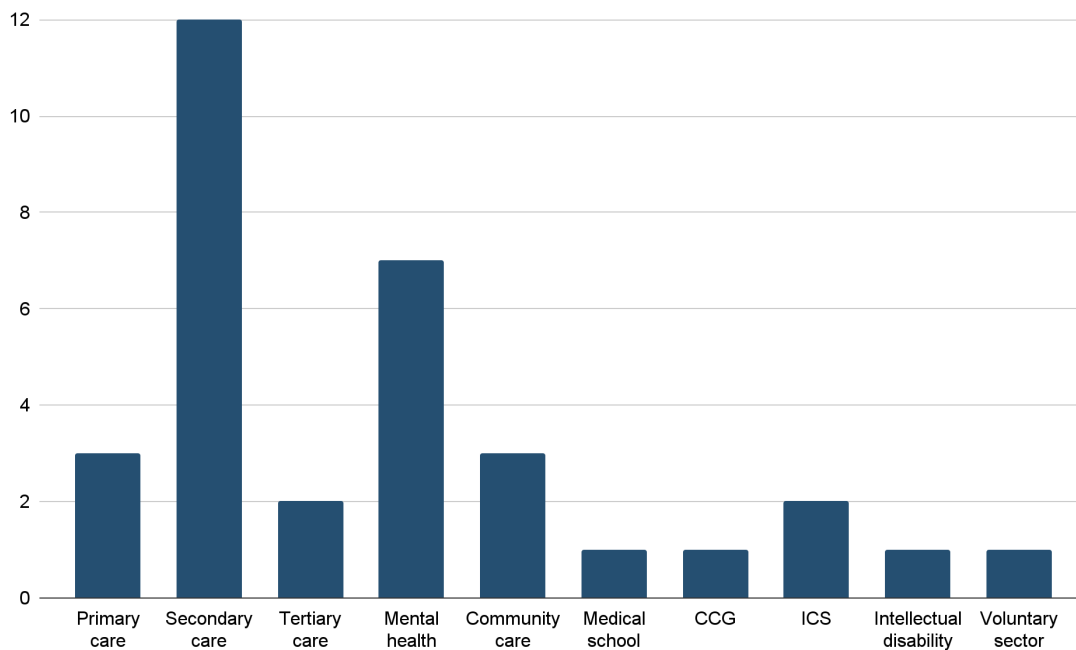
## Information about the users - moderated activities

This section shows the breakdown of users who participated in moderated activities (phone interviews, remote observational sessions and workshop).

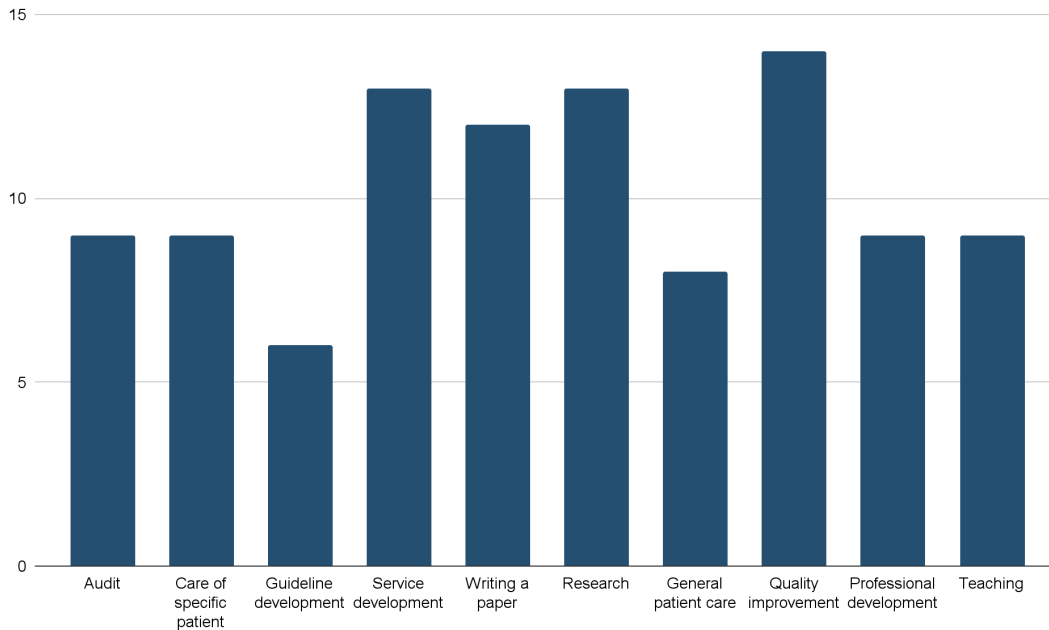
## Who do you work for?



## Which sector do you work within?



## What are the reasons for your literature or evidence search requests?



## Information about the users - user needs validation survey

This section shows the breakdown of users who participated in the user needs validation survey (n=342).

### What is your role?

clinical researcher	Nurse Manager	EMERGENCY NURSE PRACTITIONER	Pharmacist
Consultant (Clinician)	Dietetic Assistant	Pharmacist	Physio Tech
Public health principal	Pharmacist	Clinician	Pharmacist
Director of Workforce	clinician	Clinician	Respiratory Nurse
Consultant	associate community matron	Educational Lead, PSU	Physiotherapist
Deputy Lead Pharmacist - Medicines Information	Pharmacist	Physiotherapist	midwife
Chaplain	Occupational Therapist	medicines information	clinical fellow urology



		pharmacist; also independent prescriber in acute medicine and critical care	
Pharmacist	Nurse Specialist	Research Fellow	Clinician
Advanced clinical practitioner and non medical prescriber	Clinician	Programme lead	Pharmacist
Consultant	Clinician, supervisor/manager	manager	Library
Pharmacist	Manager	Project Lead	Doctor
Medicines Information Pharmacist	clinician	team manager	pharmacist
Midwife	academic research and innovation manager	Clinician/workforce lead	pharmacist
Senior research nurse	Doctor	Lead Pharmacist - Medicines Information	Senior oncology Dietitian
Clinical Specialist Nurse Lymphoedema	Manager	Speech Therapist	specialist nurse
Clinician	Clinician nursing	trainee advanced clinical practitioner (nurse)	Speech and Language Therapist (Bank)
AHP SALT	Dietitian	Manager	Associate Director of Education & Development (job-share)
Registrar	Manager	Medicines Information Pharmacist	Pharmacist (policy)
Public Health Practitioner	Surgeon	Commissioner	Microbiology registrar
Pharmacist	clinical service manager	Clinical Scientist	pharmacist
Associate Director	Clinical Effectiveness Facilitator	clinical psychologist	pharmacist
clinician and academic	Occupational Therapist	Technician Practitioner Medicines Information	Pharmacist
Improvement, Innovation & Effectiveness Facilitator	programmes manager	OT	Doctor
clinician	Health Visitor	Resuscitation Officer	doctor
Senior Dietitian	Project Support Officer	OD Consultant	Clinician
Tissue Viability Nurse	Clinician	Nurse practitioner	Highly specialist pharmacist - Clinical Governance and Medicines Information
Clinician - Consultant	Health Improvement Programme Manager	Medicines information Pharmacist	Clinician
Physiotherapist	Manager and student	Consultant psychiatrist	Medicines Information Pharmacist
consultant Rheumatologist	service development / project management	trainee ACCP	Multidisciplinary pathway worker

Specialist trainee and clinical researcher	strategic lead (manager)	doctor	Consultant Physician
Clinical research Nurse	Practice Learning Facilitator	Educator	Health Improvement Advanced Practitioner
Pharmacist	Public Health Specialist	Clinician and clinical lead	clinician
infection prevention specialist nurse	Staff nurse in healthcare	physiotherapist	nurse
Clinical Scientist	doctor	workforce transformation lead	OD practitioner
Consultant	manager	Nurse	clinician; consultant paediatrician
clinician	Pharmacist	pharmacist	Radiographer
Clinician: Hospital Consultant	Medicines Information Pharmacist	Pharmacist	Medicines Information Pharmacist
Consultant	Pharmacist	Community Matron	Medicines information pharmacist
Lead Nurse Professional Standards	Pharmacist	0-19 SCPHN student	Medicines Information Pharmacist
consultant nurse	Practice Educator /Senior Nurse	clinical manager	Pharmacist
research co-ordinator	Honorary Assistant Psychologist	systems lead	consultant
Clinician	Nurse	Pharmacist	Mental health nurse
Pharmacist	assistant psychologist	Pharmacist in Medicines Information	Patient and Public Involvement Facilitator
AHSN CYP Mental Health Implementation Lead	CNS	Programme Manager	RMN, Training Consultant for Prevention and Management of Violence
Library assistant	Consultant Psychiatrist	Practice Educator	Nurse practitioner
Community Matron	staff nurse	RMN / Psychotherapist	Dietitian
consultant dermatologist	clinician	Education Lead, HEE Professional Development	Emergency Department Consultant
consultant	Administrator	clinician	occupational therapist
Specialist nurse	medicines information pharmacist	Advanced clinical practitioner	in patient falls prevention nurse
Clinician	Assistant Director	speech and language therapist	Senior HR
ACP	Transformation manager	Improvement manager	FY2 doctor
Consultant Obstetrician	Nurse	TPD GP school	Clinical Nurse Specialist
healthcare	pharmacist	Pharmacist	Trainee Counselling Psychology

Student and bank staff	Staff nurse	Medicines information/advice pharmacist	Practice educator (nurse)
Manager	Medicines Information Pharmacist	Clinical Psychologist	dietitian
Medical Director	Pharmacist	Clinical Fellow	Occupational Therapist
do	Pharmacist	Medical information scientist	Manager
Clinical lead	Research Nurse	Medicines Information Pharmacist	Consultant in ED
Clinician	Manager	manager	Nursing Fellow
Nurse	Manager	Consultant radiologist and medical educator	IMT NURSE
Manager	Clinician	physiotherapist	Paediatric Nurse
Registrar	Pharmacist, Medicines Information	Administrator	Nurse
Medical Statistician	midwifery sister	Governance Lead, Mental Health Services	Clinical Academic
clinical educator	pharmacist	Staff Nurse	Clinical Scientist
surgeon	medical	Programme manager	Medical student
Pharmacist Medicines Information	Senior Regional Medicines Information Pharmacist	Lead Medicines Information Pharmacist	Commissioner
administrator	Medicines Information Pharmacist	Pharmacist - Medicines Information	Management trainee
Coordinator of research	pharmacist	Pharmacy Technician	lib
Speech and Language Therapist	NHS E Delivery Partner for NENC ICS Locality	pharmacist	Nurse
General Manager	pharmacist	Medicines Information Pharmacist, Practice Pharmacist	Project Manager
Programme Officer	Community Cardiac Nurse Specialist	nurse	cs
doctor	Head of Digital Engagement Services	Medicines Information Pharmacist	Assistant Psychologist
staff nurse	Stakeholder Engagement Manager	Project Manager and SME	Administrative Officer
Clinical scientist	clinician	Project Manager	clinical specialist physiotherapist
Consultant in Intensive Care	Pharmacist (Medicines Information)	Workforce Transformation Programme Manager	Nurse
Associate HCSW Development Educator	Occupational Therapy Professional Lead	Scrum Master	Clinician and researcher

programme manager	Advanced Practitioner (SLT)	programme manager	Pharmacist
Director Governance	D&I Manager	laboratory scientist	Workforce and Education Transformation Lead
Lead Medicines Information Training Technician	MANAGER	Clinical scientist	pharmacist
senior quality improvement practitioner	medicines information pharmacist	Medicines information pharmacist	nurse
Practice educator (nurse)	Pharmacist	RN but specialising in medical device safety and decontamination	Occupational Therapist
Clinician	nurse	Pharmacist	Pharmacist
Nurse	Pharmacist	Service Manager	Medicines Information Pharmacist
clinician	Deputy Postgraduate Dean	pharmacist	Administrator
clinical nurse specialist	Patient Experience Lead	Medicines Information Pharmacist	

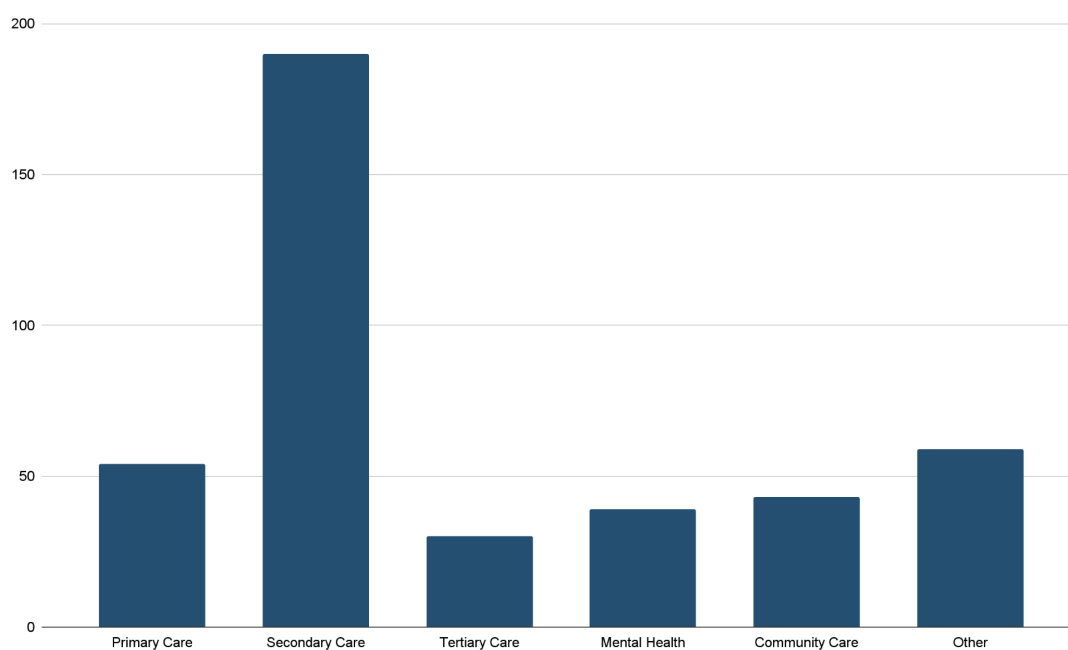
## Who do you work for?

At least one user from each of the following organisations responded to the survey:

University Hospitals of Leicester NHS Trust	Brighton and Hove City Council Public Health	Leeds Community Healthcare NHS Trust	University Hospitals of Birmingham NHS FT
University Hospitals of Derby and Burton NHS FT	Royal Free London NHS FT	Lancashire Teaching Hospitals	University Hospital Southampton NHS FT
Gloucestershire Hospitals NHS Trust	Salisbury NHS FT	Northern Devon Healthcare Trust	Buckinghamshire Healthcare NHS Trust
University of Oxford	University of Leicester	Royal Devon and Exeter NHS Trust	KSS AHSN
KSS ARC	Health Education England	Newcastle Hospitals NHS FT	Surrey and Borders Partnership NHS FT
Nottinghamshire Healthcare NHS FT	Derbyshire Community Health Services NHS FT	Chesterfield Royal Hospital NHS FT	Epsom and St Helier NHS Trust
University Hospital Sussex NHS FT	East Kent Hospitals University FT	Lancashire County Council	Royal Orthopaedic Hospital
Portsmouth Hospitals University NHS Trust	Oxford AHSN	Sussex Partnership NHS FT	Brighton and Sussex University Hospitals Trust
Sussex Community Foundation NHS Trust	Sussex NHS Commissioners	Cheshire and Wirral Partnership NHS FT	East Suffolk and North Essex NHS FT
Torbay and South Devon NHS FT	Great Western Hospital FT	Barnet, Enfield and Haringey NHS FT	Dartford and Gravesham NHS Trust
Blackpool Teaching Hospitals Trust	Specialist Pharmacy Service	North West Ambulance Service	Sheffield Teaching Hospitals

Yeovil District Hospital NHS FT	North East London NHS FT	University Hospitals of North Midlands NHS Trust	University Hospital Dorset NHS FT
Northampton General Hospital NHS Trust	NHS England	North East and North Cumbria ICS	University Hospitals Bristol and Weston NHS FT
West Hertfordshire Hospitals NHS Trust	Liverpool University Hospitals NHS FT	DHU Healthcare	Birmingham and Solihull Mental Health FT
Worcestershire Acute Hospitals NHS Trust	Royal Wolverhampton NHS Trust	Leeds CCG	Doncaster and Bassetlaw Trust
Charity hospice	Sherwood Forest Hospitals NHS FT	Mid Yorkshire NHS Trust	Leeds Teaching Hospitals
North Tees and Hartlepool NHS FT	UKMI	Regional drug and therapeutic centre	Solent NHS Trust
Alder Hey Children's NHS FT	Shrewsbury and Telford Hospital NHS Trust	Oxford University Hospitals NHS FT	Dudley Group NHS FT
Primary Care Network	Homerton University Hospital NHS FT	Kettering General Hospital	Chelsea and Westminster NHS FT
SLaM	Frimley Health NHS Trust	Airedale NHS FT	East London NHS FT
Guy's and St Thomas' NHS FT	London Borough of Barking and Dagenham	North West Medicines Information Centre	Royal Berkshire NHS FT
Royal Cornwall Hospital	St George's University Hospitals NHS FT	Devon Partnership NHS Trust	Nottingham and Nottinghamshire CCG
Mersey Care NHS FT	Unspecified NHS Trust	Unspecified Local Authority	Unspecified ALB
Unspecified AHSN	Unspecified CCG		

## Which sector do you work within?



Other responses to this question included public health, acute hospital Trust, education, ALBs and working across all sectors.

# Annex II - user research outputs

These outputs have been delivered in accordance with the project proposal:

1. Kick-off meeting outputs
2. Detailed notes from user interviews and observational sessions
3. User proto-persona profiles
4. Journey map 1: Requesting a search for service management
5. Journey map 2: Requesting a search for patient care
6. Journey map 3: Requesting a search for auditing/quality improvement
7. Validation survey results and analysis
8. User story backlog (including validated user needs)
9. Show and tell presentation
10. Report (this document)