



E-books user research

Health Education England

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1. User research overview

1.1. Executive summary

This research was conducted by Lagom Strategy (an agency specialising in discovery and user research for digital services) between April and June 2022.

The research focussed on the needs of healthcare staff in England, Northern Ireland, Scotland, Wales, and the Republic of Ireland who use e-books from their knowledge and library service.

The research activities were conducted in line with the UK Government Service Standard definitions and guidance for user research as part of discovery work.

The work has concluded with a prioritised user needs backlog and a set of findings for the library and knowledge services team to consider.

The main findings are:

Context and purpose

- ◆ Users share a common definition of e-books
- ◆ There appears to be limited interest in interactive content
- ◆ Users utilise e-books for a range of purposes
- ◆ Over three quarters of e-books users access e-books for more than one use
- ◆ A number of users rely on e-books to do their job
- ◆ People seem to be accessing more electronic formats in general (including e-books)

- ◆ Use of e-books seems to have become more important during the pandemic

Access

- ◆ The main way that e-books are accessed seems to be on work desktop computers and laptops
- ◆ Users don't appear to distinguish between different platforms
- ◆ A small number of users feel that e-books are not visible enough
- ◆ Access to a physical healthcare library isn't strongly linked to whether or not individuals utilise e-books
- ◆ Users have different perceptions about the range of e-texts available compared to physical libraries
- ◆ Users' IT confidence seems to affect their take up of e-books
- ◆ Several users expressed a desire for training about how to use e-books
- ◆ Some users imagine that costs might prevent libraries from making e-books available
- ◆ Some users access e-books via other means
- ◆ There is some awareness of e-book licensing practices

User experience

- ◆ Individuals who use healthcare e-books seem to have a high level of satisfaction
- ◆ A helpful librarian was cited as an invaluable resource by a number of users
- ◆ Most users feel that e-books are a good way to access the most up-to-date information

- ◆ The majority of users are satisfied with the range of e-books that they get access to
- ◆ One of the main frustrations for users is not having access to the full text

Behaviour

- ◆ There are big differences in how frequently people use healthcare library service e-books
- ◆ Not all users choose e-books over paper books
- ◆ Users value the ability to use e-books from any location
- ◆ Users appreciate the in-text features that are an advantage of e-books over other formats
- ◆ Many users find the ability to copy and paste from e-books a useful feature
- ◆ Being able to search within texts is cited as an important time-saving feature

Nation and roles

- ◆ There may be different levels of awareness in different nations and different regions
- ◆ Users want to know that they're accessing the same range of texts as their peers in other areas
- ◆ Medicines information pharmacists are most likely to have integrated e-books into their role

1.2. User research goals

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

1. Who: understand who users of e-books in the NHS actually are.

2. What: understand what they are using e-books for.
3. When and how: Understand and articulate the common scenarios and user journeys for users of e-books
 - a. Identify the user needs in those scenarios.
 - i. Validate the significance and impact of those needs, and prioritise them.
 - b. Understand the current range of platforms, tools and systems that they use.
 - i. What influences users' choice of format? (e.g. when would they choose e-book over print?).
 - c. Understand how *well* they meet these needs.
 - i. What do they think about the current experience?
 - ii. Do they have unmet needs?
 - iii. What are the common barriers?
 - iv. How does the experience differ across different e-books platforms?
 - d. Why do they do it this way? E.g. training, access to devices, platforms, tools, or licences.
 - i. What devices do they commonly use (eg personal vs work devices, desktop vs handheld)?
 - ii. What influences frequency of use of e-books?
 - e. How inclusive do users feel e-books are, and why?

1.3. The scope of the user research

The scope of the work was limited to healthcare staff (in training, clinical, and non clinical) using e-books through library and knowledge services.

The research also engaged users who did not use e-books.

The research covered users from across the five nations (England, Northern Ireland, Scotland, Wales, and the Republic of Ireland).

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 - Service Designer and Project Lead
- ◆ Dr Hannah Fletcher-Poole - Lead User Researcher
- ◆ Dr Charlotte Jais - User Researcher
- ◆ Victoria Garnett - Delivery Manager

1.4.2. Health Education England

- ◆ Helene Gorrington - Knowledge and Library Services Development Manager

Note: The work was commissioned by Health Education England on behalf of the five nations (England, Northern Ireland, Scotland, Wales, and the Republic of Ireland). HEE was the primary client but representatives from each of the five nations were involved throughout the research.

1.5. User research activities

The user research was conducted during April and May 2022.

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 **14 one-to-one user interviews/observings**.
4. Ran a **user needs workshop** with an end user, to generate user journey maps and proto-personas.
5. Analysis of a **user needs validation survey** with 212 e-books user responses and 109 non user responses.
6. Developed **journey maps** for 24 user journeys.
7. Developed **5 user proto-personas**.
8. Created and prioritised **29 user needs** with the library and knowledge services team.
9. 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. We engaged with individuals from a good range of user roles.

In terms of the qualitative research, we interviewed 4 people from Northern Ireland, 3 from England, 3 from Scotland, 2 from Ireland and 2 from Wales. Our user who participated in the workshop also worked in Wales (see Annex 1 for a breakdown of the different job roles held by participants).

In terms of users of e-books who completed the user needs validation survey, we had 119 respondents from Northern

Ireland, 37 from Wales, 27 from England, 21 from Scotland and 8 from Ireland (see section 4 for a more detailed discussion of the user need validation survey).

1.6. Key associated documents

- ◆ A list of prioritised user needs
- ◆ A set of proto-personas
- ◆ Digitalised user journey maps

Note: **all** project documentation has been gathered and shared with the HEE library and knowledge services team team

1.7. Background to this user research

Health Education England, and the equivalent organisations in Northern Ireland, Scotland, Wales, and the Republic of Ireland, wanted to better understand how people currently use e-books in healthcare.

They commissioned this research to help understand the behaviours, needs and expectations of e-books users across the five nations.

This work builds on previous work into the use of e-books in healthcare. But there has not been any previous *user research* into the use of e-books conducted on this scale.

This user research will inform future approaches to e-books across the five nations, including to inform procurement, and future platform choices.

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

- ◆ 14 one-to-one interviews with user representatives
- ◆ 1 user participant working alongside the client team in a user needs workshop, including journey mapping
- ◆ Open text comments in 321 online survey responses

Note: Unfortunately we were unable to conduct observations during the interviews as we had planned. A number of the early participants experienced difficulties sharing their screen, to the detriment of the flow of the interview and our ability to address the research questions. So the remaining sessions focussed on interviews, rather than observations.

2.1.2. Quantitative research

- ◆ 321 respondents to the online user needs survey

Note: 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

◆ **NHS staff in training**

- ◆ Those who are in formalised training, such as apprenticeships or university courses. This may mean that they also have access to e-books via a university library.

◆ **Current NHS staff**

- ◆ Incorporates both clinical and non-clinical roles, as well as those in community based practices and those in acute hospitals.

◆ **NHS staff doing CPD**

- ◆ Individuals who have a role in the NHS (or HSE / HSC) and are undertaking professional development. This could be specific, such as a nurse taking their revalidation, or more general learning.

Through the process of undertaking the research these roles were refined further in order to give more clarity and a deeper level of detail.

These refined user roles were as follows:

◆ **CPD and training users**

- ◆ Users who draw upon e-books to aid their professional development and/or support their learning as part of an accredited programme of study.

◆ **Research users**

- ◆ Users who utilise e-books to complete research which is directly related to their role.

◆ **Medical enquiry users**

- ◆ Characterised by medicine information pharmacists who utilise e-books regularly to complete patient care queries.
- ◆ **Teaching users**
 - ◆ The research identified a small group of users who draw upon e-books to help them develop programmes of work.
- ◆ **Non-users**
 - ◆ Individuals who either choose to not use healthcare library e-books or do not know that they can access these.

3. Findings

Findings are presented by 5 overarching themes:

- ◆ Context and purpose
- ◆ Access
- ◆ User experience
- ◆ Behaviour
- ◆ Nations and roles

3.1. Context and purpose

3.1.1 Users share a common definition of e-books

In speaking to both users and non-users of e-books across the 5 nations it emerged that individuals tended to share a common definition of e-books.

They typically defined e-books as electronic versions of existing printed books.

"An e-book is a resource that we have traditionally as a paper book and then they make an electronic version of that paper book." - E-books user, Scotland

"The ones that I know are definitely e-books are online versions of the ones we've had on the shelf." - E-books user, England

3.1.2 There appears to be limited interest in interactive content

Our working definition of e-books included reference to some of the imagined benefits of e-books over other formats, including the facility to provide interactive content.

Working definition of an e-book (from the research kick-off workshop):

An electronic version of a book that can be read on a screen

Contains text and images, and can be interactive

Consumed on any digital device (PC, tablet, mobile, dedicated e-reader)

Accessed by healthcare staff, sometimes in preference over printed books

Sometimes purchased as bundles, enabling access for groups of staff

However, most users who were interviewed as part of the research expected e-books to simply be an electronic copy of familiar paper texts.

"I can't be doing with too many animations and things in books." - E-books user, England

"The Renal Drug Handbook is great 'cos that's exactly the same as it is online." - E-books user, England

3.1.3 Users utilise e-books for a range of purposes

Our research revealed that many users utilise e-books for a number of different purposes.

The core reasons identified were:

- ◆ to support training and CPD
- ◆ for research
- ◆ to answer medical enquiries
- ◆ to support service/quality improvement
- ◆ to aid teaching

Participants in our research often referred to the very specific purpose they used e-books for.

"If I get enquiries about the effects of medicine I would go onto the Meyler's Side Effects of Drugs to have a look at that resource." - **E-books user, Northern Ireland**

"I was doing an enquiry about a medicine and somebody who's breastfeeding. So I used an electronic book to find out information from that." - **E-books user, Scotland**

"Looking for a reading list for the student nurses [...] we were looking for different journal articles plus electronic books as well. So they could access it to support them to complete the module." - **E-books user, Scotland**

"Overall I use them for work and that brings in training and CPD alongside it." - **E-books user, England**

"I'd just mainly use them when I need some theoretical back-up, or I'm doing some of my own research." - **E-books user, England**

3.1.4 Over three quarters of e-books users access e-books for more than one use

Our research suggests that most people who use e-books, use them for more than one purpose.

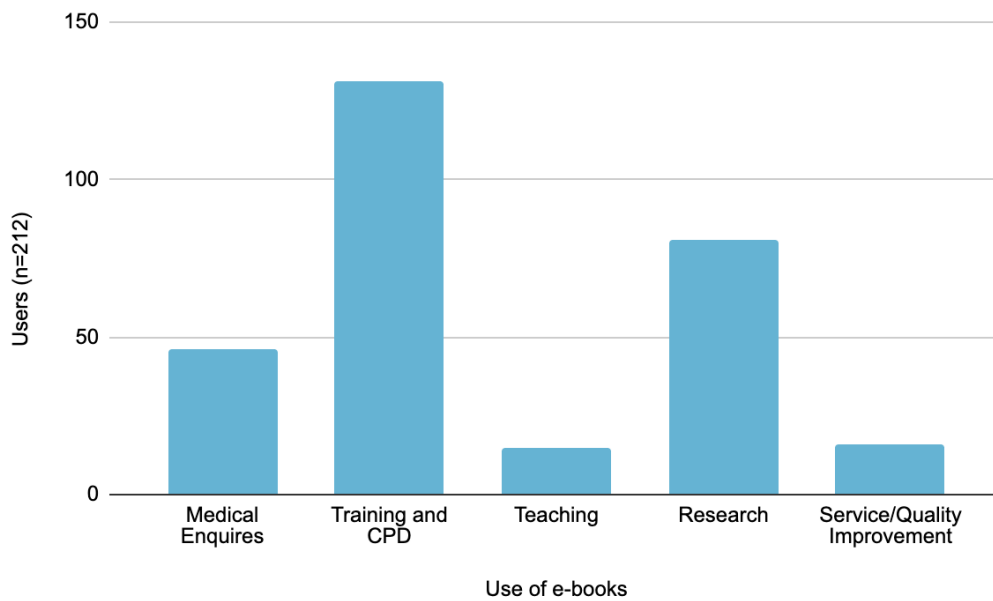


Image: Bar chart presenting the uses of e-books

Our user needs validation survey shows that only 24% of users access e-books for just one use, whilst 76% access them for more than one purpose.

3.1.5 A number of users rely on e-books to do their job

Our research suggests that some users use e-books out of preference. They would rather use e-books than other formats.

But for some, accessing electronic texts is borne out of necessity. For these users, they might rely on e-books because they are the only up-to-date versions of texts available to them.

"Well I wouldn't be able to do my job [if I no longer had access to e-books, essentially]." - **E-books user, England**

"At work we're not really allowed to use the [paper] books - or discouraged - in case they're not up-to-date." - **E-books user, England**

3.1.6 People seem to be accessing more electronic formats in general (including e-books)

Our research suggests a more general trend away from print formats towards electronic versions of texts.

Many users who we spoke to during the research utilised electronic copies of journal articles and other electronic formats, as well as e-books.

"Bit of both [online journals and e-books], it just depends on the type of enquiry we're doing." - **E-books user, Scotland**

"It's probably more the journals that I would use. 'Cos within mental health nursing it's obviously the most up-to-date research that we would be looking for." - **E-books user, Scotland**

3.1.7 Use of e-books seems to have become more important during the pandemic

Perhaps unsurprisingly, our research suggests that use of e-books seems to have played an increasingly important role during the pandemic.

Users may have spent more periods of time working from home, and found it more difficult to access physical libraries during this period.

"The way covid had impacted on our services the last couple of years ... we had to change our approach. So we were relying on the HPSC and the HSE and then our own online research." - **E-books user, Ireland**

3.2. Access

3.2.1 The main way that e-books are accessed seems to be on work desktop computers and laptops

We heard from users about their *personal* use of e-books for pleasure, which tended to be undertaken on tablets and readers such as iPads.

But this contrasted with the devices they used to access e-books for work, which were much more likely to be desktop computers or laptops.

"Work laptop all the time, I don't use a tablet or a phone for work at all." - **E-books user, England**

"The laptop really. I've been working a lot from home so either the computer at the office or most likely the laptop when I'm at home - a work laptop." - **E-books user, Scotland**

"[Use personal e-books] through Amazon and tablets. I would have personal e-books, nothing work-related on that." - **E-books user, Ireland**

3.2.2 Users don't appear to distinguish between different platforms

It was notable from the research that users do not tend to distinguish between different e-books platforms.

The users we spoke to tended to use the same e-books repeatedly. Typically, they accessed these e-books in a routine manner in which the platform they used to find and access them was not recalled as being of major significance.

Most of the users we spoke to had utilised their library catalogues and / or lists of URLs put together by librarians. There was little evidence of web searches being used to access e-books.

"I would search for [e-books] either through the healthcare library or through the university library." - **E-books user, Northern Ireland**

If they did have a preference for a platform, this tended to be determined by recommendations, or familiarity with a publisher.

"A lot of the stuff work-related would be recommended from the Infection Prevention Control Society or through HSE or the HPSC." - **E-books user, Ireland**

3.2.3 A small number of users feel that e-books are not visible enough

Some individuals involved in our research interviews complained that access to healthcare library service e-books is not visible enough to them.

They suggested that this lack of visibility might result in staff not utilising e-books as much as they might have done.

"There's probably loads more e-books that I don't know and don't use because I don't know that they're there." - **E-books user, England**

"We don't seem to publicise it that it's available and it's there - it's only when I went looking for it that I found that there was actually training." - **E-books user, Ireland**

Some participants said they were not aware that they could access healthcare library service e-books before they engaged in our research.

3.2.4 Access to a physical healthcare library isn't strongly linked to whether or not individuals utilise e-books

We found no strong link between access to a physical library, and take-up of e-books.

Responses to our user needs validation survey show that:

- ◆ 83.02% of *e-books users* have access to a physical healthcare library
- ◆ 76.15% of *non-users of e-books* have access to a physical healthcare library

So our research suggests that people without direct access to physical books are also *slightly less likely* to use e-books.

We might have expected there to be a stronger link between take-up of e-books, and access to a physical library, but our research found no strong correlation.

3.2.5 Users have different perceptions about the range of e-texts available compared to physical libraries

Some users believed that using e-books meant they had access to a greater range of publications.

But while this perception about availability was common, it was not shared by all users.

Some felt that there was a greater range of hard copy publications available to them, either immediately or on request from a library.

"It seems hard copies are available much more than the e-versions." - E-books user, Wales

"They rarely have it but they will access it for you and they will do their utmost to get it for you." - **E-books user, Ireland**

3.2.6 Users' IT confidence seems to affect their take up of e-books

Some of the participants we spoke to cited their lack of digital skills or confidence as a barrier to using e-books.

Those users told us that they might be more likely to utilise healthcare library service e-books if they were shown how.

We heard about this lack of digital confidence in our research with non-users, *and* some of those who did use e-books.

"I'm IT literate 'cos I use it all the time but I'm not an expert and it puts me off - anyone less than me I think it'd put you off altogether." - **E-books user, England**

"If you're like me - which is slightly older - then you're not used to using computers ... I am quite tech-savvy but it took a long time ... if you're not tech-savvy then that's going to be an extra barrier." - **E-books user, England**

"Every time I've looked at it in the past I've just found it a bit too complicated." - **Non-user, Wales**

3.2.7 Several users expressed a desire for training about how to use e-books

We heard users talk about the need for training, in a few different ways.

Some talked about a need for personal or classroom training about how to use e-books. While others mentioned other methods that might enable more self-service learning.

"Education and training would be really good." - **E-books user, Northern Ireland**

"A fact sheet or just a quick video which shows 'look this is what you can do with e-books'. So it'd probably be something like that that'd be useful." - **E-books user, Northern Ireland**

However, this apparent need for training may reflect different problems, for which training is not the only solution.

Some users just wanted e-books to be easier to access and use, rather than being trained how to use something they might find difficult.

"Keep it simple to use as not everyone is computer literate." - **E-books user, Northern Ireland, user needs validation survey**

3.2.8 Some users imagine that costs might prevent libraries from making e-books available

Some users expect e-books to be less available to them, because they would be too expensive for library services to purchase.

"Our library has refused to purchase some titles as e-books due to the cost in comparison to the paper version." - **E-books user, England, user needs validation survey**

"Medication and Mother's Milk is a breastfeeding resource and there is an online version of that ... but it's really expensive, so it's probably more cost-effective to have just the printed version of that." - **E-books user, Northern Ireland**

"It tends to be I haven't got access to this e-book because it's too expensive for the number of times we would do that query." - **E-books user, England**

We don't know from our research whether or not costs are a barrier to library services making e-books available. Rather we note the perception amongst users that e-books might be less

available because of cost, and the impact this might have on their expectations and behaviours.

3.2.9 Some users access e-books via other means

Users of e-books in our research usually knew that they could access e-books via their healthcare library services.

But when we asked where else users looked for similar information, it emerged that some users also accessed healthcare e-books via other means.

We found that a number of the users we spoke to also had access to university e-library platforms.

A smaller number of users also told us that they paid for private subscriptions to certain professional platforms.

"I use OpenAthens a lot as a NHS worker. I also am affiliated with a university so I use their search tool as well." - **E-books user, England**

"I can access some of the journals through my own professional subscription." - **E-books user, Wales**

3.2.10 There is some awareness of e-book licensing practices

Issues around the licensing of e-books were a clear theme in the *e-books SOS* project which we analysed as part of our document review.

Licensing issues did not often come up in our qualitative research with users, although we did encounter some awareness of how e-booked might be licensed, and how this might impact availability for users.

"You require licensing for some of them, a lot of the licensing would be purchased through the HSE." -

E-books user, Ireland

3.3. User experience

3.3.1 Individuals who use healthcare e-books seem to have a high level of satisfaction

We have not conducted a quantitative measure of satisfaction as part of our research, but our qualitative evidence suggests a high level of satisfaction amongst users of e-books.

'Accessible' and 'useful' were key terms used to describe e-books.

"It's a useful resource and I always like to support it if I can because I wouldn't like it to go!" - **E-books user, Scotland**

"It's great that there are e-books out there but it'd be useful to know what would be available to us, and to perhaps have some training as well. But overall it's really useful to have them." - **E-books user, Northern Ireland**

3.3.2 A helpful librarian was cited as an invaluable resource by a number of users

Several users talked positively about receiving support from librarians in relation to accessing e-books.

"We have a dedicated pharmacy librarian and they cover the healthcare library as well for us. So if I had any problem at all I would contact her no problem." - **E-books user, Northern Ireland**

"The support I got from the librarian was great, she was very prompt and very helpful." - **E-books user, Northern Ireland**

"Our librarian is a really enthusiastic librarian, so if somebody did need teaching how to use something her

and her little tiny team would do that.” - **E-books user, England**

Our user needs validation survey confirmed a *high* level of user need for the support received from librarians.

UN09: To have access to a dedicated librarian so that I can get help when needed when finding and using e-books

3.3.3 Most users feel that e-books are a good way to access the most up-to-date information

A number of the users we spoke to had been encouraged to use e-books in order to access the most up to date information.

“I would quite often rather get the paper book, but of course the e-books are updated more often so then you can’t trust the book.” - **E-books user, England**

“I’m going to be looking at changing different policies ... so that’s something probably I will be accessing the library to see as well. To make sure our policies are up-to-date to current guidance, so an e-book would be good!” - **E-books user, Scotland**

Our survey revealed a *very high* level of user need for accessing the most up to date information.

UN01: To access the latest edition of an e-book so that I have the most up-to-date information

However a handful of users voiced concerns that the e-books that have access to through healthcare library services may not actually be the most up-to-date versions.

“Some of those books that we would use I’d like to see updated versions of them, because I use them but I know they’re really valuable.” - **E-books user, Northern Ireland**

3.3.4 The majority of users are satisfied with the range of e-books that they get access to

The majority of users we engaged with appeared to be satisfied with the range of e-books which they get access to.

"The range is good, you've got all these Oxford texts, so we don't have to go to the library, the library comes to us really!" - **E-books user, Scotland**

"I'm very satisfied, but I suppose I don't really know what's out there or what I'm actually missing 'cos I'm not actively searching for e-books, so I suppose that's a problem - actually knowing what is actually available." - **E-books user, Northern Ireland**

But a few users did mention the range of texts available as a barrier to their usage of e-books.

For example some participants mentioned that the most up-to-date versions of key texts are not available to them electronically.

"We feel hard done to in our mental health service that we can't access certain texts electronically." - **E-books user, England**

3.3.5 One of the main frustrations for users is not having access to the full text

We heard from a number of users that they were sometimes able to start to read an e-book, only to realise that they did not have access to the full text.

When this happened (for whatever reason), it left users frustrated with the experience of using e-books.

"You don't get the whole book that often, so it's part of the book." - **E-books user, Northern Ireland**

"There was a while where the e-books weren't compatible with the internet explorer. So ... you could only get so far in it." - **E-books user, Northern Ireland**

3.4. Behaviour

3.4.1 There are big differences in how frequently people use healthcare library service e-books

Some participants told us they rarely or never accessed e-books.

"I know that they're available! But that's really all I know about them." - Non-user, Wales

And we heard from occasional and regular users.

"I would say probably if I'm on enquiries then I'd probably use them every other day or so. Probably at least a week or every two weeks." - E-books user, Northern Ireland

While some users rely upon access to e-books on a daily basis as part of their role.

"On a daily basis I would say we use electronic books." - E-books user, Scotland

3.4.2 Not all users choose e-books over paper books

Some (but not all) participants in our research expressed a preference for e-books over other formats.

Users' choice between paper and electronic texts sometimes came down to personal preference. For example, we heard about a preference for the feel of flicking through a physical book.

"The Maudsley Guidelines, it's a resource you'd rather be holding a book, flicking back and forth. The information you need might be spread throughout the book and you

might be having to go on various chapters.” - **E-books user, Northern Ireland**

Some users referred to specific barriers to using e-books. For example, a lack of confidence about using electronic texts, or being unable to access the books needed in electronic form.

“Some of the resources that I have here are only available in the print version to me.” - **E-books user, Northern Ireland**

“Sometimes I have to get out the paper book to find it ‘cos sometimes you’ve got too many drop-downs and it’s not necessarily intuitive as to where it would be.” - **E-books user, England**

3.4.3 Users value the ability to use e-books from any location

We heard that the ability to use an e-book from home, or any other location, represents a clear advantage over other formats, affording the flexibility to work outside the office.

This appears to be of increased importance to users as more people have moved to a hybrid working environment during the pandemic.

“I can have it wherever I am that I can get my laptop to work. So yeah, predominantly electronic these days - I can’t remember when I last looked in the paper BNF to be fair.” - **E-books user, England**

“Since the pandemic one of the plusses is I now have a work laptop so I’ve always got it with me ... so if I’m gonna look something up just put the work laptop on.” - **E-books user, England**

“A lot of our staff would spend a day at home doing CPD, and the thought of having to go to a library to access books, for them to have that access it’s great.” - **E-books user, Northern Ireland**

Both users and non-users returned this need as *very high* in the user needs validation survey.

UN16: To access e-books outside the office / library so that I can work from any location

3.4.4 Users appreciate the in-text features that are an advantage of e-books over other formats

We heard that users value common features enabled by electronic content.

For example, a number of users referred to the ability to highlight text, and annotate content, and navigate through the text via hyperlinks.

"I don't like to damage books, I don't like to write in them, and actually if you've got an electronic version you just highlight and annotate as you want." - **E-books user, England**

"They are very convenient, and also you can adjust the size and all these kinds of things." - **E-books user, Scotland**

"If it's got links in, so for example the BNF now you can go to the nice treatment summaries from there ... so it's links to them onto other things and references." - **E-books user, England**

"It's good to be able to have the chapters at the beginning so you can go and click on chapters and then you get the section of those chapters ... so you can go and access the information immediately." - **E-books user, Northern Ireland**

3.4.5 Many users find the ability to copy and paste from e-books a useful feature

We heard that the ability to copy and paste text, in particular, helps users to work more efficiently, and save time.

And we heard that the ability to copy and paste can help users to reduce errors in their work, removing the need for manually copying information or data from printed text.

"[If] I have a print edition book I'm having to free-type and that's time-consuming, but it can also produce an element of risk - if you mistype something So copy and pasting is safer." - **E-books user, Northern Ireland**

"It makes it much easier then as well if you're looking for tables or graphs or anything like that, you can pull them from the books then directly." - **E-books user, Ireland**

3.4.6 Being able to search within texts is cited as an important time-saving feature

A number of users we talked to referred to the ability to search the content of an e-book more easily than other formats.

If users know what to search for they can often find what they need more quickly in an electronic content, compared to a printed book.

"If you don't know what chapter it's in ... if you've got the sort of book where you can search for a term that can be really helpful 'cos you can find ... what you want in a chapter you maybe wouldn't have expected it." - **E-books user, England**

"The search function can be quite good, you know if you're looking for a particular phrase or you're able to filter out and find exactly what you're looking for.

Whereas in a printed text that could take a bit longer." -
E-books user, Northern Ireland

3.5. Nation and roles

3.5.1 There may be different levels of awareness in different nations and different regions

It appears from our qualitative research that awareness of healthcare library service e-books may not be uniform across different geographical areas.

"If you're telling me that there's an e-book that I can access ... then I would be very happy! I would love it that I could actually download it." - **Non-user, Ireland**

"Didn't know about them ... Please raise awareness about e-books." - **Non-user, Northern Ireland Ireland, user needs validation survey**

There appear to be differences in awareness between the five nations. And our research suggests that there may be differences between e-book awareness between regions within nations.

However, it is difficult for us to draw strong conclusions on these differences due to the relatively small sample size of our qualitative research, and the participation levels in our research (see 1.5.1).

3.5.2 Users want to know that they're accessing the same range of texts as their peers in other areas

Some users expressed a desire for the same range of e-books to be available to users, wherever they are located.

For some this would have very practical advantages.

"[I] would like to have access to the minimum resources recommended by UK Medicines Information to enable my

medicines team to answer queries." - **Non-user, England, user needs validation survey**

"I haven't got access to this e-book ... and you would need to find another organisation who have got access and ask them if they'll look it up ... that's a bit of a hassle and often it's just too slow." - **E-books user, England**

Others referred to a perception of *fairness*. They questioned why some users should have the advantage of access to a greater range of content, depending on their location.

3.5.3 Medicines information pharmacists are most likely to have integrated e-books into their role

From the relatively small sample of individuals involved in our qualitative research it seems that *medicines information pharmacists* are the most likely group to have routinely integrated e-books into their role.

"Every day. I look in the [e-version of the] BNF every day." - **E-books user, England**

4 Validating the user needs

4.1 Analysis method and outputs

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

(Example) ...*access a list of available e-books so I know what is available to me*

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

Please refer to the full data contained within the user needs validation survey analysis spreadsheet for more detail about the scoring the user needs.

The levels of user need (amongst users of e-books) are shown in the chart below:

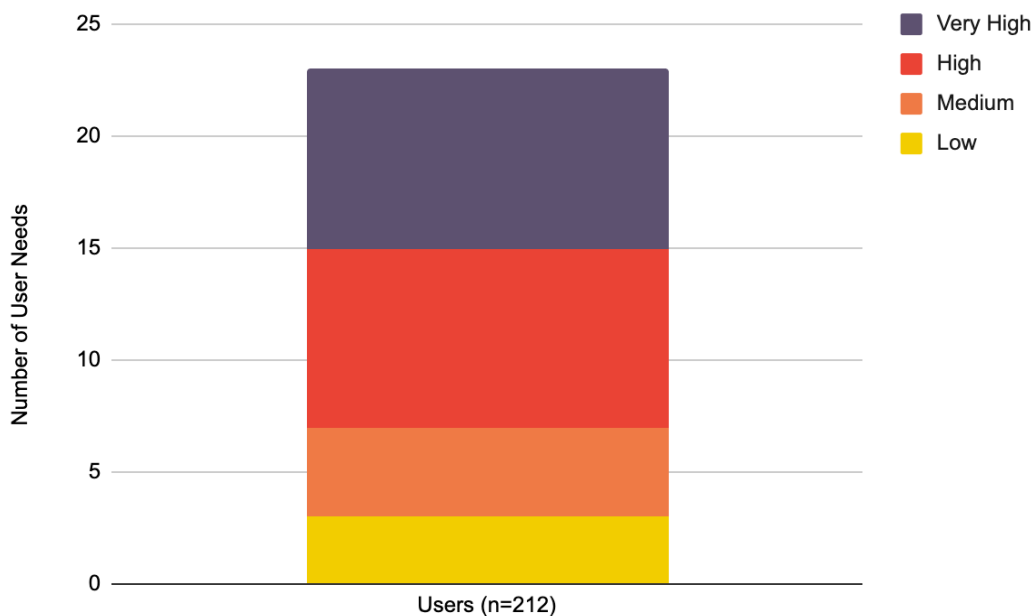


Image: Bar chart presenting the levels of need for healthcare library service e-books users

The level of response to the user needs validation survey was very good. We had 321 complete responses, with 212 of these from healthcare library service e-books users and 109 from non-users.

4.2 Non-users recorded a lower level of need than users

The focus of the bulk of our analysis from the survey was on the level of need amongst e-book users, as non-users are recording a projected - rather than actual - level of need.

The levels of user need (amongst non-users) are shown in the chart below:

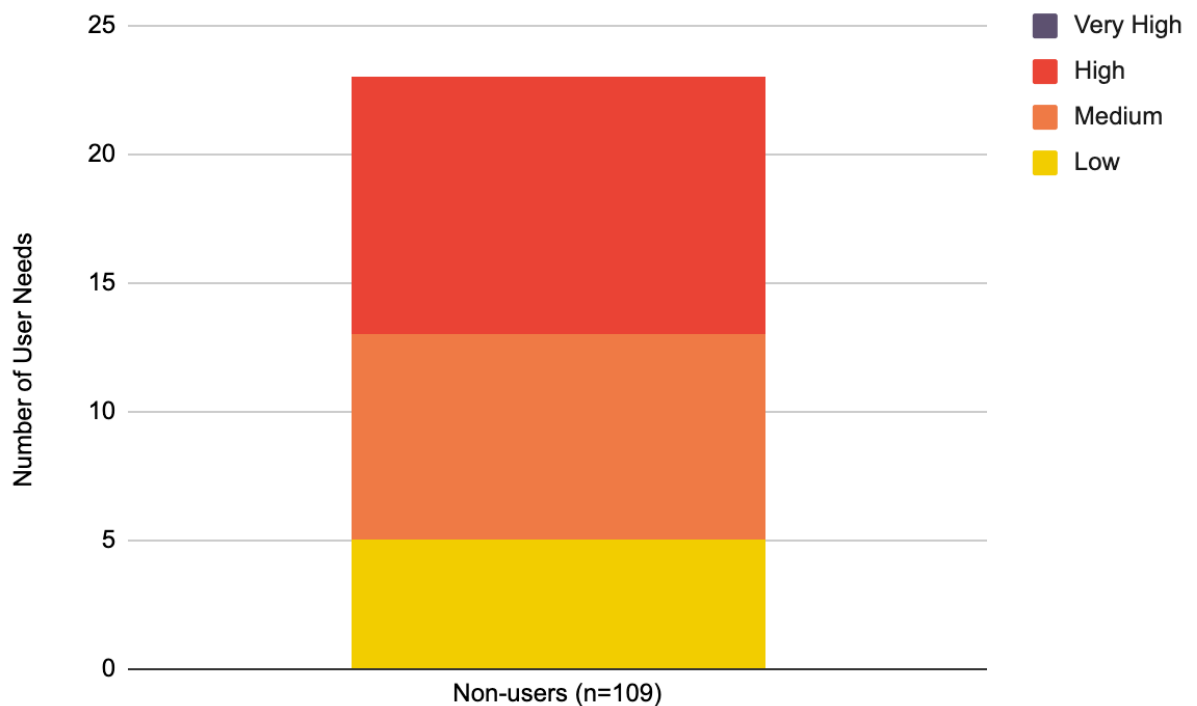


Image: Bar chart presenting the levels of need for non-users

Whilst non-users returned a lower level of need than users, the needs which came back as high amongst non-users are consistent with those of e-book users. For example, the most highly ranked need amongst non-users - 'I need to access a list

of available e-books so I know what is available to me' - was also one of the highest amongst users of healthcare library service e-books.

4.3 Users from Northern Ireland recorded a higher level of need than those from Wales

Unfortunately we did not have an adequate amount of responses to the user needs validation survey from users of e-books in England (27 responses), Scotland (21 responses) and Ireland (8 responses) to validate the needs of these users. We did, however, gain an adequate number of users from Northern Ireland (119) and Wales (37).

The levels of user need of e-books users from Northern Ireland and Wales are shown in the chart below:

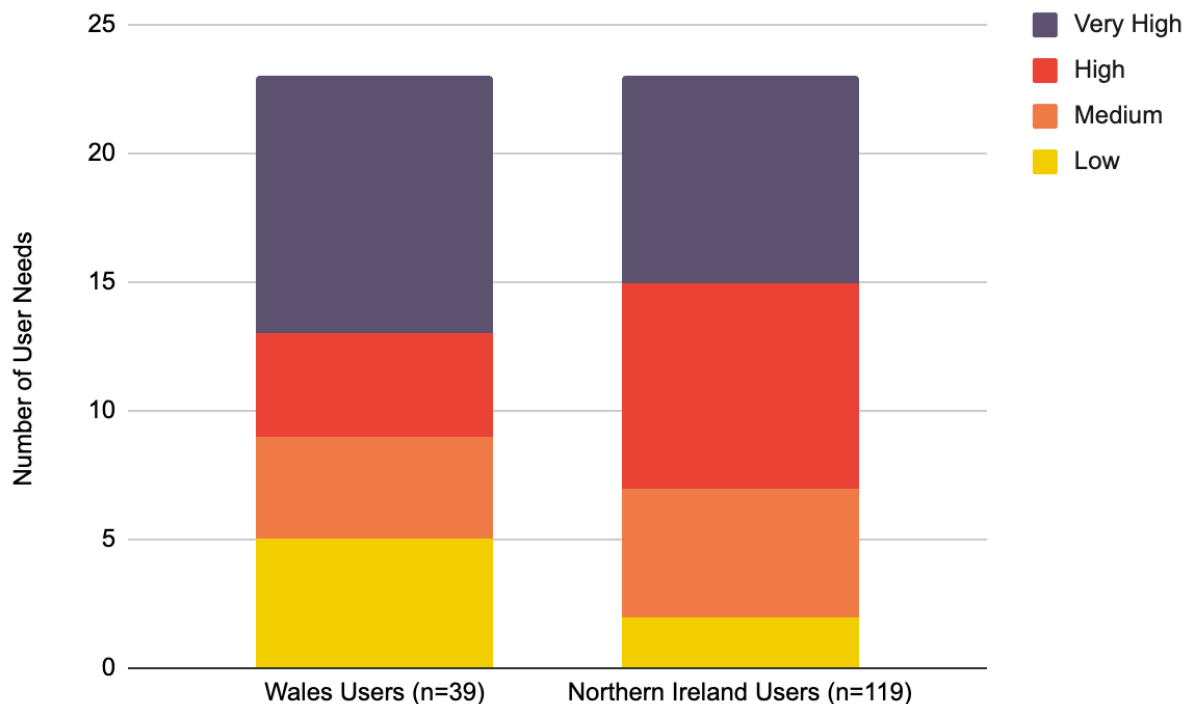


Image: Bar chart presenting the levels of need for users in Wales and Northern Ireland

As the chart shows, there is little difference in terms of levels of need among users from Wales and Northern Ireland. Users from Northern Ireland have a slightly higher level of need than those from Wales. However it is also important to underscore the fact that we had vastly different sample sizes from the two nations - with three times as many respondents from Northern Ireland as Wales.

4.4 There emerged a high level of need for a range of user needs

Amongst users of e-books a total of 8 needs were rated as very high. This clearly indicates a high level of need amongst users of e-books.

Needs which were ranked very highly encompassed a range of topics. For example texts being up-to-date, having an effective search function, greater visibility about what is available, and the ability to download and access an e-text wherever you are.

The highest ranked needs amongst users were:

I need to access e-books outside the office / library so that I can work from any location

I need be able to search for e-book titles so that I can find results that are directly relevant to me

I need to have unrestricted access to an e-book so that I can read the full text when I need it

These findings align closely with those of our qualitative research. Accessing e-books from outside the office, and the ability to search for available e-book titles are both important benefits of electronic texts. Having unrestricted access to these texts represents an important pain point.

5. Prioritising the user story backlog

The evidence from the user needs validation survey and the user research interviews was used by the members of the healthcare library services team from across NHS England, NHS Scotland, NHS Wales, HSC Northern Ireland and HSE Ireland to directly inform their initial round of **user needs prioritisation**. The final list contained 29 prioritised needs.

The prioritised backlog of user needs is available as an output of this user research (see Annex 2).

ID	As a... [role]	I need... [user need]	Theme	Validated level of need	Priority
UN01	Current NHS member of staff / NHS member of staff doing CPD	To access the latest edition of an e-book so that I have the most up-to-date information	Up-to-date	VERY HIGH	SHOULD
UN02	Current NHS member of staff / NHS member of staff doing CPD	To be able to view what has changed in a latest edition of an e-book so that I have the most up-to-date information	Up-to-date	MEDIUM	COULD
UN03	NHS member of staff doing CPD	To access e-books required for my qualification so that I can complete my course	Range of information	LOW	SHOULD
UN04	Current NHS member of staff	To have the same choice of titles available both in print and electronic so that I can choose which format suits me best	Range of information	MEDIUM	COULD
UN05	Current NHS member of staff / NHS member of staff doing CPD / NHS staff in training	To be able to search for e-book titles so that I can find results that are directly relevant to me	Searching	VERY HIGH	MUST
UN06	Current NHS member of staff / NHS member of staff doing CPD / NHS staff in training	To be able to filter my search for available e-book titles so that I can just see the most relevant results	Searching	VERY HIGH	MUST
UN07	Current NHS member of staff / NHS member of staff doing CPD	To access training about using e-books so that I can confidently search for and access these	Searching	MEDIUM	MUST

Image: screenshot from the validated and prioritised user needs backlog

6. Proto personas

User personas help provide content for user needs, enabling a better understanding of the people that use services and products so you can make better informed decisions about how to improve these services.

With this in mind, we produced 5 proto personas based on our research:

- 1) Sarah the social worker
- 2) Richard the research-user
- 3) Paula the pharmacist
- 4) Emily the educator
- 5) Nancy the non-user

These are based on the research interviews, findings from the user needs validation survey, and the user workshop.

We have tried to bring each persona to life - giving them a name, describing some background information about them and their work context. Each persona also details their digital proficiency and their goals and aspirations.

These personas help to tease out the different ways in which healthcare library service e-books are used (and, in the case of Nancy, why they're not used) and what individuals need from them.

These user personas are included as an output of the research (see Annex 2).

7. User experience mapping

During the user research we mapped out user journeys for four different user roles:

- 1) CPD and training users
- 2) Research users
- 3) Medical enquiry users
- 4) Teaching users

In particular, these journey maps highlight that there are several different motivations behind accessing healthcare library service e-books. As shown in the maps, there are a number of different key pain points experienced by users.

It is important to further note that a significant number of users access e-books for a number of different reasons - therefore it is likely that individuals may go through a number of journeys across the 4 different maps.

NB: The first journey on the medical enquiries map came out of the user research workshop.

PDFs of each of the journey maps are available as an output of the research (see Annex 2).

Annex 1: Discovery research

Research sources

Document review

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

1. e-books user experience and usage HEE literature search results.
2. Campaign to investigate the academic - book market article.
3. Joint statement on access to e-book and e-textbook content.
4. Example e-book text and platforms from across the five nations.

User participants

All the users below were involved in interviews (by telephone or Zoom) or a user experience mapping workshop.

User interviews/Remote observational sessions

1. Senior Social Worker Learning and Improvement, Northern Ireland
2. Pharmacist, Northern Ireland
3. Support Services Administrator, Wales
4. Consultant in Emergency Medicine, Wales
5. Clinical Nurse Manager 2, Ireland
6. Occupational Health Advisor, Scotland

7. Infection Prevention & Control Manager, Ireland
8. Senior Clinical Pharmacist (CMHT), England
9. Medicines Information Pharmacist, Scotland
10. Mental Health Triage Nurse, Scotland
11. Medicines Information Pharmacist, Northern Ireland
12. Education, Workforce & Professional Development Lead ,
England
13. Associate Psychologist, Northern Ireland
14. Medicines Information Pharmacist, England

User Workshop

1. Medicines Advice Pharmacist, Wales

Annex 2: user research outputs

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

1. Kick-off meeting outputs
2. Research transcripts/notes
3. Proto-personas
4. Prioritised user needs
5. Digitised user experience maps
6. User needs validation survey data
7. Handover slides - findings
8. Report - findings

Annex 3: User needs validation survey

Further data from the 321 responses to the user needs validation survey is included in the summaries below.

How frequently do you use healthcare library services e-books?

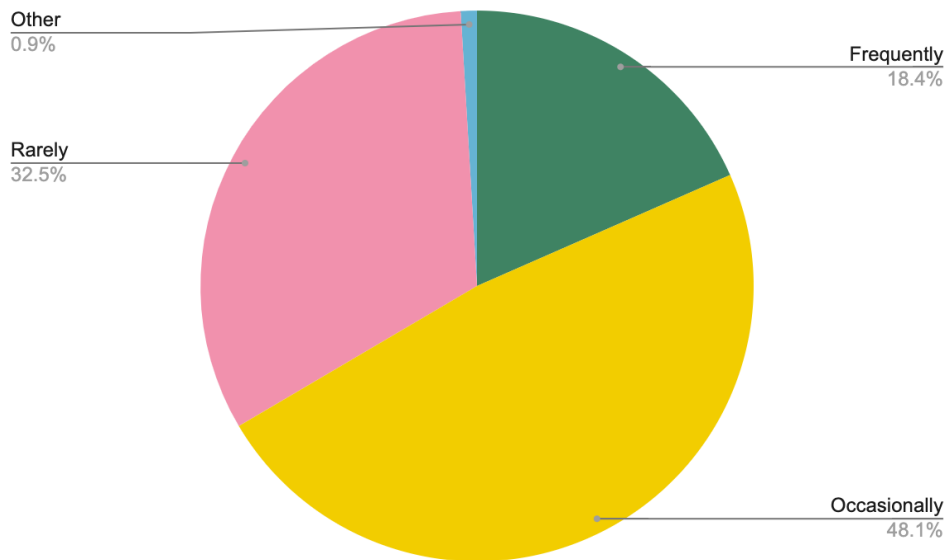


Image: Pie chart presenting how regularly users of e-books engage with these

Do you have access to a physical healthcare library?

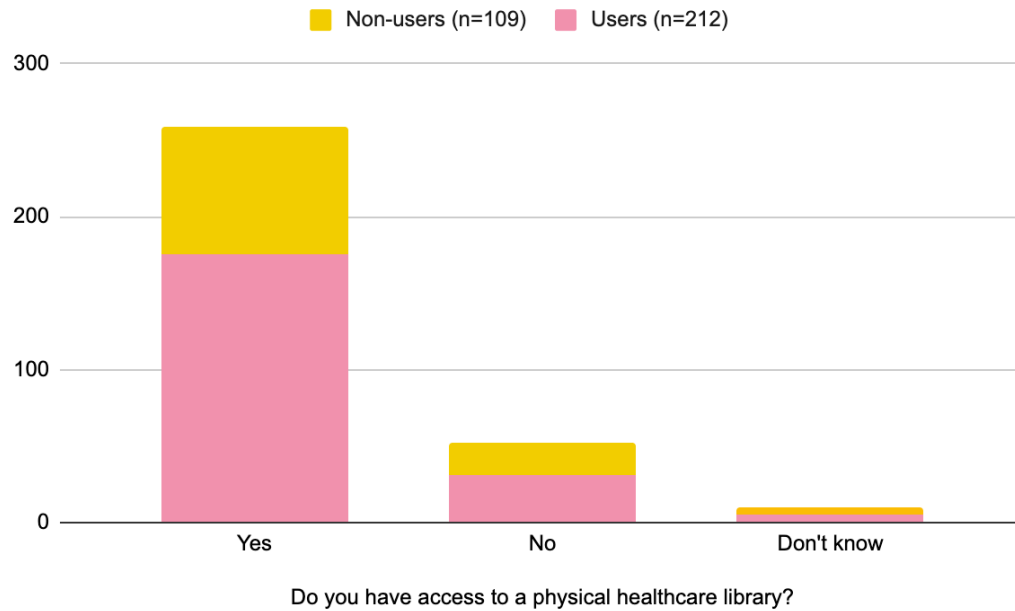


Image: Bar chart presenting access to a physical healthcare library amongst e-books users and non-users