Experiences of health and digital literacy pilot sites: the barriers and facilitators to the embedding of health literacy and digital health literacy activities in public libraries and community information services in England

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Executive summary

The COVID-19 pandemic lockdowns accelerated the shift to digital delivery of health services and information. This has widened the digital and literacy divide in some sections of the population, which has been recognised as contributing to inequalities in health outcomes. If people and communities are to have agency in their own healthcare decisions, they need to be provided with appropriate support. This pilot scheme sought to explore whether public libraries and other trusted community hubs can become pillars of support to individuals: who seek assistance in finding good quality health information online; who need access to digital devices; and who require advice on navigating online sources of information. This report is based on the experiences of fourteen small scale pilot projects in which public, health and prison library services worked in cross-sector partnerships and with external stakeholders, on schemes designed to improve accessibility to health information and to reduce the digital divide for the communities they serve.

The pilot project scheme was co-led by the National NHS Knowledge and Library Service (NHS KLS) team at Health Education England (since April 2023, part of NHS England) and the Chartered Institute of Library and Information Professionals (CILIP), with the support of Arts Council England and Libraries Connected. Public libraries were invited to apply to participate in the scheme, with successful applicants each receiving funding of up to £10,000 to develop a project intended to improve local levels of health literacy and enable local citizens to navigate the digital health landscape. In awarding the funding, priority was given to projects located in areas of low health literacy and to those libraries who had arranged support from their local NHS knowledge and library service.

What is health literacy?

"an observable set of personal skills and capacities that enable people to find, understand, appraise and use health information" (Nutbeam, 2023)

As a requirement of receiving funding from Health Education England to participate in a pilot project, the lead member of staff in public or prison libraries was asked to return data on:

- The numbers of individuals who attended health literacy sessions
- The percentage of these participants who reported an increase in their confidence to access, understand and use health information.
- The number and percentage of participants who downloaded the NHS app onto a personal device when shown how to do so.

The authors of this report sent a further questionnaire to these service leads, asking for qualitative information concerning barriers and facilitators to their projects.

Although small in scope, the pilot offers important insights into the role that libraries can play in disseminating trustworthy health information and in training communities to use digital devices to support their healthcare requirements. We aim in this report to highlight good practice and lessons learned so that further work in the context of promoting libraries as a venue for health information provision can be built on a foundation of evidence.

Change Management

In the context of change management, three factors are required to enact change: capability, opportunity and motivation. It would appear from the data available to us, that for public and prison libraries to successfully cascade health literacy training and health information provision to their communities, these factors are most successfully incorporated into the library offer in the following ways:

- **Capability** is maximised by long-standing and dynamic relationships with stakeholders in the NHS, social care and charity sectors. The more stakeholders involved, the greater the chance of success in developing the capability to structure and target appropriate health literacy offers to different populations.
- **Opportunity** is maximised by embedding health literacy into established social, community and educational programmes. The delivery of health information 'by stealth' or by expanding existing education programmes was seen to result in the highest number of participants.
- **Motivation** is maximised by a combination of allocating engaged staff and volunteers to health information programmes, engaging in co-production with enthusiastic partners and seeing the positive impact of the schemes on target audiences.

Common barriers to successful implementation of health literacy programmes

- The **lack of time** available to devote to the structure and delivery of the schemes by staff on both sides of the partnership. This was due to a range of factors from long term illness to lack of funded hours.
- **Difficulties with technology**. This manifested in unreliable hardware in some public library settings; difficulties with sourcing and setting up tablet devices to be used with

library members; and some library staff and volunteers lacking in confidence around their own use of technology.

• Installation of the **NHS app as a metric** for the pilot schemes. The NHS app itself presented barriers to consumers of digital health literacy training. It was reported that individuals did not have sufficient capacity on their phones to download the app; did not have a sufficiently up to date phone to allow its installation or found the app too confusing to be persuaded of its benefit. The pilot scheme with the greatest number of NHS app downloads was specifically targeted at a younger population demographic.

We hope that the experiences of the pilot site research participants reported here, provide an illustration of the ways that libraries can mitigate some of the barriers that many individuals face when trying to obtain reliable health information. With adequate funding, they offer potential to bridge the knowledge and digital gap between citizens and health information and thus help to reduce some of the health inequalities observed in the UK.

Acknowledgements

The authors would like to thank the public libraries and one prison library who participated in this pilot project and those who supplied the data on which the analysis in this report is based.

We would also like to thank NHS Health Education England for initiating a training programme, 'Developing the KLS Researcher', delivered by Professor Maria Grant with support from Gil Young. The three authors are Knowledge and Evidence Specialists employed by the NHS, participating in this development opportunity, and this report has been compiled as a collaborative project. Guidance and access to data has been provided by Dr Ruth Carlyle and we would like to express our thanks for her invaluable insights during the research process.

We have applied our perspective as professional health knowledge and evidence specialists to the appraisal of the results supplied by the pilot sites. We have included a number of recommendations which might be applied to future digital health literacy provision in non-traditional settings, based on our analysis of the evidence provided by participants in this pilot scheme.

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Section 1: Introduction

Background to the Digital Health Literacy Pilot Projects

During 2022, the National NHS Knowledge and Library Service (NHS KLS) team at Health Education England (since April 2023, part of NHS England) worked with CILIP to co-lead a partnership for health and digital literacy, working alongside Libraries Connected and Arts Council England and other stakeholders such as NHS England/NHS Improvement, the Patient Information Forum and representatives of specific professional groups, such as pharmacists and prison librarians.

What is health literacy?

"an observable set of personal skills and capacities that enable people to find, understand, appraise and use health information" (Nutbeam, 2023)

This followed on from a baseline survey of librarians and information workers, conducted by NHS Health Education England and CILIP during 2021 (CILIP, 2021). The baseline survey showed that understanding of health and digital literacy varied widely across the library and information profession.

The survey looked at the level of health and digital literacy activity across England, in all sectors of the knowledge and library workforce. Although the numbers were small (n=138), the survey responses give an insight into health and digital literacy activities in libraries.

In NHS settings, 60% of librarians that responded had received training in health literacy, compared to 24% in the public library sector. Likewise, 59% of respondents in the NHS sector had received training in how to deliver health literacy, compared to just 7% in the public library sector. Both NHS and public sector librarians felt equally that health literacy training is important to professionals in that sector (41% NHS libraries, 42% public libraries).

When it comes to digital literacy training, fewer library staff had had any training, with only 20% of NHS librarians and 18% of public librarians having had training in this area.

Health Education England offered small-scale funding for pilot projects to public library services and community information services to explore how health literacy and digital health literacy could be embedded into library services. Applications were particularly encouraged from library services that would be working with local NHS Knowledge and Library Services (NHS KLS) as part of the pilot project.

The aim was to support citizens to develop health literacy skills and be able to access, assess and use health information in an increasingly digital environment, and ultimately to help citizens in shared decision-making alongside health professionals, and manage their own health and wellbeing. Three intermediate outcomes formed the basis of the three workstreams:

- 1. Improve health and digital literacy skills.
- 2. Enable people to find and use high-quality patient, health and wellbeing information.
- 3. Build community partnerships, test approaches and share good practice.

Activity was prioritised in areas of low health literacy and digital exclusion.

Seven pilot sites were identified for the initial pilot phase beginning in January 2022, and there was an expectation that after the pilot was completed they would share any learning from the pilot, and contribute to an evaluation.

A further seven pilot sites were identified in early 2022, and funding released in July 2022.

Section 2: Introduction to the literature

People and communities need optimal levels of health literacy to take some responsibility for their health conditions; they need to have agency in discussions about health treatment options; and to understand information about healthy lifestyle choices (Byrne, 2022). However, research conducted by Rowlands et al. (2015) indicated that many people in the working age population of the UK struggled with understanding standard health information materials.

Many factors which impact an individual's health literacy have been identified. Poor health literacy has been indicated as a social determinant of health (Nutbeam & Lloyd, 2021) and the delivery of health services via digital routes has further excluded some population cohorts (Studman, 2023). To help mitigate poor health literacy and reduce its impact on health inequalities, pilot projects have been undertaken between NHS libraries and Public Libraries plus one Prison Library, to promote access to sources of reliable health information.

Drawing on the experience of these 14 pilot sites, this report investigates the barriers and facilitators to embedding health literacy skills as well as health information provision in the public library and other non-traditional contexts for health information.

A comprehensive review of the literature can be found in Appendix B

Section 3: Summary of projects

The fourteen public library sites were asked to provide an outline of their project, compile statistics and provide qualitative feedback to the Health Education England / NHS England Knowledge and Evidence Specialist who took the lead on this pilot investigation. From data returned, and answers provided to our own questionnaire, the three authors of this report compiled detailed reports for each individual project (**Appendix A**) and used these to perform iterative thematic analysis. A brief summary table of the fourteen pilot sites and the resultant data provided is presented in Table 1.

Name of project	Lead service and partners	Summary of the initiative / project	Results
Ellesmere Port ('Library Health Helpers')	Healthbox CIC (a not-for-profit community interest company) in collaboration with Ellesmere Port Libraries, one Ellesmere Port Primary Care Network (6 GP practices) and the social prescribing team.	Core aspect was to provide mental health first aid training for Library employees and cascade this knowledge.	No. of branch libraries: 3 People take part in HL intervention: 14 (Sep 22 - Apr 23) Increase in confidence in HL: no data Download NHS app (when shown): no data
Essex ('Tablets and Digital Champion Training for Libraries and Community Outreach')	Essex Library Service Local mental health NHS trust, three local Integrated Care Boards, public health colleagues in Essex County Council, multiple local third-sector organisations, DWP, Reed in Partnership	Using tablets to teach residents how to download and navigate the NHS app and how to access further health advice online.	No. of branch libraries: no data People take part in HL intervention: no data Increase in confidence in HL: no data Download NHS app (when shown): no data
HMP Aylesbury ('Facilitating Health Literacy	HMP Aylesbury Buckinghamshire NHS Knowledge	Improve access to health information resources in a prison setting. Signposting to health information sources upon prison release through	No. of branch libraries: 1 [Prison] People take part in HL intervention: 13 (Sep 22 -

Table 1. Summary of the 14 pilot projects

Across the Young Offenders' Population')	and Library Services	the creation of an information pack. Empower prison residents with the skills and confidence to ask questions during health care conversations, and to understand and evaluate non- digital health information.	May 23, but people only took part in May 23) Increase in confidence in HL: no data Download NHS app (when shown): none
Lancashire ('Addressing low health and digital literacy across Lancashire by promoting access to quality health information and embedding it in local library provision')	Lancashire Cultural Services Team, Lancashire County Council NHS Librarians across Lancashire, external website designers, NHS e- learning design team	Look at staff training around Health and Digital Literacy. Put together an Information Hub that would help the public read and understand health information better.	No. of branch libraries: 30 People take part in HL intervention: no data Increase in confidence in HL: no data Download NHS app (when shown): no data
Leeds ('Supporting the development of Health Literacy within library based Digital Health Hubs in Leeds')	Leeds Libraries, Leeds City Council West Yorkshire Health Care Partnership, NHS, Leeds Community Healthcare, Wakefield Libraries, LCPs & PCNs, multiple local community organisations	Improve library users' digital and health literacy skills to help them find high-quality health and wellbeing information to encourage better self-management of their health needs.	No. of branch libraries: 37 People take part in HL intervention: 1324 Increase in confidence in HL: 94% (n=1324) Download NHS app (when shown): 95% (n=17)
Newcastle ('Help 4 Health')	Newcastle City Libraries Get Online Newcastle (GON) NHS library staff at Cumbria, Northumberland,	Develop a health literacy training and support package to deliver small group sessions to the public in libraries within the city. Development of an in-house training module for library staff.	No. of branch libraries: 3 People take part in HL intervention: 138 (Sep 22 - Jun 23) Increase in confidence in HL: 80% (n=138) Download NHS app (when shown): 100% (n=12)

	Tyne and Wear NHS Foundation Trust		
Norfolk ('Digital Health Hub – Easy Read provision')	Norfolk Libraries and Information Service, Norfolk County Council Opening Doors, Healthwatch, Digital Project Managers from NHS Norfolk and Waveney Integrated Care Board, Customer Services Transformation Managers at the County Council	Digital Health Hub – Extending existing Digital Health Hub to provide Easy- Read shared decision making tools. Working with Opening Doors - a user led organisation run by people with learning difficulties for people with learning difficulties to coproduce Easy Read materials.	No. of branch libraries: 36 People take part in HL intervention: 757 (Apr 22 - Nov 22) Increase in confidence in HL: 100% (n=757) Download NHS app (when shown): 100% (n=15)
North Yorkshire ('Public libraries as gateways to good health')	North Yorkshire Libraries York and Scarborough Teaching Hospitals NHS Foundation Trust Library service	We will focus on libraries across the Borough of Scarborough. Work with NHS KLS colleagues to enable public library staff and volunteers to develop the skills and knowledge to signpost people to, and assist them to access reliable health information, and deliver drop-in sessions designed to facilitate improved customer interactions with health services.	No. of branch libraries: 4 People take part in HL intervention: 48 (Sep 22 - Jun 23) Increase in confidence in HL: no data Download NHS app (when shown): none
Oldham ('Digital Pathways for Positive Health Outcomes')	Oldham Libraries Practice manager at a GP surgery, local pharmacists, Oldham Council marketing team. NHS Knowledge and Library Service colleagues from the Pennine Care NHS Foundation Trust.	Oldham Libraries would facilitate a partnership between Fitton Hill Library and Hill Top Surgery for weekly Health-&-Digital Drop-ins which HCPs would refer into. NHS KLS colleagues from the Pennine Care NHS Foundation Trust will offer signposting and advice. The Fitton Hill Library meeting room would be kitted out for 1-	No. of branch libraries: 1 People take part in HL intervention: 2 (Sep 22 - Feb 23) Increase in confidence in HL: no data Download NHS app (when shown): no data

		 2-1 support sessions. 10 loanable laptops with data would be available for those who are confident enough to use the kit for health information and access. The project would pilot a model that could be rolled out to some of our other 11 libraries, most of which are located close to the local surgery. 	
Shropshire ('Your Health Admin')	Shropshire Libraries, Shropshire Council A Shropshire GP, Shropshire Public Health, Midlands Partnership NHS Foundation Trust librarians, Digital Unite	Your Health Admin – a project to train Digital Health Champions in each of our largest branches to deliver a customised toolkit to members of the public. The toolkit covers finding trustworthy health information online, NHS website and app, and familiarisation with the learner's GP website and services.	No. of branch libraries: 2 People take part in HL intervention: 17 (Apr 22 - Feb 23) Increase in confidence in HL: 100% (n=17) Download NHS app (when shown): 100% (n=17)
Somerset ('WHAT IF – Wellbeing, Health And Technology Information For all')	Somerset Libraries, Somerset County Council Public Health, local NHS Knowledge and Library Services, Somerset Activity Sport Partnership	Making digital health information available for everyone and helping to increase the understanding of how to access digital health information.	No. of branch libraries: 2 People take part in HL intervention: 31 (Apr 22 - Sep 22) Increase in confidence in HL: 60% (n=31) Download NHS app (when shown): 50% (n=31)
Staffordshire ('Be Your Health')	Staffordshire Library Service, Staffordshire County Council The Voice Project, NHS Knowledge Hub at the University Hospitals of Burton & Derby, health librarians at Midlands	Be Your Health. Targeting young people between the ages of 16 and 25 years to identify the barriers preventing young people from obtaining accurate and dependable health/digital health information and then looking at ways we can help them to overcome these barriers.	No. of branch libraries: 3 People take part in HL intervention: 1159 (Apr 22 - Oct 22) Increase in confidence in HL: 95% (n=1159) Download NHS app (when shown): 90% (n=305)

	Partnership NHS Foundation Trust in Staffordshire		
Suffolk ('Health Click, Haverhill')	Suffolk Libraries, Suffolk County Council Knowledge and Library Services Manager at West Suffolk NHS Trust	Outreach into communities in the town of Haverhill in Suffolk. Identify and approach potential audiences to introduce them to various reliable sources of digital health information, to give initial support in accessing them. Signposting people to Haverhill Library where an enhanced health and digital literacy support offer is available.	No. of branch libraries: 1 People take part in HL intervention: 98 (Apr 22 - Oct 22) Increase in confidence in HL: 89% (n=98) Download NHS app (when shown): 100% (n=8)
Westminster, Kensington, and Chelsea ('Bi-Borough (Westminster and Kensington & Chelsea) Health Hubs')	City of Westminster / Royal Borough of Kensington and Chelsea Royal Brompton and Harefield Hospitals (part of Guys & St Thomas' NHS Foundation Trust)	Build on our partnership with Royal Brompton and Harefield hospitals to deliver a programme of online health talks. Health site leads will provide health literacy resources in the Bi-Borough libraries and through the Home Library Service.	No. of branch libraries: 2 People take part in HL intervention: 242 (Sep 22 - May 23) Increase in confidence in HL: no data Download NHS app (when shown): none

An expectation from all pilot sites was the return of data on numbers of attendees at the digital health initiatives they facilitated; perceptions of confidence in seeking health information online; and downloads of the NHS app as a recordable metric. In practice, a number of library pilot sites either returned incomplete data or no data at all, which has presented difficulties in drawing patterns and comparisons from the sites.

Qualitative data returned to Health Education England / NHS England was augmented by a further questionnaire sent by the authors of this report to establish key learning in terms of facilitators and barriers to the projects undertaken.

Section 4: Exemplar Case Studies - the positive deviance approach

The theory of positive deviance emerged from the public health field in the 1960s, and takes the approach that solutions to problems can be found in cases (sometimes known as exemplars) that demonstrate exceptionally good results in any particular set of measures (Baxter and Lawton, 2022).

The pilot projects undertaken by Leeds and Staffordshire Libraries demonstrate the greatest engagement in terms of attendance by local people and therefore appear to offer many learning opportunities for libraries seeking to deliver digital health literacy provision to their communities. We therefore present a summary of the behaviours, practices and systems demonstrated by these library services as exemplars which could facilitate success in future projects.

Across 37 branches of the Leeds Library Service, 1324 individuals took part in the pilot health literacy interventions, with 94% reporting an increase in confidence and 95% of those who were shown the NHS app actually downloading it to their device (n=17). Staffordshire Library Service delivered their health literacy intervention through 3 branches, with 1159 young people attending training and outreach events, 95% reporting an increase in confidence, and 90% of those shown how to install the NHS app going on to download it to their device. It is important to note that the data collection in Leeds extended over 12 months whereas in Staffordshire data was collected for 7 months.

Leeds Libraries demonstrate the value of building links with a range of external stakeholders and being involved in a city-wide digital initiative. This network approach developed from a series of reports by Healthwatch Leeds (2020), which contributed to framing a city-wide goal of removing barriers to delivery and inclusion in digitised health and care services. Stakeholders with whom Leeds Libraries were able to work to identify gaps in local population health literacy included:

- local care partnerships
- primary care networks
- neighbourhood networks
- secondary and community healthcare agencies
- council colleagues, steering groups and committees.

The Chief Librarian is a member of the Health Partnership Board and additionally sits on the West Yorkshire Digital Partnership. This championing of health and digital initiatives at senior leadership level resulted in an investment of £76,000 from the NHS Leeds Clinical Commissioning Group prior to the pilot project, resulting in all 300 frontline library staff receiving training as Digital Champions, the purchase of loanable iPads and the intention to transition all 34 libraries into Digital Health Hubs. Therefore, a sound basis on which to build the digital health literacy initiative was already in place when the pilot project commenced.

Similarly, Staffordshire Libraries and Arts Service had a history of community engagement and partnership working across health and wellbeing initiatives. These included a project funded in 2021, Crafting Communities, which supported post-COVID recovery, and Crafternoons funded by the National Lottery Connections Fund. Partners involved in these projects included social prescribers, health professionals, housing associations and those working with the rurally isolated.

At Leeds Libraries, health literacy training was developed to be as relevant as possible to frontline staff working in libraries, with train-the-trainer sessions for librarians to help cascade this training. Existing library offers for all library user cohorts were a crucial enabler of the digital health literacy project. Leeds took the approach of introducing digital health activities "softly", as an additional inclusion to arts, music or social activities already taking place in the libraries. This non-threatening approach allowed library users to be gently introduced to online health and wellbeing content during sessions with an entirely different main theme. This stealth approach was supported by tutorials added to the existing online learning platform, Leeds Libraries Online Learning, which had been established prior to this project. The success of the approach can be seen in the statistics: 1324 attendances were recorded at digital health literacy projects during the 12 months that data was gathered.

Leeds Libraries reported that working with community partners was a key facilitator to this project. It enabled learning from multiple established sources, continuous mapping of existing support to avoid duplication of effort and upskilling of frontline teams. It can be concluded that the continuous network building acted, and continues to act, as an amplifier of the Digital Health Hubs project.

Staffordshire Libraries decided to focus their project on empowering young adults aged between 16 and 25 to self-manage their health and support the health of those that they care for. They have reached out to groups of young carers, young parents, young asylum seekers, care leavers, sofa

"Through the discussions with the young people we now have a better understanding of the barriers they face in obtaining health information"

Feedback from Staffordshire Library Service

surfers and the homeless. By including partners from two different NHS Knowledge and Library Services and third sector organisations, and targeting the issue of health and health literacy that is high on the Staffordshire County Council agenda, the project has been able to reach the communities it sought, and engage them in co-production of appropriate materials. It is interesting to note that this pilot scheme, specifically looking at a younger population demographic, was the most successful in encouraging downloads of the NHS app.

They concluded that for the young people they interacted with, it was not always a lack of knowledge about the importance of health or where to go to get help and information that prevented them from managing their health and wellbeing, it's a whole range of other factors. Those listed included:

• social anxiety (real or imagined)

- personal circumstances e.g., young carers may not prioritise their health because they are already prioritising the health of the person they care for
- past experiences e.g., didn't feel listened to by a school nurse
- formative experiences e.g., if their parents / carers use a 'crisis management' approach to health then the young person is likely to follow the same pattern.

Finding that much of the existing support is temporary, they aim to continue to work with partners to avoid duplication and overlap and to gather accurate signposting information. Having gained a better understanding of the barriers faced in obtaining health information, they intend to incorporate this into the second discussion sessions which will look at producing a toolkit or health passport with the format being determined by the young people themselves.

"Confidence and knowledge of staff and volunteers around health and digital health literacy, resources and signposting is a huge factor in how we support communities through our Health Offer. It needs to be an ongoing development journey, not a 'one hit wonder'."

Feedback from Staffordshire Libraries

Section 5: Barriers and facilitators to implementing health literacy

Barriers

Five key themes were identified as barriers to delivering digital health literacy during the analysis of the qualitative data supplied to us. Within these key themes further sub-themes were identified. The key themes are presented in sections below, with the sub-themes being demonstrated within them.

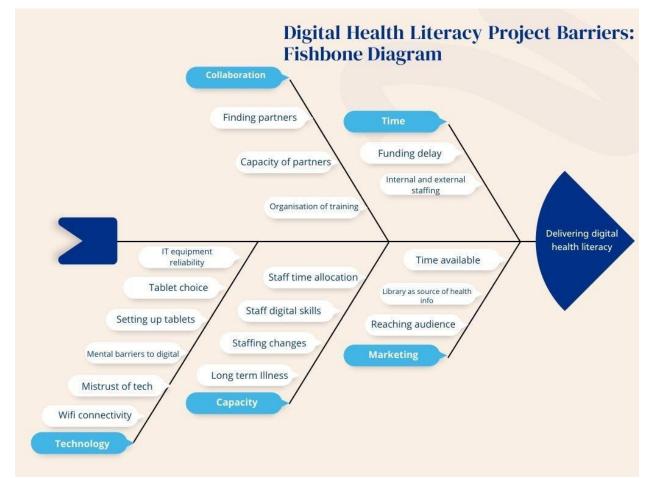


Figure 1: A fishbone representation of the key barriers identified from analysis of feedback provided by digital health literacy pilot projects in English public libraries, and one prison library, 2022-2023.

Facilitators

The same five key themes were identified as facilitators by some of the pilot sites. The subthemes identified by analysis of data from these sites offer positive learning opportunities to future sites who might implement digital health literacy programmes. The key themes are presented in sections below, with the sub-themes being demonstrated within them.

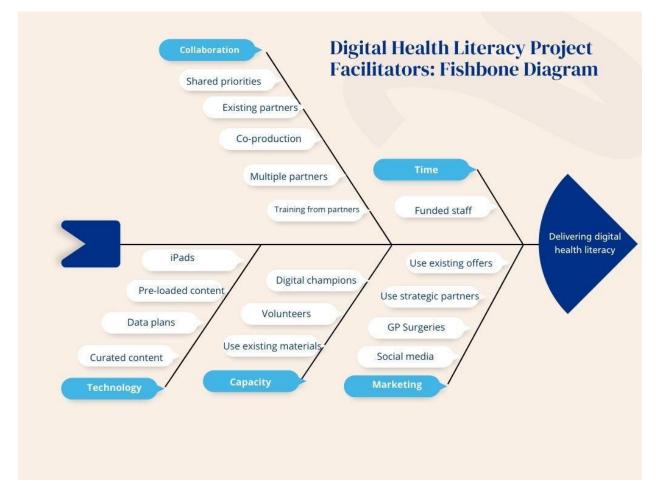


Figure 2: A fishbone representation of the key facilitators identified from analysis of feedback provided by digital health literacy pilot projects in English public libraries, and one prison library, 2022-2023.

Theme 1 - Time

Time was mentioned as a barrier by every pilot project that reported outcomes. This fed into all of the other barriers shown on the fishbone diagram and is therefore revisited in each of the discussions below.

Of particular note, the project at HMP Aylesbury was affected by delays resulting from issues transferring the funds from the NHS to the prison service, impacting on the time available to run the project. The prison service also faced additional time constraints in delivering their health literacy training sessions due to the tightly timetabled environment.

The time that both public library staff and their collaborators were able to dedicate to their pilot projects was felt to have a considerable impact on all stages of the process, from initial planning and marketing, to upskilling, to delivering sessions to the library users.

Theme 1 - Action recommendations:

- Allow time for planning before the project officially starts
- Ensure that project **planning includes realistic staff time allocation** for all partners involved in the projects.

Theme 2 - Capacity

Capacity was mentioned as a barrier by five of the pilot sites: Ellesmere Port, Leeds, Norfolk, North Yorkshire and Staffordshire. Issues of long term illness of staff and the number of hours that staff were available to deliver digital health sessions appeared frequently in the feedback. Two services highlighted that part-time staff or volunteers working on this project had other responsibilities making it difficult to timetable the digital health sessions or to put health literacy knowledge into practice. Finding the time for staff and volunteers to attend health literacy training themselves also proved difficult for specific services. The capacity of partner organisations to deliver training or engage in co-production activities also caused time delays in pilot projects. Finally, one service, with a large number of branch libraries participating in their project, mentioned that a great deal of time was required to collect and collate data from all sites by the one part-time staff member working on the project.

Volunteers can help support library staff and provide extra capacity, but there were mixed views expressed by volunteers at the North Yorkshire project. One volunteer expressed that library staff rather than volunteers should be delivering health literacy information to library users. However, other volunteers were positive about supporting customers with health literacy.

One pilot site has gone on to recruit a Digital Inclusion project co-ordinator after the end of the pilot project, which was felt would enable more time and attention to be given to this work.

Theme 2 - Action recommendations:

- Future projects could look at **allocating a full-time member of staff** to deliver health literacy.
- Prior to starting a health literacy project **investigate the capacity of partners**, the time required for training and ensure that this is timetabled early in the project.
- Request that a **video of training** is provided to be used by staff absent through illness and future new recruits.

Theme 3 - Technology

Technology acted as both a facilitator and a barrier to pilot projects. The use of videos was included in the offer by three sites, one project at Newcastle utilised the demonstration videos created by Leeds Libraries as part of its own training offer. Another site proposed to use videos for display in GP waiting rooms, however no feedback has been received on the success of this proposal.

Leeds Libraries, Somerset Libraries and Essex Libraries included the provision of loanable tablets as part of their digital health information offer. Leeds and Somerset sites used iPads, with Somerset embedding curated information, links and apps on their loanable iPads. Essex Libraries used Android based tablets and faced some problems with sourcing their chosen tablets, which then presented usability issues in relation to the NHS app.

Learning from Somerset Libraries Digital Development Officer about the decision to select iPads as loanable devices for library users.

"Planning for the scheme commenced in 2019 following a meeting with Leeds Library Service and learning about their 100% Digital Scheme. The two core considerations for Somerset Libraries were adherence to GDPR and cost, with ease of administration being the third major factor investigated.

The Digital Development Officer conducted six months of due diligence research covering:

- GDPR
- Cost of cellular devices
- Cost and supply of data plans
- Ease of use for library users (taking particular account of users with low digital literacy)
- Security of devices
- Ease and cost of central management of the devices

During the research process:

- 30 day trials of both Apple and Google educational administration platforms were conducted.
- Apple recognised the library service as an educational establishment, allowing the use of the Apple School Manager platform.
- Purchase from an Apple-authorised dealer enabled an educational discount and ensured that device serial numbers are logged with Apple which increases the security of iPads.
- JAMF Mobile Device Management software was selected to manage the iPads, this
 has required a one-off licence payment. This software allows the Digital Development
 Officer to maintain the security of all devices both from the library perspective (they
 can be remotely locked and tracked with GPS) and in terms of personal data, GDPR
 compliance is assured as all personal data is wiped from the iPad as soon as it is
 returned to the library. The iPad is returned to factory settings and then is reassigned
 with a profile. This management system additionally allows immediate remote
 updating of apps and links on the devices as well as the configuration of different
 profiles according to use.
- Price comparisons between the devices revealed that ten-inch Apple iPads with cellular capacity are significantly cheaper than the only available Android ten-inch tablet with cellular capacity.
- All data networks were contacted to discover the best price and data capacity plan available (the price of data plans has fallen significantly since the original investigation). It was considered essential to supply devices with a data plan to enable their use by socio-economically disadvantaged library users.

The first batch of 25 iPads were purchased during the 2020 lockdown and were made available to loan to jobseekers in October 2020. These initial loans consisted of an iPad and a charger. Feedback from individuals who had borrowed the iPads revealed that writing a CV or job applications on the iPads had not been easy. Thus, all iPads are now packaged in a neoprene carry case complete with a small QWERTY keyboard, on-ear, dual ear, Bluetoothenabled headphones with a microphone which can be positioned on the left or right, charger cables and full operating instructions. There are currently 120 iPads available for loan through Somerset Libraries with additional profiles customised for Health and Wellbeing Information and for Library at Home use.

In the three years that the loanable iPad scheme has been running, only three devices have been broken, none have been stolen and one has even been tracked on its return journey to the library from Australia."

The lack or unreliability of Wi-Fi connectivity caused barriers for two of the projects. At HMP Aylesbury there was no internet access due to this being a Young Offenders setting, whereas in North Yorkshire, there were issues with connectivity and equipment at the digital health training sites.

Accessibility of the NHS app on mobile devices was an issue for library users for the following reasons:

- The perceived cost of mobile data was a barrier for large numbers of library users who had 'pay as you go' contracts on their mobile phones and as a result were reluctant to download or access the NHS app.
- The size of the NHS app was also a barrier to its use by individuals who had insufficient space in their phone's memory capacity.

Attitudes to digital information and general digital literacy proved to be barriers for both library staff and customers. North Yorkshire reported that library staff and volunteers often did not feel confident in activities such as downloading apps. Some users felt that they should not need to access services and

"We decided to have digital as a part of the sessions not as the main theme, choosing arts, music or a social activity instead."

Suggestion supplied by Leeds Libraries

information digitally. The Suffolk project encountered issues around mistrust of technology, such as a fear of being scammed, and also an unwillingness by some individuals to engage with technology unless they really needed to. As with North Yorkshire, amongst participants in Suffolk there seems to have been an attitude that they should not have to access services digitally. Conversely, Suffolk also mentioned that mobile technology helped as it is so ubiquitous now, and more intuitive than laptops or desktops, and the presence of free, reliable, Wi-Fi in libraries also helped.

Theme 3 - Action recommendations:

- **iPads** are the recommended tablet for health literacy projects from user accessibility, data privacy and device security standpoints.
- Loanable devices should be preloaded with a data allowance to help reduce health inequalities.
- Choose a **different metric than NHS app** downloads. The choice of this as a metric currently provides an inaccurate measure of the level of engagement with health literacy training.
- Ensure that all staff and volunteers involved in digital health literacy projects have been trained to a suitable level of digital competence and confidence prior to their participation in the project.

"Allow more time in training session for practical workshop element where individuals check out resources/work through questions on training iPads/their own devices. Some participants found using own devices easier if not familiar with iPads."

Suggestion from North Yorks Library Services

- Devise some **behavioural change training** or videos to facilitate conversations that help to remove negative attitudes to digital information.
- Make **financial provision for public library staff to print out information** for customers who do not wish to access the information digitally themselves.

Theme 4 - Collaboration

Collaboration was essential to all projects and a broad variety of partners were engaged. In some cases, collaboration extended to co-production work to design precisely targeted interventions. Whilst collaborators were essential to facilitating projects, the time available for their own staff to make contributions was sometimes seen as a barrier. These competing aspects are examined in more detail from the viewpoint of various projects.

Collaboration with local healthcare enablers

A number of projects engaged with their local healthcare enablers with varying levels of success.

The Essex project extended over 74 branches, and worked with a number of partners including three Integrated Care Boards, public health colleagues in Essex County Council, third sector organisations (CVS, MIND, food banks), the Department for Work and Pensions, and Reed in Partnership. One of the key learning points of the project was to 'engage with strategic health partners as they will understand what you are trying to achieve'. For example, the Ellesmere Port project run by Cheshire West and Chester Libraries wanted to display videos on the information screens in GP surgeries.

This project planned to collaborate extensively with partners such as their local Social Prescribing Team (to run wellbeing events geared towards national awareness events), with both their Social Prescribing Team and the local Primary Care Network (for a social media and marketing campaign, the development of easy read leaflets and links to the local online health and wellbeing information directory) and to their local NHS Knowledge and Library Service (for support, advice, guidance, and signposting to resources).

Collaboration with NHS Knowledge and Library Services (NHS KLS)

Engagement with and support from local NHS KLS was mentioned by a number of the projects. The prison librarian at HMP Aylesbury worked with Buckinghamshire NHS KLS in a number of areas, such as joint project planning, advice on stock selection and support for accessing digital resources and workshop planning. The Chester and Lancashire projects planned to work with their local NHS KLS services; however, no feedback has been received on their collaboration. Responding for the HMP Aylesbury project, the NHS KLS manager reported issues with cross-organisational working, that they did not know how to sustain the momentum of the project going forward as it was not within their own organisation, and there was no way to influence delays over funding.

Essex libraries already had strong links with local NHS KLS, and mentioned North Essex Partnership NHS Foundation Trust, a mental health care trust that has a digital health literacy project manager and runs training workshops on digital literacy. There was also collaboration taking place with the NHS Anchor Programme, Primary Care Assistants, and Mental Health Nurses, and they have provided activities within hospital settings.

Partners' capacity in collaboration

Several projects mentioned, as a barrier to delivery, the capacity of their partners or the extra time it took in co-design the services that would be delivered.

Staffordshire Libraries mentioned problems with the capacity of their partners (in this case the Voice project and two NHS KLS) to support the project. However, they did make the point that although 'genuine co-design takes a long time' they did feel it was worthwhile.

 Norfolk Library and Information Service had some issues when working with one of their partners, Opening Doors, as they were reliant on their availability and timescales. "My tip would be to be ready to be patient and to work at a different pace, if necessary, when working with a small organisation that is led by people with learning difficulties. Also, to remind other staff working on the project to be mindful of this same thing."

Suggestion supplied by Norfolk Libraries and Information Service

- Cheshire West and Chester Libraries' proposal for the project in Ellesmere Port (Ellesmere Port Library Health Helpers) planned to utilise videos such as one created by project partner Healthbox, for display in GP waiting rooms and in the library. Unfortunately, as there was no feedback from Cheshire West and Chester Libraries it's not known if this was successful.
- Newcastle (the 'Help 4 Health' project) also made use of videos, in this case videos about the NHS app hosted by Leeds Libraries were embedded into training sessions.

Theme 4 - Action recommendations:

- Ensure that **project deliverables are agreed with partner organisations** at the planning stage.
- Have a named individual from collaborative partner included in the planning stage.
- Include a **sustainability plan** in case of staffing changes on either side of the partnership arrangement.

Extract from the pilot proposal from Essex Library Service

"We currently have strong links and collaborate with North Essex Partnership NHS Foundation Trust, where we will be sharing resources and best practice with their digital health literacy project manager and training workshops focussed on using digital tools to answer a range of health queries. We also partner with South Essex Partnership NHS Foundation Trust, Essex University Partnership Foundation Trust and Southend University Hospital Mid & South Essex NHS Foundation Trust (M&SE NHS).

Working more closely with Health Librarians to access skills training and deliver a consistent approach to improving Health & Digital Literacy to patients within and outside care settings. We work closely with the NHS Anchor Programme, Primary Care Assistants, Mental Health Nurses, and have provided activities within hospital settings.

We are also working closely with Thurrock and Southend library services, sharing resources and capacity building, signposting to both our Dementia resources, Reading Well collections and our IT and Literacy Champions.

We share buildings and interlink with Adult Community Learning throughout Essex who are providing and developing IT training and learning opportunities.

Each of our 74 libraries have close ties with their local pre-schools, junior and secondary schools as well as colleges and universities.

One of our partners, [the] Programme Director within M&SE NHS has shared their Virtual Outpatient Programme which includes the roll out of a Digital Patient Interface (Patient Portal). To support this, we will be establishing hubs within our libraries to improve accessibility for residents who either do not have digital devices/data or who need support in registering and using the portal. Training to support our volunteer champions and library staff will enable this hub to be run as a drop-in service, but with [the] ability to book time slots.

[The] Basildon & Broomfield Hospital NHS Healthcare Libraries Manager is supporting us under the Health Inequalities Programme, working to reduce inequalities which impede local people in understanding and accessing healthcare and information available to them. Our pilot project will be reducing digital exclusion and improving digital and health literacy in this region, which is well below the national average."

Feedback provided by Essex Library Service as part of the expression of interest.

Theme 5 - Marketing

Marketing was a theme that caused several services some difficulties both in terms of lack of time and the difficulty of reaching the correct audience.

Somerset Libraries specified that they lacked time for implementing marketing and awareness raising, which was echoed in Newcastle's experience of limited time available for marketing and publicising the offer.

"[We] joined steering groups and meetings to help promote our work"

Suggestion supplied by Leeds

Libraries

Different methods of reaching the intended audience were tried from printed flyers to social media and videos in GP

surgeries. It would have been useful to gather feedback on the effectiveness of video advertising.

It would have been helpful to establish which of the different communication styles were more effective at attracting an audience or persuading individuals that the library is a useful source of health information.

Theme 5 - Action recommendations:

- Plan marketing strategies in the initial project planning stage.
- Gather feedback from attendees on **where they heard** about digital health literacy sessions.

Section 6: Conclusions

The fourteen sites which participated in these pilot projects took different approaches to providing improved access to trustworthy sources of health information for their communities. The data they provided adds to the evidence base on which future learning can be built. The figures for numbers of people reached in health literacy initiatives was variable between the sites during the data collection period, but all sites managed to reach members of their communities and indications that their health and digital literacy offers continue to grow have been provided by some sites.

Those public library services that had long-established collaborative partnerships, and which had benefited from significant previous funding rounds, demonstrated the greatest levels of health information service provision. This indicates the important role that well-funded library

services can play in bridging the health and digital literacy divide which exists in society and provides encouragement and a model for future projects.

Participants in this research started their projects from different levels of prior funding and were at different points on their maturity pathways, but all those who provided data have offered valuable insights which have contributed to actionable learning recommendations.

It would appear that behaviour change is necessary within the libraries themselves and in their local communities to enable the successful promotion of health literacy interventions by library services.

- Libraries require **sufficient funding** to provide training to their staff and volunteers to give them the capacity, confidence, and motivation to deliver digital and health interventions which empower the communities they serve.
- System-wide **collaboration between all stakeholders** in Integrated Care Systems needs to be encouraged to provide opportunities for the design and delivery of health and digital literacy to different demographics and population cohorts at their point of need.
- **Creative initiatives** need to be designed to promote the benefits of taking an active role in personal health management and co-production with partners is valuable. Alongside this, community-wide signposting to library services as trustworthy partners in the supply of guidance and information should be encouraged.

Section 7: Recommendations

We end the report with some general observations followed by recommendations for any future work in this area.

Observations

- There were **null data returns** from some of the pilot project sites. We recognise that funding levels and staff pressures probably contributed to this but have to acknowledge the impact of null returns on the strength of our report.
- The extent of qualitative feedback was variable between sites both on the Health Education England data collection sheets and the survey sent by the authors. A greater

depth of analytical reflection on the barriers and facilitators would have been helpful and perhaps greater guidance on this could be provided to participants in future projects.

• Each pilot project clearly started from a different baseline. The projects which demonstrate exemplar results, Leeds Libraries and Staffordshire Libraries, benefitted from significant prior investment to create the existing infrastructure. However, positive outcomes and acknowledgement of learning were reported from all sites that provided feedback.

Recommendations for future projects

- Build a **knowledge sharing community** amongst project participants to allow mutual support, exchange of ideas and mobilisation of best practice.
- Investigate offering future projects as a CPD **research opportunity** for public library staff who are currently studying for a professional qualification or who are applying for certification or chartership. Possibly facilitating ongoing conversations with NHS knowledge and library service staff about the research process and the value of data and asking NHS librarians to provide research mentorship.
- Provision of a **short teaching session** for public library staff at the start of the project about the importance and value of **robust data collection**. Enhance this by writing questions on the data collection sheets which are sufficiently detailed to gain answers with a deeper level of analytical reflection.
- A **longer lead-in time** from application and award of funding, and commencement of the project to allow additional planning time. Facilitation of a '**Before Action Review**' which includes discussions with participants from this set of pilot projects.
- Advice for public library staff on continuous data collection after the end of the pilot project to monitor future developments or progress, and greater assertion of the **obligation for data return** as a requirement for receipt of project funding.

Appendix A: Summary tables for each of the pilot sites

Ellesmere Port

Name of service and project	Healthbox CIC ('Library Health Helpers')
Health literacy data	Percentage of the population aged 16-64 that are below the threshold for low health literacy 37.22% (slightly worse than the average of 40.66%) (Health Education England and University of Southampton, 2016)
Demographics of area	Median age 43 (against 40 for England as a whole) (Office for National Statistics, 2022a)
	Population density 388.2 residents per square kilometre (Office for National Statistics, 2022b) (against 434 for England as a whole) (Office for National Statistics, 2022c)
	Index of Multiple Deprivation rank of average rank 112 (of 151 council areas, where higher is better) (Ministry of Housing, Communities and Local Government, 2019)
Local health literacy and digital literacy context	When the local 'tartan rug' health profile for Ellesmere Port is consulted 22 of the 38 indicators are significantly worse than the England average. Only 2 of the indicators rank as significantly better than the England average (2019 data).
	Ellesmere Port has a reported high level of digital exclusion based on information from the social prescribing team (low or no access to digital items and Wi-Fi). Cheshire West and Chester has around 25,000 residents that are at risk of digital exclusion (CWAC stats). According to the CWAC Council Acorn health and wellbeing profile for Westminster ward in Ellesmere Port, 55% of those surveyed wait until technology becomes cheaper before making a purchase and 19% reported never using computers/being confused by them (2020). This report found only 5% of those surveyed accessed the NHS Direct website. In the last complete year of library opening (2019/20), the public computers at Ellesmere Port Library were used for 8,260 hours, the second highest hours after Storyhouse.
Structure of project	[Taken from expression of interest:]
	 Training for library staff and Home Library Service volunteers on local health service provision, new community services and activities, as well as training in Mental Health

	 First Aid. This will benefit the existing library users, which include those with health issues or social wellbeing needs, enabling contact with health and wellbeing champions and providing a non-judgemental and accessible community health information hub. Staff will feel confident in discussing mental health and have an action plan if an individual presents in crisis, as well as understanding local mental health pathways. Social Prescribing team to run wellbeing events and groups in partnership with libraries themed with national awareness days/weeks. This will raise awareness of available assistance and support groups. Set up referral route/signposting links with the library and social prescribing team (adults and children's services). Dedicated social media and marketing campaign including easy read leaflets, developed in partnership with the library, One Ellesmere Port Primary Care Network (PCN), the social prescribing team and relevant partners. This will include links to the Live Well website (local health and wellbeing information directory). Explain the service videos: these will be on health care topics and patient journeys. Healthbox recently created a similar video which had 24,843 views. These videos will be made available on the screens in GP waiting rooms and in the library. 	
Teams involved	 "Healthbox CIC will work in collaboration with Ellesmere Port Libraries, One Ellesmere Port Primary Care Network (6 GP practices) and the social prescribing team." Cheshire and Wirral Partnership NHS Foundation Trust library service to provide support, advice, guidance, and signposting to resources 	
Outcomes	No data returned	
Key learning	No data returned	
Key data	Cohort: 2 No. of branch libraries: 3 People take part in HL intervention: no data returned Increase in confidence in HL: no data returned Download NHS app (when shown): no data returned	

Essex

Name of service and project	Essex Library Service ('Tablets and Digital Champion Training for Libraries and Community Outreach')
Health literacy data	Percentage of the population aged 16-64 that are below the threshold for low health literacy 39.38% (slightly better than the average of 40.66%) (Health Education England and University of Southampton, 2016) Worth noting that Essex covers 13 district councils on health lit geodata tool: • Thurrock 43.77 • Castle Point 40.48 • Southend on Sea 44.16 • Rochford 33.74 • Maldon 36.18 • Chelmsford 32.4 • Brentwood 32.96 • Havering 41.95 • Epping Forest 38.79 • Harlow 46.24 • Braintree 36.79 • Colchester 36.86 • Tendring 47.58 Average = 39.38 and range of health lit is from 32.4% in Chelmsford to 47.58% in Tendring
Demographics of area	Median age Thurrock 36 Castle Point 46 Southend on Sea 41 Rochford 46 Maldon 48 Chelmsford 41 Brentwood 42 Havering 39 Epping Forest 42 Harlow 37 Braintree 43 Colchester 39 Tendring 50 Average = 42.3 and range 36 (Thurrock) to 50 (Tendring) Median age 42.3 (against 40 for England as a whole) (Office for National Statistics, 2022a) Population density

	 Thurrock 1074.2 Castle Point 2005.4 Southend on Sea 4335.6 Rochford 512.7 Maldon 185 Chelmsford 535.9 Brentwood 503.2 Havering 2332.3 Epping Forest 398.2 Harlow 3056.1 Braintree 253.8 Colchester 587.2 Tendring 440.9 Average = 1247.7 and range 185 (Maldon) to 4335.6 (Southend on Sea) Population density 1247.7 residents per square kilometre (Office for National Statistics, 2022b) (against 434 for England as a whole) (Office for National Statistics, 2022c) Index of Multiple Deprivation rank of average rank 114 (of 151
	council areas, where higher is better) (Ministry of Housing, Communities and Local Government, 2019)
Local health literacy and digital literacy context	The County of Essex has 72% of its land area designated as rural. The Essex Rural Partnership (ERP) informs that 50% of parishes do not have a shop or post office and only 32% possess a GP surgery, even part-time. We aim to support to help improve access to services in these rural areas in partnership with Essex Rural Strategy (RCCE)
	Essex has 74 libraries throughout the county, plus 2 mobile libraries and 1 outreach mobile library and a library within Chelmsford Prison.
	The most deprived area of England is within Tendring, Essex; Jaywick was assessed through indices of deprivation based on factors including poverty, crime, education and skill levels, unemployment, and housing. Our libraries within this area are perfectly placed to support the health literacy and digital connectivity for this community.
	Essex libraries cover 4 areas of poor Health & Digital Literacy. These below average statistical areas are Tendring 10.62%, Harlow 9.79%, Basildon 6.71%, Castle Point 3.91%; please see map attached.
	We have 10 libraries within Tendring that have 58 Public Network Computers (PN), 5 libraries within Harlow with 30 PN's, 7 libraries

	within Basildon with 59 PN's and 4 libraries within Castle Point with 25 PN's.
Purpose of project	 The County of Essex has 72% of its land area designated as rural. The Essex Rural Partnership (ERP) informs that 50% of parishes do not have a shop or post office and only 32% possess a GP surgery, even part-time. We aim to support to help improve access to services in these rural areas in partnership with Essex Rural Strategy (RCCE) Essex has 74 libraries throughout the county, plus 2 mobile libraries and 1 outreach mobile library and a library within Chelmsford Prison.
	 The most deprived area of England is within Tendring, Essex; Jaywick was assessed through indices of deprivation based on factors including poverty, crime, education and skill levels, unemployment, and housing. Our libraries within this area are perfectly placed to support the health literacy and digital connectivity for this community. Essex libraries cover 4 areas of poor Health & Digital Literacy. These below average statistical areas are Tendring 10.62%, Harlow 9.79%, Basildon 6.71%, Castle Point 3.91%; please see map attached. We have 10 libraries within Tendring that have 58 Public Network Computers (PN), 5 libraries within Harlow with 30 PN's, 7 libraries within Basildon with 59 PN's and 4 libraries within Castle Point with 25 PN's.
	 Utilising our existing PN's and purchasing new tablets for easy accessibility and outreach, we will train new and existing staff and digital champion volunteers, signposting and assisting members of the public to healthcare information. The new tablets have a modem inside allowing greater outreach within villages and supporting those without internet access. Tablets can be used during our home library service visits as well as various outreach locations, especially within rural areas. We will help people understand their medical forms, registering online, ordering prescriptions, accessing the correct NHS sites for interpreting medical information, symbols, acronyms and learning about their condition, including signposting to partners and other service providers.
	• The tablets and Digital champions will support our Essex County Council (ECC) Everyone's Essex Plan for Levelling up the county by 1) increasing the number of people successfully completing Skills Training. 2) narrowing the gap in Healthy Life Expectancy by individuals accessing and understanding their health needs. 3) Improving Well-

 being by growing confidence, understanding and ownership on health and digital literacy, promoting a healthy lifestyle and overcoming social isolation. 4) Engagement in Local Culture and Community by creating Pride in Place, involving health partners, and increasing shared knowledge, skills, capacity, and digital resources. We currently have strong links and collaborate with North Essex Partnership NHS Foundation Trust, where we will be sharing resources and best practice with their digital health literacy project manager and training workshops focussed on using digital tools to answer a range of health queries. We also partner with South Essex Partnership NHS Foundation Trust, Essex University Partnership Foundation Trust and Southend University Hospital Mid & South Essex NHS Foundation Trust (M&SE NHS). Working more closely with Health Librarians to access skills training and deliver a consistent approach to improving Health & Digital Literacy to patients within and outside care settings. We work closely with the NHS Anchor Programme, Primary Care Assistants, Mental Health Nurses, and have provided activities within hospital settings. We are also working closely with Thurrock and Southend library services, sharing resources and capacity building, signposting to both our Dementia resources, Reading Well collections and our IT and Literacy Champions. We share buildings and interlink with Adult Community Learning throughout Essex who are providing and
 developing IT training and learning opportunities. Each of our 74 libraries have close ties with their local preschools, junior and secondary schools as well as colleges and universities. One of our partners. Programme Director within M&SE NHS
 One of our partners, Programme Director within M&SE NHS has shared their Virtual Outpatient Programme which includes the roll out of a Digital Patient Interface (Patient Portal). To support this, we will be establishing hubs within our libraries to improve accessibility for residents who either do not have digital devices/data or who need support in registering and using the portal. Training to support our volunteer champions and library staff will enable this hub to be run as a drop-in service, but with ability to book time slots.
• The Basildon & Broomfield Hospital NHS Healthcare Libraries Manager is supporting us under the Health Inequalities Programme, working to reduce inequalities which impede local people in understanding and accessing healthcare and information available to them. Our pilot project will be reducing digital exclusion and improve

	digital and health literacy in this region, which is well below the national average.
Structure of project	Using Samsung tablets to teach residents how to download and navigate the NHS app; and how to access further health advice online.
Teams involved	Three ICBs, as well as a mental health trust. All have been worked with. Also, public health colleagues from the wider ECC, third sector organisations (CVS, MIND, food banks), DWP [Department for Work and Pensions], Reed in Partnership
Outcomes	We have used every opportunity to "spread the word" about our offer.
	By focusing less on the tools and more on the transfer of knowledge, we've been able to extend the range of our offer.
	We hope to widen our offer to almost all 74 of our libraries, with a simple tracker to capture each interaction.
Key learning	There was an initial delay due to sourcing tablets, which we had to acquire via our Technical Services team. With hindsight, the delay could have been better used to engage with library staff and volunteers about the offer.
	One tip is to engage with strategic health partners as they will understand what you are trying to achieve. They will have their own communications routes with e.g. GP surgeries, which will have a better chance of cut-through.
	Secondly, don't overthink things: use the resources you already have (people, space, an audience) and build on those. Use data to help. E.g. I Googled "health inequalities Essex" and was able to easily find a range of open-access official data.
	From survey:
	Facilitators: Volunteers; library space; library staff; existing skills within the team.
	Barriers: The complexity of the initial offer; procurement of tablets through the local authority; set up and usability of the tablets regarding the NHS app; effective project monitoring; accessing volunteers; booking system for appointments. Top 3 facilitators: Existing digital skills volunteers; engaged staff in key locations; change of approach by project lead.

	Top 3 barriers: Complexity of initial thought; usability of tablets; appointment system. Main learning points: Keep it simple: by using our own equipment to assist members of the public we would be "doing to" or "doing for" instead of helping them develop their own digital/ health literacy. We also started using targeted local data to ensure that volunteers and staff knew about local services which could help. We are training staff and other volunteers within the library so more people can be helped in ways and at times which match their needs, rather than at times which suit the service.
Key data	Cohort: 2 No. of branch libraries: 74 People take part in HL intervention: no data returned Increase in confidence in HL: no data returned Download NHS app (when shown): no data returned
Key quotes	"engage with strategic health partners as they will understand what you are trying to achieve""the delay [due to sourcing tablets] could have been better used to engage with library staff and volunteers about the offer"

HMP Aylesbury

Name of service and project	HMP Aylesbury ('Facilitating Health Literacy Across the Young Offenders' Population')
Health literacy data	Percentage of the prison that are below the threshold for low health literacy is estimated to be as high as 72% (much worse than the average of 40.66%) (Health Education England and University of Southampton, 2016)
Demographics of area	No median age available, but age range of prisoners is 21-40
Local health literacy and digital literacy context	The levels of low health literacy in Buckinghamshire are 33%, less than the national mean average of around 40% (Health Literacy Geodata). However, these statistics do not reflect the unique challenges of young offender prisons where low levels of health literacy are as high as 72% (Meek & Ogden, 2021).
	Offenders in HMYOIs are a difficult to reach community in a closed environment where there are complex factors and various structural limitations leading to significant obstacles to maintaining health and wellbeing. HMYOI Aylesbury is considered one of toughest in the country. Offenders are often subject to violence, bullying and self- harm. They face a significant number of hours in solitary confinement (Howard League blog 25 Feb 2020), are easily influenced by peers and are often facing long sentences. Many have no formal education, some are drop-outs and others are from non-English speaking countries. They are also at high risk of misinformation as a result of lack of access to authoritative health information in part due to digital exclusion linked to prison security measures. Whilst the offenders in Aylesbury have access to education including English and Maths and in prison healthcare treatment, there is no established approach for the promotion of health literacy.
Planned activity	Proposed activity. This project, designed to be a community-based collaborative intervention, seeks to address the barriers the 17-21 year olds at the Young Offenders' Institution (YOI), Aylesbury face with health literacy.
	 The target population is a sampled population of 10 young offenders, 10 staff e.g. prison officers, nurses, occupational therapists, commissioners and Governors. The design of the project has multiple aims and activities. Increase access to quality health information The Librarian will identify, acquire and promote appropriate resources - books, graphic novels, audio CDs and leaflets

	 including some specialised furniture to increase access to reliable sources of health information. To increase engagement with health literacy A workshop will be planned and delivered to young offenders with the issues around accessing quality information through shared activities such as designing a wellbeing leaflet. This will be a joint effort of the prison library and healthcare unit and with the support of the commissioners and governors. To facilitate self-care management skills and personal healthcare decision-making of participating young offenders. A Sensory Room will be required - helpful for people on the autism spectrum and individuals with ADHD, including individuals with a variety of developmental challenges and social skills. The sensory room can provide a place for a time-out and a calm space to regain control of their emotions and reduce anger. Guidance of the occupational therapists will be sought on the room's design.
	Intended benefits It is believed that any opportunity for exposure to health and digital literacy will help reformation / rehabilitation of offenders and improve health status, when released. Mahey, Meek and Ogden (2020) found engaging young offenders in health literacy workshop activities helpful to increase ownership of managing personal health and enabling them consider what constitutes good quality sources of health information. Expanding the library healthcare resources in various formats will promote access to inclusive quality health information. This will be underpinned by the sensory room for managing stress and anger, thereby increasing the likelihood of prisoners engaging with available positive interventions including healthcare. The project will also establish a long term partnership between the Prison Library and NHS Library Services for future health literacy based projects.
	 Involvement of Buckinghamshire NHS Knowledge and Library Services Joint project planning and delivery Advise on resource selection where needed Support with accessing digital resources not available in the prison library - providing health information Library support for workshop planning
Capability to deliver	 The commitment of the in-prison health care team has already been obtained. The prison librarian and the NHS Library Manager have jointly participated in a prison/NHS shared learning event for health literacy, hosted by Health Education England.

	 The Prison Librarian has also successfully worked collaboratively with librarians in other sectors, for example: Joint research project on a paper: "Whither evidence-based librarianship: a comparative reflection on the practices in some university libraries in Nigeria, UK and USA"; http://www.eblip6.salford.ac.uk/presenter.php?sessions=on e Co-authored a book meant for promotion of libraries to people with disabilities. Improving Library Services to People with Disabilities ScienceDirect [see Chapter 5] Contributor on a Working Group Team for the Review Medical Core collections on behalf of the Health Library Group, CILIP; published in Jan 2022 by Tomlinson. https://corecollection.co.uk/working-group-team/ Many other published papers in reputable librarianship journals and review of books.
Structure of project	 HMP Aylesbury recently became a category C training prison for male offenders aged 21-40. Levels of low health literacy in Buckinghamshire are 33%, less than the national mean average of around 40% (Health Literacy Geodata). However, these statistics do not reflect the unique challenges of young offender prisons where low levels of health literacy are as high as 72% (Meek & Ogden, 2021). Whilst the offenders in Aylesbury have access to education including English and Maths and in-prison healthcare treatment, there is no established approach for the promotion of health literacy, especially with no access to the internet which prevents access to online health information. The project had two main aims: Improve access to health information resources in a prison setting through the selection and purchase of relevant books and audio CDs and increasing the availability of patient information leaflets in the prison library. This included signposting to health information sources upon prison release through the creation of an information pack. Empower prison residents with the skills and confidence to Ask questions during health care conversations to ensure the information they have been given is easy to Understand and know where to find further information. Understand and evaluate non-digital health information that they might come across for example in men's health magazines or from friends and family.
Teams involved	The project leads from the NHS (Buckinghamshire Healthcare NHS Trust) and HMP Prison library established regular meetings to plan the delivery of the project. We worked with prison education colleagues to seek approval for delivering a workshop and help us target the promotional activities.

Outcomes	Creation of an enhanced health information collection housed in the prison library. This included the procurement of additional shelving and a leaflet display rack to accommodate the additional resources. Delivery of a 1-hour health literacy workshop tailored towards the information needs of prisoners. The workshop was well received. On a scale of 1-5 (with 1 being low and 5 being very high), the session was rated 4.1 on the likely difference the learning from the workshop will make next time participants encounter health information. We plan to continue running further health literacy workshops with different cohorts among the HMP Aylesbury prison population. The information pack for signposting to health information resources upon prison release is still under development but there are plans to launch this in the near future.
Facilitators to the embedding of health literacy/digital health literacy	Regular communication with other project members. Top three facilitators: Previous training on health literacy. Communication. Being able to offer small incentives 'freebies' to encourage participation
Barriers to the embedding of health literacy/digital health literacy	Delay to receipt of funding - this was not going directly to my organisation so there was nothing I could do to have influenced the situation.
	Top three barriers: Delay to funding. Knowing how to sustain the momentum going forward - again because this project is not hosted within my organisation. The nature of the prison environment unavoidably created some barriers e.g. lack of internet access, fitting sessions around strict timetables and reaching possible attendees directly.
Key learning	Knowledge sharing was key from the outset of the project, particularly for the NHS librarian to gain a better understanding of the likely needs and challenges of raising awareness of health literacy in a prison environment.
	This included background research to see what else had been done around health literacy in prison settings. There was little UK research but what we did find helped shape some of the detail in the workshop content (Mehay, Meek and Ogden, 2021).
	We also established a core list of physical and mental health topics which might be of particular interest of male prisoners under 60 years old including ADHD, diabetes and depression.

How have those learning	It's too early to say. We may not be able to continue the training in
points been used since the	the same way but are looking to create a flyer to keep awareness
pilot ended?	of health literacy high.
Key data	Cohort: 2 No. of branch libraries: 1 [Prison] People take part in HL intervention: 13 (Sep 22 - May 23, but people only took part in May 23) Increase in confidence in HL: no data Download NHS app (when shown): none

Lancashire

Name of service and project	Lancashire Cultural Services Team/Lancashire County Council ('Addressing low health and digital literacy across Lancashire by
	promoting access to quality health information and embedding it in local library provision')
Health literacy data	Median percentage of the population aged 16-64 that are below the threshold for low health literacy 41.755% (slightly worse than the average of 40.66%) (Health Education England and University of Southampton, 2016)
	Districts in covered by Lancashire CC: Burnley - 51.25% Chorley 38.25% Fylde 35.14% Hyndburn 49.30% Lancaster 39.59% Pendle 50.81% Preston 48.64% Ribble Valley 31.78% Rossendale 43.22% South Ribble 36.17% West Lancashire 39.73% Wyre 39.48% Blackburn with Darwen 54.61% Blackpool 52.57% Health Literacy v Digital access Ribble Valley - Good HL & Poor Digital Access (Broadband coverage)
Demographics of area	Median age 42.5 (against 40 for England as a whole) based on median of median ages for all districts covered by Lancashire County Council (Office for National Statistics, 2022a)Median population density of all districts of Lancashire CC 585.85 residents per square kilometre (Office for National Statistics, 2022b) (against 434 for England as a whole) (Office for National Statistics, 2022c)Index of Multiple Deprivation rank of average rank 78 (of 151 council areas, where higher is better) (Ministry of Housing, Communities and Local Government, 2019)Median age for districts in covered by Lancashire CC ⁶ :

	 Fylde Hyndburn Lancaster Pendle Preston Ribble Valley Rossendale South Ribble West Lancashire Wyre 	491.2 1126.6 252.1 565.4 1039 105.6 513.4 981.4 338.8 396.7
Local health literacy and digital literacy context	Lancashire has a diverse commun rural, and coastal areas, and it also health and lower life expectancy co 2021). There are several districts across L higher than national average perce 64 that are below the threshold for are likely to have difficulties in under information (GeoData Institute, 201 highest percentage of low health lift rural districts including Burnley (51 (50%) and Rossendale (43.22%). Hyndburn also have the highest per households at risk of digital exclusion is also higher across Lancashire's the population of Blackpool being b literacy, and areas in Fylde (St. An higher risk of digital exclusion (73-	b has significant inequalities in ompared to England (LCC, ancashire which also have a entage of the population aged 16- low health literacy (40.66%) and erstanding or interpreting health 16). East Lancashire has the eracy across several urban and %), Pendle (51%), Hyndburn Areas in Burnley, Pendle, and ercentage (90-100%) of ion (LCC, 2019). This prevalence coastal districts with 52.57% of below the threshold for low health nes) and Wyre (Garstang) at
Purpose of project	"Our aim is to promote access to g and upskill communities across the staff training and digital skills sessi local information and library provisi	whole of Lancashire by using ons to embed health literacy into
Structure of project	Embedding HL in public library pro This would involve upskilling Lancs increasing health literacy in the cou Aimed to use existing HL training fu Teaching Hospital KLS staff and tra would be done by a blended learni with live and pre-recorded training Creation of an online information h Lancashire Knowledge and Library resources and signposting to qualit resources. This would include 'how library staff on how to use the hub.	s Library service staff and unty. rom a pilot run by Lancs ain all public library staff. This ng approach involving e-learning to make it more accessible. ub to be developed in the <u>v Service website</u> "contain[ing] ty health information and v to' guides for the public and

	"Staff from across 64 Lancashire libraries would then deliver health and digital literacy awareness sessions using our public network computers to show library users how to use tools and techniques to find quality health resources. Staff would also signpost to the online hub and demonstrate how to use it effectively" Sessions would also be tailored for vulnerable communities to provide additional support as needed.
Teams involved	Five NHS Knowledge and Library Services across Lancashire (Preston, Chorley & South Ribble, East Lancashire, Morecambe Bay, and Blackpool) Lancashire Knowledge and Library Service, includes 64 public libraries NHS e-learning designers (possibly IT)
Outcomes	 Creation of e-learning package. Planning of content for the website (was this the Hub?) Creation of more accessible materials for low literacy levels. Staff attended 1 hr online training session on health literacy and digital literacy Interactive map of Lancashire, with all libraries, GP surgeries and pharmacies.
Key data	Cohort: 1 No. of branch libraries: 30 People take part in HL intervention: no data returned Increase in confidence in HL: no data returned Download NHS app (when shown): no data returned

Leeds

Name of service and project	Leeds Libraries, Leeds City Council ('Supporting the development of Health Literacy within library based Digital Health Hubs in Leeds')
Health literacy data	Percentage of the population aged 16-64 that are below the threshold for low health literacy 44.49 (slightly worse than the average of 40.66%) (Health Education England and University of Southampton, 2016)
Demographics of area	Median age 36 (against 40 for England as a whole) (Office for National Statistics, 2022a)
	Population density 1471.7 residents per square kilometre (Office for National Statistics, 2022b) (against 434 for England as a whole) (Office for National Statistics, 2022c)
	Index of Multiple Deprivation rank of average rank 65 (of 151 council areas, where higher is better) (Ministry of Housing, Communities and Local Government, 2019)
Local health literacy and digital literacy context	 When applied to the Leeds population, the regional data from the Lloyds Bank Consumer Digital Index (published in September 2021), reveals that: <u>35,000 adults do not have any of the Foundation Level Essential Digital Skills</u> <u>20,000 adults are not online at all</u>
	In addition, the percentage of the population aged 16-64 falling below the threshold for low health literacy is 44.49%, set against a mean national prevalence of 40.66%.
	The COVID-19 pandemic – a period during which the nation has experienced " <u>an almost exclusively digital coping response to the</u> <u>isolation imposed by the COVID-19 lockdown</u> ". (Addressing Poverty with Lived Experience (APLE) Collective) has meant that these already excluded residents have been further marginalised.
	Because of these combined barriers, the response to COVID-19 and the subsequent implementation of digital medicine into patient pathways has fundamentally excluded a large segment of the population who would routinely rely on the NHS for health information, and the management and treatment of their condition.
	A key driver for the city is therefore the identification and removal of barriers to delivery and inclusion in digitised health and care services, with the goal of reducing health inequalities as outlined in Healthwatch Leeds <u>Digitising Leeds</u> series of reports.

Title of project	Supporting the development of Health Literacy within library based Digital Health Hubs in Leeds
Local health literacy and digital literacy context	When applied to the Leeds population, the regional data from the Lloyds Bank Consumer Digital Index (published in September 2021), reveals that: 35,000 adults do not have any of the Foundation Level Essential Digital Skills 20,000 adults are not online at all
	In addition, the percentage of the population aged 16-64 falling below the threshold for low health literacy is 44.49%, set against a mean national prevalence of 40.66%.
	The COVID-19 pandemic – a period during which the nation has experienced "an almost exclusively digital coping response to the isolation imposed by the COVID-19 lockdown". (Addressing Poverty with Lived Experience (APLE) Collective) has meant that these already excluded residents have been further marginalised.
	Because of these combined barriers, the response to COVID-19 and the subsequent implementation of digital medicine into patient pathways has fundamentally excluded a large segment of the population who would routinely rely on the NHS for health information, and the management and treatment of their condition.
	A key driver for the city is therefore the identification and removal of barriers to delivery and inclusion in digitised health and care services, with the goal of reducing health inequalities as outlined in Healthwatch Leeds Digitising Leeds series of reports.
Planned activity	In response to these challenges Leeds Libraries is engaged with partners to create a network of Digital Health Hubs. Our libraries are in an excellent position to take a lead role in this initiative; we have the required sustainable infrastructure including all 300 frontline staff trained as Digital Champions. It is our intention to transition all 34 libraries into Digital Health Hubs. This project will build on and extend this work. To ensure a fully comprehensive Digital Health Hub offer we will use this funding to employ an additional (0.5fte) librarian to: extend the role of our Digital Champions, to include Health Literacy, with training based on HEE [Health Education England] health literacy toolkit, ensuring staff are able to support patients accessing health information and services digitally, empowering them to actively participate in shared decision making. further develop the health and wellbeing information provided within our learning platform - Niche Academy, e.g. NHS App. support the development of Digital Health Hub activity, e.g. talks and events.

	This project will create a sustainable solution implemented across all the city's libraries ensuring the health inequalities gap is not widened, particularly in areas of greatest deprivation and poverty. Evidence suggests a more personalised approach results in better health and wellbeing outcomes for people reducing the risk of a medical emergency and unplanned visits to A&E or their GP, relieving pressure within the system. A network of Digital Health Hubs supported by library staff trained in digital and health literacy will support residents to fully participate in their health and wellbeing ensuring that the approach, 'No decision about me without me' becomes a reality. The project is supported by the West Yorkshire Health and Care Partnership and we will be looking to share our learning with our library colleagues in West Yorkshire as part of ongoing collaboration. The long-standing Leeds Health Libraries and Information Partnership Group, of which the Chief Librarian is a member, also supports this application, and we will work in partnership with the group in the delivery of the project. The group provides strategic direction in the development of library and information services for the Leeds health economy. Membership includes representatives from: Leeds Community Healthcare NHS Trust Leeds Teaching Hospitals NHS Foundation Trust Leeds Beckett University Leeds Library and Information Service, Leeds City Council Health Resource Centre Leeds Beckett University Leeds Library and Information Service, Leeds City Council Health Education England University of Leeds Thrive by Design
Capability to deliver	Leeds Libraries have a very good record of partnership working including with the NHS and local CCG. The Chief Librarian is a member of the Health Partnership Board (as above) and sits on the West Yorkshire Digital Partnership (which includes health). One recent and relevant example has been the Digital inclusion project to support long-term conditions programmes of rehabilitation In July 2020, following a bid for funding from the Library Service, the NHS Loods CCC Executive Management Team approved a
	 the NHS Leeds CCG Executive Management Team approved a business case to deliver this 12 month project. A total of £76,000 was provided to cover: Recruitment of a Digital Inclusion Coordinator to facilitate digital champion training to healthcare professionals across the MSK, Diabetes, Pulmonary, Cardiac, Community Neurology, NDPP, Pain and Stroke rehabilitation pathways; and

	 Purchase of devices (iPads) to be provided through the Library Service's tablet lending scheme to people with LTCs who lacked access to manage their conditions through digital means.
Structure of project	We aim to improve our library users' digital and health literacy skills to help them find high-quality health and wellbeing information to encourage better self-management of their health needs.
	We researched existing health literacy resources to avoid unnecessary duplication and to identify any gaps in provision. We built links with Local Care Partnerships, Primary Care Networks, Neighbourhood Networks, Secondary and Community Healthcare agencies, council colleagues and partners and joined steering groups and meetings to help promote our work. We acquired (prior to this project) an online platform where we can curate and create the content we need to support this project. This also allows us to provide a holistic approach to local health needs and ensure we're meeting our communities' needs. Having one place for signposting is incredibly useful.
	We delivered awareness sessions to frontline staff to ensure relevant knowledge was shared and staff can support customers appropriately.
Teams involved	West Yorkshire Health Care Partnership, NHS, Leeds Community Healthcare, Wakefield Libraries, LCPs & PCNs, multiple local community organisations
Outcomes	We created a series of digital wellbeing events with a soft approach to give our users the opportunity to discover digital through fun and inclusive means. We decided to have digital as a part of the sessions not as the main theme, choosing arts, music or a social activity instead. From piloting these events for Get Online week in October we found that most participants didn't feel threatened by going online after having the chance to take part in the main theme of our sessions.
	We have used our Leeds Libraries Online Learning platform for staff and users to access a range of resources from making an email account to digital champion training. We have a range of Get Online guides which include 'first and next steps with digital' and 'staying safe online' as well as a digital health section which includes tutorials on 'how to measure your blood pressure at home', 'how to download the NHS app', and 'how to use the NHS website'. These guides have been designed with easy reading in mind to make them as inclusive as possible. We are also able to host content for partners – for example, we have collated leaflets on 'getting ready for a talk about your health' and 'three questions for better health' from a partner in the NHS.

	These mildes have been used ast sub-orders in the distance of the
	These guides have been used not only within our libraries but in libraries all over the world including America and New Zealand and we have been nominated for an award by Niche Academy who is our host site.
	We will be continuing our work developing resources on our Leeds Online Learning Platform, making sure all our tutorials are relevant and useful for our users. We will be mainly focusing on easy read and accessible online health materials, growing the collection we already have on there.
	We will also be developing our health literacy training for staff, concentrating on bringing staff up to date with health literacy statistics and the importance of it within our current work and that of our partners.
	As well as this we will be also be continuing our digital inclusion work through various means, whether that's developing our tablet lending schemes, hosting digital wellbeing events or simply continuing our digital drop ins throughout our library service.
Facilitators to the embedding of health literacy/digital health literacy	Designing health literacy training to be as relevant as possible to frontline staff working in libraries. Delivering 'train the trainer' training to librarians to help cascade training to frontline staff. Working with community partners to learn gaps in health literacy that could be filled.
	Top three facilitators: Co-production. Librarian team buy-in. Relevant training.
Barriers to the embedding of health literacy/digital health literacy	Capacity to deliver training. Turnover of staff and high levels of sickness. Keeping up to date with new challenges being faced by healthcare professionals to ensure we're keeping our staff up to date with developments.
	Top three barriers: 1. Capacity. 2. Sickness among staff. 3. Keeping on top of and reacting to latest developments.
Key learning	Working with community healthcare partners was incredibly useful. Mapping out existing support to avoid duplication and to learn from established sources. Upskilling frontline teams crucial to overall success.
How have those learning points been used since the pilot ended?	We are continually mapping out community partners and existing support to make new relationships and ensure we're meeting community needs. These new partnerships help when redesigning training to make sure it's up to date. Health Literacy training is now a standard part of new-starters' inductions.
Key data	Cohort: 1 No. of branch libraries: 37

	People take part in HL intervention: 1324 Increase in confidence in HL: 94% (n=1324) Download NHS app (when shown): 95% (n=17)
Key quotes	"Having one place for signposting is incredibly useful" "[We] joined steering groups and meetings to help promote our work" "We decided to have digital as a part of the sessions not as the main theme, choosing arts, music or a social activity instead."

Newcastle

Name of service and project	Newcastle City Libraries ('Help 4 Health')
Health literacy data	Percentage of the population aged 16-64 that are below the threshold for low health literacy 46.08% (slightly worse than the average of 40.66%) (Health Education England and University of Southampton, 2016)
Demographics of area	Median age 34 (against 40 for England as a whole) (Office for National Statistics, 2022a) Population density 2646.1 residents per square kilometre (Office for National Statistics, 2022b) (against 434 for England as a whole) (Office for National Statistics, 2022c)
	Index of Multiple Deprivation rank of average rank 54 (of 151 council areas, where higher is better) (Ministry of Housing, Communities and Local Government, 2019)
Local health literacy and digital literacy context	 Newcastle has below average levels of health literacy and numeracy. 46% of 16-64 year-olds are below the threshold for low health literacy Newcastle is ranked 17th in the Index of Multiple Deprivation (2019) most deprived for health outcomes in England. Life expectancy is 13.1 years lower for men and 8.8 years lower for women in the most deprived areas of Newcastle compared to least deprived. Whilst the city has the digital infrastructure in place, there is a barrier through lack of knowledge and/or access to technology. Public libraries are seen as trusted and safe places, open to all, making them the perfect venue to provide training and access to equipment for residents. The North East has the highest proportion of residents in England with zero basic digital skills. Those without digital skills are likely to be the most vulnerable and excluded. More than 200,000 people locally have either never used the internet or have not
	used it in the last three months. This reinforces findings that people from disadvantaged backgrounds are most affected by digital exclusion. Addressing this is a high priority and we are committed to growing existing digital support with specialist partners.

Purpose of project	"develop a health literacy training and support package which will be used to deliver small group sessions to the public in libraries within the city."
Structure of project	Session delivered by own device and/or PCs in the library by library staff partnered with Get Online Newcastle. Creation of mandatory in-house training module for staff to be completed annually to keep knowledge and skills current. Collaboration with local NHS trusts to signpost self-help guides, trusted resources of information, tools (eg "questions to ask your doctor" and
Teams involved	Collaboration with Cumbria, Northumberland, Tyne and Wear NHS Foundation Trust
Outcomes	 [No case study at present] From Survey: 64 people attended a health and digital activity - 16 of these attended a targetted programme activity; 48 attended a public access programme [Dispartity of numbers of people compared to spreadsheet data - need to check this further] Targeted programme - more structured and longer. Public access programme - briefer interventions and advice in response to specific questions. Both types " provided people with a social space or social event where they could access specialist advice or focused learning activities"
Key learning	 Facilitators: [a] Embedding existing materials, (e.g., videos about NHS App hosted by Leeds Libraries online) into sessions that were tailored to individuals and groups. [b] Recruiting participants via intermediary agencies that serve GP practices (e.g., social prescribing). [c] Targeting cohorts of participants (to our 8-week courses) who shared experiences (e.g., of receiving mental health support) had the added benefit of creating an informal learning environment that also had a socialising element. Barriers: A first barrier was engaging potential participants was a challenge, i.e., recruiting people to attend drop-in sessions

	 [for Stream 2, the public access programme]. We tried a range of different approaches with differing degrees of success including the following: Newcastle Elders Council newsletter InformationNOW Newcastle events website Leaflets (in libraries and a 96-apartment council residence next to a branch library) - Posters (in libraries) Newcastle City Council Facebook/Twitter Newcastle Libraries Facebook/Twitter A second barrier was limitation on time needed for marketing and publicity. A third barrier was not being able to respond to enquiries outside the 10 hours per week hours (which were mainly Wednesdays). Top facilitator: We carefully designed sessions around particular health topics that were intended to engage people in a group learning context.
Key data	Cohort: 2 No. of branch libraries: 3 People take part in HL intervention: 138 (Sept 22 - June 23) Increase in confidence in HL: 80% (n=138) Download NHS app (when shown): 100% (n=12)

Norfolk

Name of service and project	Norfolk Libraries and Information Service, Norfolk County Council ('Digital Health Hub – Easy Read provision')
Health literacy data	Percentage of the population aged 16-64 that are below the threshold for low health literacy & numeracy combined 40.12 % (slightly better than the national average of 40.66%) (Health Education England and University of Southampton, 2016) This figure calculated from average of all 6 council areas covered by the 36 branches of Norfolk service: • Kings Lynn & West Norfolk 43.91% • North Norfolk 42.68% • South Norfolk 34.73% • Breckland 40.80% • Broadland 34.45
	• Norwich 44.15% Average = 40.12 and Range is 34.45 (Broadland) to 44.15% (Norwich)
Demographics of area	Median Age Kings Lynn & West Norfolk 47 North Norfolk 54 South Norfolk 46 Breckland 46 Broadland 48 Norwich 34 Average = 46 and Range is 34 (Norwich) to 54 (North Norfolk) Median age 46 (against 40 for England as a whole) (Office for National Statistics, 2022a) Population density Kings Lynn & West Norfolk 107.2 North Norfolk 106.6 South Norfolk 156.4 Breckland 108.4 Broadland 238.6 Norwich 3688.2 Average = 734.2 and Range is 106.6 (North Norfolk) to 3688.2 (Norwich) Population density 734.2 residents per square kilometre (Office for National Statistics, 2022b) (against 434 for England as a whole) (Office for National Statistics, 2022c)

	Index of Multiple Deprivation rank of average rank 81 (of 151 council areas, where higher is better) (Ministry of Housing, Communities and Local Government, 2019)
Local health literacy and digital literacy context	Norfolk & Waveney CCG identifies areas in need of most support with low health literacy and digital connectivity in this locality, using the broadband score dashboard in DERI (Digital Exclusion Risk Index) Workbook: Digital Exclusion Risk Index v1.5 (gmtableau.nhs.uk) and HEALTH LITERACY - Home (geodata.uk) showing:
	 Kings Lynn & West Norfolk high risk of digital exclusion scoring 8.734 out of 10 Thorpe Hamlet, Norwich high risk of digital exclusion scoring 9.141 48.86% of Gt Yarmouth's population have low health literacy levels
	NHSx identified areas within our Integrated Care System (ICS) as being the most in need in <u>Digital Health Inequality Pioneers</u> — <u>Thrive by Design</u> –
	Norfolk Insight data <u>Children and young people - Map explorer -</u> <u>Norfolk Insight</u> provides information on how Norfolk & Waveney compares to other areas in East of England and Nationally, who fare lower than both for attainment at key stages 2, 4 & 5.
	 40% of people with no qualifications at all in Nelson ward of Gt Yarmouth
	Norfolk Insight data highlights how the local authority sees education as a priority: "Improving the level of education and skills present within a local population remains an important policy objective for both local and central government.".
Purpose of project	Public Library Network working with a small organisation run by people with learning difficulties for people with learning difficulties.
	(Original plan to work with an NHS Librarian ceased when that librarian resigned and the NHS library no longer had capacity to support the project.)

	Digital Health Hub – Easy Read Provision – Norfolk Libraries and NHS Knowledge and Library Services
	Extending existing Digital Health Hub to provide Easy-Read shared decision making tools
	Norfolk & Waveney CCG identifies areas in need of most support with low health literacy and digital connectivity in this locality, using the broadband score dashboard in DERI (Digital Exclusion Risk Index) Workbook: Digital Exclusion Risk Index v1.5 (gmtableau.nhs.uk) and HEALTH LITERACY - Home (geodata.uk) showing:
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	40% of people with no qualifications at all in Nelson ward of Gt Yarmouth
	Norfolk Insight data highlights how the local authority sees education as a priority: "Improving the level of education and skills present within a local population remains an important policy objective for both local and central government.".
Structure of project	Norfolk Library and Information Service plans to extend our Digital Health Hub offer to include "Easy- Read" shared decision-making tools for health and care choices within our Norfolk communities.
	 We are well placed to deliver with 47 libraries and 6 mobile libraries visiting over 500 villages - covering a mix of urban, rural and coastal areas

 We reach out into the community through the <u>Norfolk</u> <u>Community Advice Network - Norfolk Community Advice</u> <u>Network (ncan.co.uk)</u> referral system, GP footfall websites throughout Norfolk and Waveney, other CCG and Digital Inclusion partners, as well a promotion on the library website and social-media platforms Health Literacy training to staff derived from NHS Knowledge and Library service continues to cascade through library-service staff - expanding our Digital Health Hub to all 47 libraries "Easy Read" has many formats; a subtitled video, for example (in English and other languages) and BSL is extremely accessible. We are keen to explore all areas that make shared decision-making more equitable. The library service has made a start in training staff to be LD & Autism Champions Awareness is supported through newsletters, training and resources from our local LD Partnership Board <u>Our current</u> work - Norfolk County Council and Ability Net <u>Free</u> <u>Resources AbilityNet</u>
We eagerly anticipate seeing the decision-making tools and are enthusiastic to work with NHS Knowledge & Library service and key delivery / development partner organisations that have agreed to contribute.
Service expansion to include Easy Read is an obvious next step, ensuring that decision-making information is more accessible and improving outcomes for vulnerable people:
 This will benefit the most vulnerable in society who are more in need of support More accessible formats are helpful to care providers as well as those receiving care "Easy Read" works toward preventing safeguarding issues by making important decision -making information more comprehensive It empowers the most vulnerable to have agency over their own body/ health and care decisions Staff development and accessibility awareness is addressed Library staff will have access to resources and know where to find "Easy Read" information
NHS Knowledge & Library service have shared resources with us to see what is available:

	 Health information with easy-to-understand words, pictures and films <u>https://www.easyhealth.org.uk/</u> "Ask 3 Questions" <u>https://aqua.nhs.uk/resources/shared-decision-making-ask-3-questions/ https://www.accc-cancer.org/projects/health-literacy/ask-me-3-tool</u> <u>MAGIC: Making good decisions in collaboration. Shared decision making as part of everyday practice</u> We look forward to continued involvement and collaboration with NHS Knowledge & Library service.
Teams involved	Opening Doors (<u>www.openingdoors.org.uk</u>), Healthwatch, Digital Project Managers from NHS Norfolk and Waveney Integrated Care Board, Customer Services Transformation Managers at the County Council
Outcomes	Opening Doors trained 10 members of our key Norfolk Libraries & Information staff on Easy Read, to look at making libraries and the information they provide more accessible. Healthwatch helped to deliver some Digital Health Hub training to some local surgery Patient Participation Groups and are keen to help make videos to promote the service to a wider audience.
Key learning	Some staff fed back afterwards that they found the training, provided by the people from Opening Doors, difficult. Opening Doors www.openingdoors.org.uk a user led organisation run by people with learning difficulties for people with learning difficulties – who made if very clear from the start that the NHS App is not accessible for a lot of people therefore we would not work on trying to get an Easy Read guide together to help people gain access to that. Another fantastic insight was that our co-producers at Opening Doors were very keen to stress to us, was that a lot of people who use Easy Read materials might not be safe online and a lot of health information is not accessible for them when trying to find out about health information or long term conditions. I could have planned more support in chasing, collecting and collating the data from the 47 libraries – which took a generous amount of time which unfortunately ate into my other planning time. Collecting the data from all 47 of our libraries to share back to HEE [Health Education England] / Libraries connected has been challenging – although I developed a simple tally sheet to record the information – but some libraries missing some months altogether

From our survey:
Facilitators
• Thankfully we already have a digital health offer in Norfolk Libraries - we have been able to promote this by having visible banners that can be moved around the libraries and external agencies like GP surgeries / health centres / pharmacies. We are also grateful for the health literacy training and the updated versions of this to keep the staff at our 47 libraries up to date. We are still working with Opening Doors to develop accessible health information for those with learning difficulties and our local NHS in the promotion and development of this
 Opening Doors is co-led by people with LD lived experience and we are very much led by their availability and timescales. The next step is to look at other means of health information provision alongside Easy Read - such as videos.
Top 3 facilitators
 Already having a digital health offer in place to expand upon Working with Opening Doors to understand the real needs of the communities we are trying to support Working with local NHS to help get the work out about the support we are able to offer. Without this collaboration we could not have this information on GP websites, in surgeries, hospitals and so on
Top 3 barriers
 Time - as there was just 1 x part time member of staff leading on this who also had other projects Pace - we could only work as quickly as Opening Doors were able to help produce accessible health information COVID - health providers only now really feeling able to dedicate time to projects like this post-COVID
Main learning
Keep up the contacts with the other agencies and keep the project going. Developing at a pace suited to others - not just the span time of the project itself. Keep the digital health offer alive in staff minds as 'business as usual' and make sure training is up to date. Recording our interactions for our own and local NHS information.
Learning points used since end of project

	Maintaining relationships with those we have been working alongside. Developing new contacts within district councils as well as social prescribers. Developing a plan for regular health literacy training - as well as for new starters to keep staff knowledge up to date. Plan to use data collected in a meaningful way.
Any commonality or correlation of structure or perceived success	Other pilot sites. Our knowledge sharing meetings with other pilot sites highlighted that the work Opening Doors developed around accessing GP online services, would be beneficial if it was able to be adapted to local support needs in their own pilot areas. After a few initial meetings, together we decided that accessing GP online services would be the most beneficial. Opening Doors were then able to work at their own pace to produce a guide to help people to access GP online. We were able to share this at the 2022 CILIP conference and with the rest of the cohort – who are keen to use it and adapt it for their own needs. We have had to work at the pace of Opening Doors which is a relatively small organisation Digital Project Managers from our NHS Norfolk and Waveney Integrated Care Board & Customer Services Transformation Managers at the County Council have also become interested in promoting the Digital Health Hub service that we provide at libraries and we are working with joint comms teams on how we might do this.
Key data	Cohort: 1 No. of branch libraries: 36 People take part in HL intervention: 757 (04 2022 - 11 2022) Increase in confidence in HL: 100% (n=757) Download NHS app (when shown): 100% (n=15)
Key quotes	"My tip would be to be ready to be patient and to work at a different pace, if necessary, when working with a small organisation that is led by people with learning difficulties. Also, to remind other staff working on the project to be mindful of this same thing." "It would be wonderful to keep Easy Read on the radar and part of 'business as usual' for Norfolk Libraries and Information Services in the health information that we provide and in staying mindful of accessibility information provision in general."

North Yorkshire

Name of service and project	North Yorkshire Libraries ('Public libraries as gateways to good health: a collaborative project between North Yorkshire Libraries and York and Scarborough Teaching Hospitals NHS Foundation Trust Library service')
Health literacy data	Percentage of the population aged 16-64 that are below the threshold for low health literacy 45.05% (worse than the average of 40.66%) (Health Education England and University of Southampton, 2016) Data for Borough of Scarborough
Demographics of area	Median age 50 (against 40 for England as a whole) (Office for National Statistics, 2022a)
	Population density 133.2 residents per square kilometre (Office for National Statistics, 2022b) (against 434 for England as a whole) (Office for National Statistics, 2022c)
	Index of Multiple Deprivation rank of average rank 1275 (of 151 council areas, where higher is better) (Ministry of Housing, Communities and Local Government, 2019)
	Data for Borough of Scarborough, except for IMD which is for North Yorkshire as a whole
Local health literacy and digital literacy context	We will focus on libraries across the Borough of Scarborough.
	Health: North Yorkshire's Health and Wellbeing Board has highlighted Scarborough Borough as a location of significant health inequality, with life expectancy 9.7 years lower for men and6.7 years lower for women in the most deprived areas of Scarborough than in the least. Scarborough has 20 LSOAs ranked within the 20% most deprived in England with four in the bottom 2%. The percentage of the population in Scarborough aged 16-64 that are below the threshold for low health literacy is 45.05% - as opposed to the national average of 40.66 Digital: Just 2.5% of premises in Scarborough have access to ultrafast broadband (100Mbps), lower than Yorkshire and Humber (64%) and England (61%). Mobile connectivity is poor with just 58% and 63% of the Borough served by 3G and 4G phone coverage respectively, among the lowest levels in England. Scarborough is a digital poverty hotspot, a growing concern as services move increasingly online. For many people the Library offers a lifeline to access digital service but also to support digital literacy. In the year preceding the pandemic, over 5200 customer IT support hours were recorded in the Borough's libraries.

Planned activity	A key tenet of North Yorkshire's library strategy is to "support the improvement of health and well-being in North Yorkshire". This project will help establish the library as "a gateway" to community health and wellbeing that empowers people to take control of their own health and make positive changes in their lives. We see libraries as promoters of health rather than just repositories of information. We want to develop the potential of the public library service to fulfil that role.
	We will work with, and learn from, colleagues in the York and Scarborough Teaching Hospitals NHS Foundation Trust Library Service (NHSLS), to enable public library staff and volunteers to develop the skills and knowledge to signpost people to, and assist them to access, reliable health information resources and empower them to engage in helpful conversations about health and wellbeing. As well as upskilling the public library team, NHS Library colleagues will support delivery of drop-in sessions designed to facilitate improved customer interactions with health services (e.g., getting the most from doctors' appointments, when to use 111).
	Benefits: This project will develop beneficial working relationships between the Public Library and NHS Library sectors. It will capitalise on the unique role public libraries have as trusted, universal spaces that attract a broad demographic. It will also provide opportunities for people who may not be engaged with the health sector to access information to influence their own health outcomes. It will help create a team of health champions within public libraries with the knowledge, skills and confidence to have meaningful interactions with people about health. The long-term benefit is to improve knowledge of health matters and health literacy levels in the community. Collaboration: This will be a collaborative project with NHSLS. Our NHS partners will develop a training pack for the public library participants to support their learning and enable them to cascade training to colleagues. This will include 'guides to resources, crib sheets and PowerPoints for library staff and volunteers, in addition to information packs to pass onto the public. They will advise on suitable digital resources and apps that will be loaded onto iPads for use in one-to-one sessions with customers. We will work together to deliver the project, evaluate its success, revise as appropriate and share the learning to enable roll-out across other libraries in North Yorkshire, setting the scene for further collaborations with neighbouring NHS organisations.
Capability to deliver	This project will build on collaboration between the services over several years. Most recently, senior public library staff participated in accredited Royal Society of Public Health, Health Literacy awareness training and an in house session on sources of patient information — both delivered by staff of York and Scarborough Teaching Hospitals NHS Foundation Trust.

	The training for the public library team will be devised and delivered by an experienced NHS library Clinical Librarian and Trainer (Level 3 Diploma in Delivering Learning and ITD certificate in Learning and Development) who has also successfully completed NHS Health Literacy awareness training, train the trainer events, and is member of national Health Literacy Community of Practice. The ongoing delivery and development of the project will be supported by the North Yorkshire Libraries' Health Strategy Team that has the remit to promote health literacy through access to information and by connecting people to other services.
Purpose of project	Working jointly across 4 libraries in an area identified as having significant health inequality, low health literacy and which is a digital poverty hotspot to provide training to staff and volunteers to build their knowledge and confidence in supporting and empowering the local community (16+) to access reliable online health information, improve knowledge of health matters and thereby encourage positive health changes in the community, particularly amongst those less engaged with health services.
Structure of project	Preliminary meetings held with staff and volunteers in participating libraries to outline purpose of project, build engagement, get input on types of health queries they receive and perceived training needs to help inform development of training session and establish a baseline of current confidence of attendees with regard to health literacy. Training session of around 2 hours developed to incorporate information/ideas fed in at preliminary meetings. Training delivered face to face across 3 of the 4 libraries (1 closed for refurbishment), with staff and volunteers from those libraries invited, alongside some other staff working in nearby areas. NHS Clinical Librarian led the training sessions supported by public library staff; the knowledge/expertise brought to the training sessions by the NHS
Teams involved	 trainer was valuable and added authority to the session. York and Scarborough Teaching Hospitals NHS Foundation Trust Library Service (Clinical Librarian) Looking to work with wide range of partners for delivery of health- related activities which incorporate opportunities to promote health and digital literacy/support with downloading NHS App – e.g. MIND, social prescribers, local NHS partners.
Outcomes	Staff/volunteer training delivered between 30th March - 26th April 2023. 23 participants. 3 confidence questions asked pre and post training. Q.1 I feel confident if I am asked about finding or using local health services - 18 reported increased confidence. Q.2 I feel confident if I am asked for information on managing a health

	 condition - 19 reported increased confidence. Q.3 I know what to look out for so that I am sure I am using a trustworthy source of health information - 15 reported increased confidence. All attendees were very engaged with the session and found the subject matter of personal interest and relevance as well as
	applicable in workplace.
	Further training has now been delivered to staff/volunteers in these areas who were unable to attend initial 3 training sessions.
	What next?
	 Begin to roll training out to all staff/volunteers in remaining 38 libraries through process of cascading (training 15 FTE Outreach Librarians to deliver locally face to face across their geographical areas). Possibly to ask Clinical Librarian (NHS) to record a video introduction to the session so NHS trainer element still visible within delivery of the training package, as no capacity for NHS to deliver further direct face to face training. Need to try and ensure some consistency/quality control as the training is cascaded. Possibly to trial delivering as a virtual training session to enable more volunteers to attend – high number of volunteers delivering library services across county, with 31 of 42 libraries run in partnership with community volunteer groups. Embed training into annual workforce training plan to ensure new staff/volunteers receive training and refreshers provided. Finalise information pack for handing out to customers we are supporting with health enquiries. Deliver health-related activities across 4 pilot sites to put staff/volunteer learning into practice and engage customers in health literacy – e.g., health roadshows or series of dropins with focus on health information. Need to spend time on planning events/finding hook to draw in audiences. Continue to gather, monitor and evaluate data on number of health enquiries supported and health literacy related activities held including number of participants and particularly any impact statements. Need to do more work on ensuring staff/volunteers recognise importance of recording this information.
Facilitators to the	Getting staff and volunteers onboard and involved before delivery
embedding of health literacy / digital	of training through pre-training meetings outlining the project and inviting to contribute to content of training.

health literacy	
	Staff attending training alongside volunteers so ongoing support can be provided.
	Public library service and NHS library staff working in collaboration to develop training content and delivery and authority and expertise brought to the training through NHS involvement, which contributed to engagement and confidence of attendees in the training.
	Top three facilitators: Good training, new knowledge of up to date and reliable health websites, improved confidence for staff and volunteers and customers felt confident that the information that they were being directed to was helpful and accurate; also recognising the benefits of self-referral to services such as the physiotherapist etc.
	Time and resources - customers could sit with an IT buddy, not feel rushed and find the information they needed quickly and accurately.
	The library being seen by customers as a safe and neutral space.
Barriers to embedding health literacy/digital health literacy	Not all staff were able to attend a training session. Volunteer engagement at training was optional - those who attended very engaged, but many did not attend.
	A longer training session or reduced content would have allowed more time for workshop activities to embed learning.
	IT/connectivity issues and idiosyncrasies of training sites and equipment caused some issues with delivery.
	Following training one volunteer voiced the opinion that it was a staff role to support customers with health literacy and not that of a volunteer. Other volunteers attending were, however, positive about the training and supporting customers.
	Technical factors for customers such as internet connectivity, space on phones for App etc There are a large number of users who are on pay as you go contracts and data and they are put off using the App as it will end up costing them more than they can afford.
	The websites and the training were very useful and helpful however some people are hesitant to use these as they would "prefer to speak to a human being".
	The ethos of digital by default with some users feeling that they shouldn't have to do this in order to access services and information.

	Top three barriers: Opportunities to put into practice the knowledge gained due to other day- to-day demands and /or limited hours/shifts worked by staff and volunteers. Limited general IT knowledge of some staff and volunteers - e.g. downloading Apps Although confidence improved, some staff and volunteers still feel unsure about supporting customers with health literacy.
Key learning	 Tips: Don't ask individuals to provide answers to confidence questions in a shared/public forum Allow more time in training sessions for practical workshop element where individuals check out resources/work through questions on training iPads/their own devices. Some participants found using own devices easier if not familiar with iPads Face to face training is key, ideally with groups of up to 8; if group larger need to split into smaller groups for workshop elements Allow plenty of time to ensure tech set up at different training locations – some issues with connections to SmartTVs, setting up iPads etc. The value of working collaboratively across different library sectors and potential to collaborate in other areas to mutual benefit. Improvements which can be made to the training prior to wider rollout- e.g. providing more workshop activity time. Potential to cascade training. Technical factors such as internet connectivity, space on customer phones for Apps etc are a big factor in delivering this, especially with the signal issues in the project area. The need to maintain momentum following delivery of training by following up swiftly with activities in libraries which enable staff and volunteers to make use of their new-found skills and knowledge.
How have those learning points been used since the pilot ended?	Training programme being amended for wider rollout. Other factors such as maintaining momentum have been noted for wider rollout.
Key data	Cohort: 2 No. of branch libraries: 4 People take part in HL intervention: 48 (Sep 22 - Jun 23) Increase in confidence in HL: no data Download NHS app (when shown): none

Oldham

Name of service and project	Oldham Libraries ('Digital Pathways for Positive Health Outcomes')
Health literacy data	Percentage of the population aged 16-64 that are below the threshold for low health literacy 51.56% (slightly worse than the average of 40.66%) (Health Education England and University of Southampton, 2016)
Demographics of area	Median age 37 (against 40 for England as a whole (Office for National Statistics, 2022a)
	Population density 1700.5 residents per square kilometre (Office for National Statistics, 2022b) (against 434 for England as a whole) (Office for National Statistics, 2022c)
	Index of Multiple Deprivation rank of average rank 25 (of 151 council areas, where higher is better) (Ministry of Housing, Communities and Local Government, 2019)
Local health literacy and digital literacy context	The Health Literacy Geodata Index indicates that <u>51.56% of</u> <u>Oldham</u> residents have low health literacy (more than 10% greater than the national average). The Fitton Hill Estate sits in the Oldham ward of Medlock Vale, an area where household income and employment rates are lower than the Oldham average and the proportion of people on Out of Work benefits is higher. Health outcomes and behaviours make it a priority area to address health literacy. Medlock Vale has higher than the Oldham average rates of smoking, hospital stays, emergency hospital admissions, and under 75s deaths (<u>Medlock Vale Ward Profile</u>).
	Although Oldham 4G coverage is generally excellent, there are pockets – including the Fitton Hill estate – with relatively weak signal for 2G/3G coverage, and the area is only capable of achieving middling download speeds. Medlock Vale has high levels of e-withdrawn Internet users and the socio-economic profile of the population indicates high rates of unemployment, social housing, and no internet access, alongside low rates of engagement in information seeking, financial services, and access via a mobile device. Experian Customer Insight additionally indicates that email use and desktop and laptop ownership are low in Medlock Vale (Digital Oldham, 2018).
Purpose of project	Creation of once-weekly "Health-&-Digital Drop In"
Structure of project	Partnership between Fitton Hill Library and Hill Top Surgery (GP Surgery) to create a once-weekly "Health-&-Digital Drop In".

	 <i>Planned project structure:</i> Healthcare professionals would refer people into the Drop-In if they identify "lack of digital skills and/or resource" which are causing a barrier to the patients' ability to access health services. They would take place at Fitton Hill Library's meeting room, with "comforts" and resources available, including a WiFi connected laptop. Existing resources (eg Learn My Way platform, social prescribing and digital device lending scheme) would be utilised by library staff and volunteers. The Library added 10 laptops to Chromebooks to the loanable devices. 1:1 support for tailored learning to respond to individual patient's requirements. <i>Final project structure:</i> Package of resources was created to enable participants to "follow digital health pathways". This included loanable devices (in library or at home), internet connectivity (via National Databank or Library
	WiFi), private space for appointments and digital skills support. A toolkit for the full offer has been created to enable replication of the pilot elsewhere.
Teams involved	Staff at Hill Top Surgery, Staff and volunteers from Fitton Hill library. Particularly - Practice manager at Hill Top Surgery Oldham Council's marketing team - support in creation of promotional material and social media content Fitton Hill Library team - co-creation of the toolkit followed by continuing fortnightly catch ups. Local pharmacists - promoting the service
Outcomes	A toolkit for the full offer has been created to enable replication of the pilot elsewhere. Staff training in areas new to them e.g. "different sources of digital skills training" and the NHS app. Staff supported general health enquiries by helping with the download of the NHS app and any necessary digital skills. Limited referrals from healthcare professionals from GP surgery initially. This increased after a change of procedures in the GP surgery. Widened the offer out via social media, pharmacies and other local GP surgeries. Approached by another GP practice to replicate the project there.
Key learning	Toolkit was designed by Library and GP teams together to ensure it incorporated everything they thought patients might need .

Key data	Cohort: 2
	No. of branch libraries: 1
	People take part in HL intervention: no data provided
	Increase in confidence in HL: no data provided
	Download NHS app (when shown): no data provided

Shropshire

Name of service and project	Shropshire Libraries, Shropshire Council ('Your Health Admin')
Health literacy data	Percentage of the population aged 16-64 that are below the threshold for low health literacy 38.27% (slightly better than the average of 40.66%) (Health Education England and University of Southampton, 2016)
Demographics of area	Median age 48 (against 40 for England as a whole (Office for National Statistics, 2022a) Population density 101.2 residents per square kilometre (Office for National Statistics, 2022b) (against 434 for England as a whole) (Office for National Statistics, 2022c) Index of Multiple Deprivation rank of average rank 100 (of 151 council areas, where higher is better) (Ministry of Housing, Communities and Local Government, 2019)
Local health literacy and digital literacy context	 38.27% of people in Shropshire have low health literacy making this a key area of health inequality 25 % of people 65+ in Shropshire are not digitally active, which means they are increasingly unable to manage changes and improvements to their health care approximately 22,000 people living in Shropshire are non-internet users the most recent data suggests that 19.8% of adults in Shropshire have never been online Shropshire's rurality means that digital connectivity is sparse in some locations, or non-existent, which means that libraries play an important part in keeping people connected and finding crucial information e.g. reliable diagnosis information, directions to out of county hospital Interim findings from the 2022-2027 Shropshire Health and Wellbeing Strategy consultation have found respondents (majority from the public) see more understanding of what good health is, including information, resources, and support, as a way of improving population health. Improving population health is a Health and Wellbeing Board priority.
Planned activity	 Phase 1 Upskilling of library staff to become Digital Health Champions using training package Digital Unite. We aim to provide 1:1 support in public libraries to digitally excluded Shropshire residents.

	We aim to enhance help sessions by designing a Your Health Admin toolkit tailored for Shropshire residents. This is informed by local GPs feedback obtained in an email survey of five Shropshire GP practices in December 2021. Local GPs have identified urgent need for patient familiarisation with AccuRx mobile phone app, e-consult, NHS app and the ability to evaluate and research health information based on their diagnosis. We will work in partnership with NHS knowledge and library services i.e. NHS Midlands Foundation Partnership Trust to design the customised sessions for the public. This will ensure quality and reliability of health information supplied for the toolkit. Engagement surveys for Midlands Partnership NHS Foundation Trust's (MPFT) Digital Strategy 2021-2026 found that a lack of digital skills, ability or affordability meant some service users who could have benefited from digital solutions within their care package were not able to do so. Digital inclusion and skills development has become a key priority for local NHS Trusts.
Phase •	2 Bookable tailored one to one Your Health Admin training sessions delivered by staff in Shropshire Libraries. People will be guided through a learning process and gain confidence in management of their own health and wellbeing.
•	tended benefits of this work will include: Freeing up time for Primary Care services, such as GP Practice staff. For example, reducing reception staff time in taking telephone appointments and GP time through confidence to use e-consult and patients having better understanding of their condition/illness through improved health literacy Enabling Shropshire people to have the skills and confidence to access and understand reliable sources of health information, which may allay fears, but also help with self-management of their condition and provide a sense of control over it. Use of a preventative approach to health, to enable people to understand health conditions that are preventable and what they can do Skilling up the workforce through Digital Health Champion training This work links into the Health and Wellbeing Board priorities of reducing inequalities and improving population health, and the local Integrated Care System priorities of digital and population health management.

Capability to deliver	 We are currently working with Shropshire Council to deliver structured volunteer digital support for people 65+ across Shropshire Libraries. This gives us an opportunity to offer Health and Wellbeing modules to potential 315 people 65+ who complete the digital course and would like to expand their skills to support their health and wellbeing. In 2021, our staff have also delivered Census 2021 through partnership work with the Good Things Foundation to support people unable or not capable to access the form. We have directly supported 148 people. We also assisted Shropshire Public Health by providing the same support for completion of the Shropshire Health and Wellbeing Strategy consultation both online, and with paper versions of the survey. Shropshire Libraries is already a social prescribing provider, and this curpert apple bacement of our Seciel Prescribing
Structure of project	 this support can become one of our Social Prescribing interventions. Your Health Admin – a project to train Digital Health Champions in each of our largest branches to deliver a customised toolkit to members of the public. The toolkit covers finding trustworthy health information online, NHS website and app, and familiarisation with the learner's GP website and services.
	We consulted GPs in Shropshire to identify main areas of need. This was supported by Shropshire's demographic and digital engagement statistics. Staff champions were recruited. We also researched ways to present a toolkit and identified Microsoft Sway as the best option.
Teams involved	A Shropshire GP, Shropshire Public Health, Midlands Partnership NHS Foundation Trust librarians, Digital Unite
Outcomes	16 members of staff trained via Digital Unite. Some staffing issues identified and addressed. This slowed the process in some areas. Team Chat and regular catch-up meetings ensured good
	communication. A simple toolkit created and staff trained in its use.
	Bookable learning sessions offered to people aged 65+ who had completed a digital support course.
	Promotional materials designed and distributed in the county and to all GP practices. PR in local press, radio and social media.
	Delivery of Your Health Admin began in August and 23 learners have participated so far.

Key learning	[from feedback form]
	Encountered a problem with limiting sessions to the original target audience (65+) so widened the offer to all adults.
	Microsoft Sway identified the best way to present toolkit.
Key data	Cohort: 1
	No. of branch libraries: 2
	People take part in HL intervention: 17 (Apr 22 - Feb 23)
	Increase in confidence in HL: 100% (n=17)
	Download NHS app (when shown): 100% (n=17)

Somerset

Name of service and project	Somerset Libraries ('WHAT IF – W ellbeing, H ealth A nd T echnology Information F or all')
Health literacy data	Percentage of the population aged 16-64 that are below the threshold for low health literacy 37.36% (slightly better/worse than the average of 40.66%) (Health Education England and University of Southampton, 2016)
	Taunton Deane: 37.52
	South Somerset: 37.19
Demographics of area	Median age 47 (against 40 for England as a whole) (for Somerset West and Taunton and South Somerset) (Office for National Statistics, 2022a)
	Population density Somerset West & Taunton 133 and South Somerset 180 residents per square kilometre (Office for National Statistics, 2022b) (against 434 for England as a whole) (Office for National Statistics, 2022c)
	Index of Multiple Deprivation rank of average rank 92 (of 151 council areas, where higher is better) (for the whole of Somerset) (Ministry of Housing, Communities and Local Government, 2019)
Local health literacy and digital literacy context	University of Southampton data demonstrates that West Somerset and Sedgemoor have below average levels of Health Literacy. Poor health literacy is also particularly apparent in areas where there is social deprivation and health inequalities. Taunton has three wards within the 10% most socially deprived, and Yeovil and Bridgwater have two each. In these areas individuals are often reluctant to engage with their GPs due to a fear of being judged or inability to afford travel.
	Somerset is a very rural county leading to digital inequalities - 89% of properties in Somerset have access to superfast broadband compared to the national average of 95%. The percentage of properties in Somerset without access to 'decent' broadband (defined as 10 mbit/s download and 1 mbit/s upload speed) is higher than the national figure. There are just over 1500 connections in Somerset with speeds under 2 mbit/s.
	Somerset has a rapidly increasing older population, which has been identified by local GPs as a high-risk audience for health illiteracy - the number of people aged 75+ is projected to double in the next two decades and in parts of West Somerset and Burnham-

	on-Sea, more than half of the population is projected to be aged 65+ by 2033
Purpose of project	Creation of two Digital Health Hubs at Taunton and Yeovil libraries, building on existing offer ("Health and Care on the High Street"). This will be expanded into "an outreach model" where the Home Library service will deliver similar content and device loans to those unable to leave their homes.
Structure of project	 Proposed project: This will be done by using "digital health volunteers" to run information sessions giving an overview of using digital services, accessing health and wellbeing information and NHS apps safely, in addition to library apps. Facility to borrow a "health" iPad. Conducted: At two of the larger library sites "tech help sessions" were piloted to allow participants to come and ask specific questions and try out different aspects of online health resources. The project was expanded to loan blood pressure as people expressed interest in learning about different aspects of their own help without a GP visit.
Teams involved	Public Health, NHS, Somerset Activity Sport Partnership
Outcomes	Positive feedback on iPads and blood pressure monitors, but participants expressed an interest in extended loan periods or ability to borrow the item a second time.
Key learning	Interest in the devices has led to a plan to introduce loaning of activity monitors in January 2023 From the survey form: Main learning points: Avoid drop-in sessions Embed Health/Digital literacy into other sessions such as Tech Help and Rhyme Times Collaboration with NHS colleagues is key. Attending HEE [Health Education England] learning sessions was useful to hear good practice and things to avoid Training of staff to raise awareness and confidence is important. Facilitators: Staff awareness and training (led by Somerset FT NHS Knowledge Services Team) Curated information and links on our loanable iPads (Top 3 - Training of staff/key staff committed to project; Development of reliable curated content; Funding - without the funding for relief staff cover and materials, this would not have been possible)
	Barriers:

	 Drop-In sessions do not really work re: attracting people's attention Not enough time to plan and implement marketing/awareness raising Need longer to evaluate impact for something new (Top 3 - Desire/appetite of members of the public to attend drop-in sessions; Timescales - needed longer to deliver the project)
Key data	Cohort: 1
	No. of branch libraries: 2
	People take part in HL intervention: 31 (April 2022 - September
	2022)
	Increase in confidence in HL: 60% (n=31)
	Download NHS app (when shown): 50% (n=31)

Staffordshire

Name of service and project	Staffordshire Library Service, Staffordshire County Council ('Be Your Health')
Health literacy data	 Percentage of the population aged 16-64 that are below the threshold for low health literacy 41.55% (slightly worse than the average of 40.66%) (Health Education England and University of Southampton, 2016) East Staffordshire 42.74% South Staffordshire 35.98% Staffordshire Moorlands 39.46% Stafford 36.02% Newcastle-under-Lyme 41.67% Stoke-on-Trent 53.40%
Demographics of area	 Median age 44 (against 40 for England as a whole) (Office for National Statistics, 2022a) East Staffordshire 41 South Staffordshire 48 Stafford shire Moorlands 49 Stafford 45 Newcastle-under-Lyme 43 Stoke-on-Trent 38 Population density 722.7 residents per square kilometre (Office for National Statistics, 2022b) (against 434 for England as a whole) (Office for National Statistics, 2022c) East Staffordshire 320.5 South Staffordshire 271.2 Stafford 228.8 Newcastle-under-Lyme 584.5 Stoke-on-Trent 2764.8
Local health literacy and digital literacy context	In the culturally diverse and socio-economically deprived areas of Burton upon Trent and Newcastle under Lyme, Geodata (Health Education England and University of Southampton, 2016) shows that the prevalence of low health literacy is higher than the national average (41.67% of adults in Newcastle and 42.72% in

	Burton). Public Health of Our Cities (Protheroe et al, 2018), shows 34% of 18-34s in North Staffordshire are 'possibly' or 'highly' likely to have limited health literacy whilst in East Staffordshire 15.9% of 18-24 years olds have difficulty reading and understanding written health information, rising to 27.7% where English is not their first language. 40% of adults in Staffordshire have preventable health conditions (Staffordshire Joint Needs and Assets Assessment 2021) so increasing levels of health literacy in the county is a priority. Our project targets care leavers, young carers, unaccompanied asylum seekers, 'sofa surfers' and young parents aged 16-25 who face digital inequality and lack of support to improve their health literacy. Although there is 99% superfast broadband and 68% 4G mobile coverage in the county (Ofcom), Staffordshire Observatory data shows that 8% of adults in the county do not have basic digital skills and 67% of young people are digitally excluded by lack of broadband or data.
Capability to deliver	Staffordshire Libraries and Arts Service has extensive experience of community engagement and partnership working across health and wellbeing projects. For example, the ACE-funded Crafting Communities project (2021) which took place in four communities across the county supported post-lockdown recovery by easing the return to social connectivity and improving community health and wellbeing, reducing loneliness and isolation and empowering participants to develop and explore their creative skills and abilities.
	Crafternoons (2020 and 2021), funded by the National Lottery Connections Fund, involved partners including social prescribers, health professionals, housing associations and those working with the rurally isolated, to engage over 50 participants in online craft- based social groups during both lockdowns and eased the return to meeting socially when this was allowed again. The evaluations for both projects clearly demonstrated the significant impact on health and wellbeing felt by the individuals involved and provided valuable lessons learned for future projects.
Planned activity	 Alongside our community and health partners, our targeted 16-25s will co-design and help deliver a health and digital health literacy action plan to include Community outreach sessions Resource kits to enable an increase in health literacy advocacy Resource kits for young adults to borrow to support their personal health literacy journey Short social media films using relatable peers to advocate health literacy.

We will co-deliver health and digital literacy training and use of the resource kits to public health colleagues working with 16-25s in our target localities and the Digital Champions in our libraries. We will use a professional evaluator to report on the project
impacts and outcomes.
 The intended benefits are: Young adults aged 16-25 empowered to self-manage their health and support the health of those they care for through use of health and digital health information
• Young adults understand the changing landscape of health provision and how to access and use digital and in-person health services and offers (e.g. public library access to digital and physical Reading Well collections, free PC and WiFi access, social groups and partner initiatives
 Young adults advocate health literacy within their communities to challenge belief in, and dissemination of, fake health news
• The library workforce and community organisations working with 16-25s and health professionals have improved skills and confidence in health and digital health literacy which will enable them to provide quality support to service users and improved patient experience for young adults.
 A strengthened strategic partnership between Staffordshire Libraries and local NHS Knowledge Hubs to increase health literacy within targeted communities
Our NHS Knowledge Hubs (Midlands Partnership University NHS Foundation Trust St George's Hospital Stafford; the Health Library for North Staffordshire at Keele University; and the Knowledge Hub at the University Hospitals of Derby and Burton NHS Foundation Trust) will support the pilot project through:
 Literature/evidence searches in conjunction with health departments (e.g. CAMHS) regarding health literacy barriers facing young people Co-design and delivery of outreach sessions Co-design of the resource kits Delivering their nationally accredited health literacy training to health professionals as CPD Supporting the evaluation of the project Sharing lessons learned and recommendations with the National Health and Digital Literacy Partnership

Structure of project	Be Your Health. Targeting young people between the ages of 16 and 25 years, our project is to identify the barriers preventing young people from obtaining accurate and dependable health/digital health information and then looking at ways we can help them to overcome these barriers. Young people will be involved in the conversations determining the barriers and then also part of the discussion whereby we look at solutions. This could be a toolkit, health passport for example. We started by consulting our health librarians to look at research which has taken place re young people and health literacy and used that information to establish a list of perceived barriers in obtaining reliable and dependable health information. We created a webpage on our website dedicated to recommended websites for young people to access. We created a task description for young people who wanted to be community health literacy champions and we created a list of
	questions to ask the young people at sessions which we planned.
Teams involved	The Voice Project, NHS Knowledge Hub at the University Hospitals of Derby and Burton NHS Foundation Trust, health librarians at Midlands Partnership University NHS Foundation Trust in Staffordshire
Outcomes	Six discussion sessions have taken place so far (as of Dec 2022) and these have included groups of young carers, those leaving care, young parents, young asylum seekers, sofa surfers and the homeless.
	We have a virtual discussion session to take place with young people in January and this will be opened up to a wider audience covering all of Staffordshire.
	Then we'll be able to invite the young people back to look at a co- design toolkit/package which will help them in the future.
Facilitators to the embedding of health literacy/digital health literacy	Positive engagement of NHS Knowledge Hub colleagues, positive engagement of partners, especially public health and third sector organisations, in engaging hard to reach young people, health and health literacy is high on a lot of organisational agendas and the agenda of the County Council so the project fits in well and has been of use / interest and has raised the profile of our libraries, willingness of young people to stay the course in the genuine co- design and development of resources in an open, honest and constructive way especially in developing the toolkits and the Health Literacy Advocate volunteer role. Funding of the project. Training of library staff and volunteers. Use of creative ways to embed health and digital health literacy e.g. through use of poetry.

Barriers to the embedding	Genuine co-design takes a long time so it's felt like a long road,
of health literacy/digital	although worthwhile.
health literacy	Capacity of our partners to support the project.
noulli literaty	Capacity of staff and volunteers to undertake training.
Key learning	
Key learning	Importance of our relationship with our NHS Knowledge Hub colleagues The ongoing relationships that we have with partners are essential. Confidence and knowledge of staff and volunteers around health and digital health literacy, resources and signposting is a huge factor in how we support communities through our Health Offer. It needs to be an ongoing development journey, not a 'one hit wonder'. In terms of the young people, it's not a lack of knowledge about the importance of health or where to go to get help and information that prevents them from managing their health and wellbeing, it's a whole range of other factors. For example, social anxiety (real or imagined), personal circumstances e.g. young carers may not prioritise their health because they are already prioritising the health of the person they care for / the person they care for neglected their own health and thereby forced the young person into that caring role, past experiences e.g. if their parents / carers use a 'crisis management' approach to health then the young person is likely to follow the same pattern. A lot of support already exists for young people, some replicated in different ways, and clearly aimed at different agendas. Much of this support is temporary e.g. short-term projects or short-term roles. We need to continue to work with partners to avoid duplication / overlap and to gather accurate signposting information. More needs to be done to upskill young people in the basics of
	health management e.g. how to join a GP surgery and make an appointment, the teaching of basic First Aid skills etc Using poetry sharing and writing is a non threatening way to engage young people in discussions around health literacy and not one that we had not considered before. [from feedback]
	Through the discussions with the young people we now have a better understanding of the barriers they face in obtaining health information and can incorporate this into the second discussion sessions which will be when we look at producing a toolkit/health passport – the format will be determined by the young people themselves.
How have those learning points been used since the pilot ended?	Our support resources developed as part of the Pilot are being launched in October for World Mental Health Day alongside the opportunities for the Health Advocate Role so we will need to review the use and success of those in the months following that. The new PSHE Co-ordinators in the county are being worked with to look at how we can encourage schools and colleges to provide upskilling around basic health management as mentioned above. Someone has been appointed to the voluntary role of West Midlands Health Literacy Ambassador, is delivering accredited

	 training as a result of doing that role and is working more widely with different library authorities and NHS Knowledge Hubs to develop how we all work together going forwards. One of the legacies of the project is the development of another externally funded project to look at the same issues with adults via Burton Library Friends Group. Work continues with Staffordshire Poet Laureate to explore the use of poetry with health literacy.
Key data	Cohort: 1 No. of branch libraries: 3 People take part in HL intervention: 1159 (Apr 22 - Oct 22) Increase in confidence in HL: 95% (n=1159) Download NHS app (when shown): 90% (n=305)
Key quotes	"Through the discussions with the young people we now have a better understanding of the barriers they face in obtaining health information"

Suffolk

Name of service and project	Suffolk Libraries, Suffolk County Council ('Health Click, Haverhill')
Health literacy data	Percentage of the population (of St Edmundsbury) aged 16-64 that are below the threshold for low health literacy 36.9% (slightly better than the national average of 40.66%) (Health Education England and University of Southampton, 2016)
	[St Edmundsbury is where Haverhill is located]
Demographics of area	Median age 41 (West Suffolk) (against 40 for England as a whole) (Office for National Statistics, 2022a)
	Population density 173.9 (West Suffolk) residents per square kilometre (Office for National Statistics, 2022b) (against 434 for England as a whole) (Office for National Statistics, 2022c)
	Index of Multiple Deprivation rank of average rank 99 (Suffolk as a whole) (of 151 council areas, where higher is better) (Ministry of Housing, Communities and Local Government, 2019)
Local health literacy and digital literacy context	Levels of need in towns like Haverhill can often get hidden in data reported on a wider geographic scale: "It was only when drilling down to neighbourhood level that a clearer picture emerged showingsignificant social need" (Hidden Needs in Suffolk, Suffolk Community Foundation, 2020).
	Similarly, district level data on health literacy and access masks need. Localised data reveals 75% of the population of Haverhill South falling in the 3rd decile for Education, and 25% in the 4th (DCLG, 2019). For access to services,100% of the town's households fall within the lowest 5 deciles, with a significant proportion in the 1st and 2nd (DCLG, 2019).
	Although Haverhill has good super-fast broadband coverage, demographic data shows key groups who are less likely to have a home connection or access to devices. Alongside lower levels of education, data from the Skills For Life Survey shows significant need in digital literacy and technical proficiency, showing over 50% have entry level or lower digital skills, using proficiency in using email, word-processing etc. as an indicator.
	The high level of deprivation of physical access to services heightens the need for remote digital access and for improved digital literacy to connect and benefit from services.
Purpose of project	Outreach into communities in the town of Haverhill in Suffolk.

	Outreach into communities in the town of Haverhill in Suffolk. A project co-ordinator was employed to identify and approach potential audiences to introduce them to various reliable sources of digital health information, to give initial support in accessing them. People were then signposted to Haverhill Library where an enhanced health and digital literacy support offer is available. Levels of need in towns like Haverhill can often get hidden in data reported on a wider geographic scale: "It was only when drilling down to neighbourhood level that a clearer picture emerged showingsignificant social need" (Hidden Needs in Suffolk, Suffolk Community Foundation, 2020). Similarly, district level data on health literacy and access masks need. Localised data reveals 75% of the population of Haverhill South falling in the 3rd decile for Education, and 25% in the 4th (DCLG, 2019). For access to services, 100% of the town's households fall within the lowest 5 deciles, with a significant proportion in the 1st and 2nd (DCLG, 2019). Although Haverhill has good super-fast broadband coverage, demographic data shows key groups who are less likely to have a home connection or access to devices. Alongside lower levels of education, data from the Skills For Life Survey shows significant need in digital literacy and technical proficiency, showing over 50% have entry level or lower digital skills, using proficiency in using email, word-processing etc. as an indicator. The high level of deprivation of physical access to services heightens the need for remote digital access and for improved digital literacy to connect and benefit from services.
Structure of project	 A project co-ordinator was employed to identify and approach potential audiences to introduce them to various reliable sources of digital health information, to give initial support in accessing them. From initial proposal: The project will focus on outreach to key groups in the Haverhill community combined with an enhanced health information offer in the town's library. The audiences targeted will be groups identified as having: a high need for health information and connection with health services potential low health literacy potential low general literacy and numeracy low digital skills, confidence and access A health information co-ordinator will oversee a programme of outreach, working with volunteers to deliver talks and demonstrations to existing community groups. These sessions will cover:

 where and how to access health information online recommended quality resources available from the library how to recognise quality, reliable information and sources scams and misinformation/disinformation
These will end with an invitation to come to the library to see and access the resources available, using dedicated health information terminals.
Haverhill Library staff will receive enhanced training around health information and literacy, as well as upskilling to help with digital and information support.
Beyond the initial focus on facilitated/supported access to quality health information, there is an aim to empower beneficiaries with the skills to find and recognise quality information for themselves
going forward. Suffolk Libraries already lends data enabled devices. This service will be available to enable participants to continue to connect to quality health information from home and help embed digital
skills. Suffolk Libraries is currently working with West Suffolk CCG to develop a service providing tier-one level mental health support and signposting in Bury St Edmunds. Although this does not cover the
same geography, both areas are within the same health authority and there will be potential to expand to neighbouring Haverhill. Suffolk Libraries will work with library and information professionals from West Suffolk NHS Foundation Trust to:
 identify accessible, high-quality information resources, appropriate to the needs of the individuals and communities being engaged
 create and deliver enhanced training in health literacy principles and good practice to library and project staff and volunteers
 assist in developing content to be included in the community group outreach sessions
 develop and produce take-away materials to support users in accessing information themselves going forward increase awareness of health information resources, support and services available beyond the library and scope of this project
 identify and approach potential community partner organisations and groups for delivery of outreach sessions to assist with sectoral awareness and advocacy of the project across local healthcare networks and contacts
Suffolk Libraries are commissioned to provide a Mental Health and Wellbeing information service, New Chapters, in partnership with Suffolk Mind and Suffolk Family Carers, funded by the Mental Health Pooled fund. Together we run SAGES, Suffolk's advice, guidance and emotional support service.

	New Chapters provides up-to-date, reliable mental health and wellbeing information and signposting, and staff training. Me, Myself and Baby is a perinatal support service aimed at pregnant women and new parents in Ipswich and East Suffolk, in partnership with Suffolk Mind, Children's Centres, Norfolk and Suffolk NHS Foundation Trust. The project aims to help reduce isolation and improve wellbeing, and includes: • an email support service • telephone counselling • Stay at Home and Play • peer support The team at West Suffolk curate collections for specific audiences through outreach, e.g. with networks that support colleagues who are LGBTQIA+, from the BME community or are disabled, to create an Equalities collection.
Teams involved	Knowledge and Library Services Manager at West Suffolk NHS Trust
Outcomes	As things developed and evolved we began to reach audiences. This ranged from attending existing community groups, social groups and activities, wellbeing groups and activities as well as more general outreach in the town, e.g. through a presence at weekend markets. People were introduced to information resources and, where needed, given some guidance and support to access them digitally. Participants were encouraged to visit the library to access further and ongoing support. Once the project had established, we were reaching up to 100 people per month. The impact will differ from person to person, and it is difficult to know exactly what the longer term impact was – but it was clear from feedback that many participants found the experience useful and that we had helped with some very specific needs.
Key learning	The project was slow to begin with. Even with the dedicated role, reaching the right audiences was difficult and there were a few false starts with audiences and groups who initially seemed logical. Will continue to work with NHS colleagues to support staff and to provide reliable and accessible digital health resources. We have also now started wider partnership work with West Suffolk NHS Trust.

 Looking at ways of making the model more sustainable within existing library capacity, at Haverhill and potentially in other libraries across the county. From our survey: Facilitators: Engagement and gauging target audience (Outreach - community engagement groups and activities) Gaining Rapport - (Haverhill market place - markets to gain new users) Motivating Learning - (In-House Library pre-existing groups (mainly focusing on help and support for seniors and 1 2 1 - tech help sessions)
Barriers: These were mainly mental barriers, specifically attitudes or myths.
 or myths. Staff, in common with many other individuals are unaware of how digitally literate they really are and lack the confidence to show others how they can use the technology that is available. There is a level to which all aspire that is known as "unconscious competence" which infers that while people become competent they also lose consciousness of the fact. This could perhaps be extended to unconfident unconscious competence. Even amongst so-called IT experts there is a wide range of abilities and skills. No-one is the master of all. It is all relative. An average user is a master in comparison to a non-user. Offers of help to potential partners, eg GP surgeries or other organisations were not taken up. It is unclear why this was the case. Mistrust? Closed shop? Territorial? A mistrust of technology in general. The best 'tinfoil hat' was to not engage with the technology at all. Anecdote - a friend's mother was scared of being scammed even though she had no connection to the. internet at all. Many believe that this is their best
defence. Tales of woe are commonplace. It is of course very sad that many seem to be swindled but as explained to a member of staff, there is a risk involved with many activities which benefit us. Driving is a good example of this. Many wouldn't dream of forgoing a car but there are associated risks and we act and mitigate accordingly.

[]
Top 3 facilitators: Mobile technology which is ubiquitous and more user friendly than any other form of computer. Phones and iPads are easier and more intuitive than laptops or desktops.
Useful apps are a key part which is related to the above but is worthy of mention in its own right. They differ greatly in quality and usability but the vast range of apps means that there is something to interest and be of use to everyone.
A good app will be so engaging that the user is unaware that they are 'doing tech'. A good example is a woman who wanted to be able to listen to radio programmes that she missed so she used the BBC Sounds app on her phone.
Technology that enables people to better use the library facilities and services - free and reliable Wi-Fi in all libraries which allows for access to learning and skill development as well as the capacity to be able to keep in touch and connected to others.
Top 3 barriers:
As above in Q 7.
 Low levels of literacy and understanding about what being Digitally Included can do to help lifestyle Suspicion and fear of being scammed / money stolen / fraud An attitude around 'being a luddite is a proud moment' - fine as they are and not wanting to change' being happy to do without technology in their lives
LEARNING POINTS:
 Some people will always struggle to change their attitude and environment and be encouraged to use

	 tech unless it is absolutely necessary and life is significantly more difficult without it. There is a mistrust of the digitalisation of health services that borders on entitlement as some people refuse to use the new services, even though they are actually becoming more user friendly eg NHS app which actually makes it easier to engage with your GP surgery and is more convenient for many people. Not accepting change or anything other than the 'routine and familiarity' of old style of phoning up and getting a face to face appointment and feel that they have been cheated or that the doctors etc are slacking off and not seeing or dealing with patients. Unless they see evidence of this, eg sitting in a packed waiting room while they await their consultation with the GP who is always running late due to being overworked, they are somehow disappointed. How have learning points been used? Picking up on overcoming some key barriers by looking to build in a Peer-to-Peer network of support to raise awareness and overcome some of the fears and trust issues which prevented further project development - a new libraries Digital Inclusion project co-ordinator is coming into post soon and this is a piece of work which can then be given further time and attention.
Any commonality or correlation of structure or perceived success	Commonality of structure: One public librarian working with one NHS librarian Outreach to community groups Commonality of perceived success/outcomes: Slow start Momentum increased once early false starts ironed out Continue to build relationship with NHS library staff
Key data	Cohort: 1 No. of branch libraries: 1 People take part in HL intervention: 98 (04 2022 - 10 2022) Increase in confidence in HL: 89% (n=98) Download NHS app (when shown): 100% (n=8)

Westminster, Kensington and Chelsea

Name of service and project	City of Westminster / Royal Borough of Kensington and Chelsea ('Bi-Borough (Westminster and Kensington & Chelsea) Health Hubs')
Health literacy data	Percentage of the population aged 16-64 that are below the threshold for low health literacy 44.2% (slightly worse than the average of 40.66%) (Health Education England and University of Southampton, 2016)
	Kensington and Chelsea 42.75 Westminster 45.65
	Average = 44.2
Demographics of area	Median age 37 (against 40 for England as a whole) (Office for National Statistics, 2022a)
	Kensington and Chelsea 39 Westminster 35
	Average = 37
	Population density 10,665.35 residents per square kilometre (Office for National Statistics, 2022b) (against 434 for England as a whole) (Office for National Statistics, 2022c)
	Kensington and Chelsea 11816.5 Westminster 9514.2
	Average = 10665.35
	Index of Multiple Deprivation rank of average rank 80 (kensington and Chelsea and 87 (Westminster (of 151 council areas, where higher is better) (Ministry of Housing, Communities and Local Government, 2019)
Local health literacy and digital literacy context	The Bi-boroughs demonstrate a higher proportion of the population aged 16-64 who are most likely to have difficulties in understanding or interpreting health information (literacy and numeracy). The proportion is above the national average of 59.64% (62.44% in Westminster and 59.93% in Kensington Chelsea). This means that around two-thirds of the population of the Bi-boroughs experience difficulties in understanding or interpreting health information.

	Data at a horough loval absource the lovals of deprivation
	Data at a borough level obscures the levels of deprivation experienced in specific neighbourhoods. For example, LSOAs that feature in the top 10% and 20% most deprived in England (North Kensington, Kensal Town, Earls Court, West Kilburn, Westbourne Green, Paddington, St. Johns Wood, Strand, Pimlico, and Victoria). There is also evidence of widening inequality gaps, exposed by the Pandemic and its disproportionate impact on residents living in those areas.
	A survey undertaken by the Bi-borough Digital Inclusion Partnership in 2021 identified the groups most likely to be digitally excluded. Initial findings confirmed that just over 12,000 residents in RBKC are digitally excluded (8% of the borough) and 4% in Westminster. Groups most likely to be excluded are over 60s, disabled people and their carers, unemployed and those on low incomes – groups that are also likely to demonstrate low levels of health literacy.
Purpose of project	Funding was sought to support the creation of two community health hubs with a focus on delivering health literacy activities in two community libraries located in areas of high deprivation (North Kensington, Church Street).
Structure of project	Through the pilot we sought to deliver outreach into the community in the following way:
	 Build on our partnership with Royal Brompton and Harefield hospitals (part of Guys & St Thomas' NHS Foundation Trust) to deliver a programme of online health talks (through Chelsea Library)
	 Comms and Marketing campaign to promote and raise awareness of the new offer
	 Health site leads will provide health literacy resources in the Bi- Borough libraries and through the Home Library Service
	 Intended benefits for residents include: Improved awareness and knowledge of health issues and improved decision making Improved understanding of key health terms and metrics e.g. understanding Cholesterol test results Improved confidence in interpreting health resources Improved engagement and involvement in health Confidence in accessing the right health / support service
	Libraries staff / libraries will demonstrate improved health and digital literacy skills.

Teams involved	Royal Brompton and Harefield hospitals and Library Officer Chelsea Library – Online health programme
	Feedback survey completed by: Royal Brompton and Harefield hospitals library - part of Guy's and St. Thomas' NHS Foundation Trust
	Public Health Partnerships and Information Coordinator, City of Westminster/ Royal Borough of Kensington and Chelsea
	One You Westminster / Kensington & Chelsea – Health checks and information stalls
	Change for Life service Westminster / Kensington & Chelsea – staff training and Health clubs for children and families
	Digital Inclusion teams, Westminster/Kensington & Chelsea – Digital inclusion sessions & advice
	Health Site Leads, all Libraries in Westminster and Kensington & Chelsea
	[Taken from expression of interest:]
	Funding is sought to support the creation of two community health hubs – focusing the delivery of health literacy activities in two community libraries located in areas of high deprivation (North Kensington, Church Street).
	 Through the pilot, we will seek to deliver outreach into the community in the following way: Build on our partnership with Royal Brompton and Harefield NHS Trust to deliver programme of online health talks Comms and Marketing campaign to promote and raise awareness of the new offer Health site leads will provide health literacy and resources through the Home Library Service
	 For skills development we will deliver: A Health Literacy training programme – to health site leads and volunteers across selected libraries. We will work closely with the NHS National Literacy and Knowledge Service to access the Health Literacy Toolkit and obtain support with navigating e-learning resources, culminating in training workshop by an approved trainer Undertake training of trainer (ToT) for two of the Health Site Leads in North Kensington and Church Street

	To embed this project, we will work with Westminster and Kensington & Chelsea Adult Education services to integrate and embed aspects of health literacy in the functional / basic skills literacy and numeracy curriculum, life-long skills and the ESOL curriculum.
	We will ensure that participants that we engage with, are signposted and referred to appropriate services. To support this, we will:
	 Develop and maintain an online and paper directory of commissioned services and local healthcare services Support a Library Services Apprentice to monitor, update and quality assure the directory supported by guidance from Health Education England
	We will share best practice more widely through a local stakeholder group. We will cascade / share best practice through our social media channels and develop a bank of case studies to demonstrate different approaches and user outcomes.
	 Intended benefits for residents include: Improved awareness and knowledge of health issues and improved decision making Improved understanding of key health terms and metrics e.g. understanding Cholesterol test results Improved confidence in interpreting health resources Improved engagement and involvement in health Confidence in accessing the right health / support service
	Libraries staff / libraries will demonstrate improved health and digital literacy skills.
	We will involve the NHS knowledge and library service by establishing a working relationship during delivery and via a local governance group into which we will provide information on findings, lessons learnt and emerging good practice.
Outcomes	Outcomes achieved so far:
	 Delivery of an Online Health programme (see feedback in Appendix below): Improved staff awareness and communication around Health Inequalities and current Health priorities and campaigns Improved Health information Displays in all libraries, including Health information leaflets as well as Books on Prescription / Reading Well literature Strengthened / established links with existing and new
	partners as well as across the service

	 Delivery of Health and digital literacy events across the service Created WCC Public Health foldout resource leaflet available to download and print Identified designated space for Health activities and for potential one to one / private sessions in pilot sites Alongside of this project, the Bi-Borough library service has done (and continues to do) a lot of work around Social Prescribing with an improved offer of Health & Wellbeing events for our communities and stronger links with Social Prescribing Link Workers and Health Champions. Two events with Social Prescribing Link Workers and Cultural Partners took place in July. OBIE projectors at North Kensington and Church Street Libraries have been set up to encourage children & families to take up physical activities and sessions will be designed by Change for Life service.
Key learning	From Feedback survey: Facilitators to embedding health literacy as result of project - Building on existing partnerships and networks. Support from the hospital's Director of Planning and Strategy. Collaboration with staff at Chelsea Public Library - Royal Borough of Kensington and Chelsea.
	 Barriers - none Top 3 facilitators - People facilitators 1. Support from library staff at Chelsea Public Library - Royal Borough of Kensington and Chelsea. 2. Support from Director of Planning and Strategy - Royal Brompton and Harefield hospitals 3. Support from the Communications Department in creating and maintaining https://www.rbht.nhs.uk/healthcareresources - Royal Brompton and Harefield hospitals 3 main learning points - Collaboration between different departments and organisations required for success. How have learning points been used since pilot ended -
	On-going collaboration to maintain and improve upon health literacy services provided for members of the public.

Key data	Cohort: 2 No. of branch libraries: 2 People take part in HL intervention: 242 (09 2022 - 05 2023) Increase in confidence in HL: no data provided Download NHS app (when shown): no data provided

Appendix B: Literature Review

Definition of health literacy

There are various definitions of health literacy from a number of organisations, most of which are based around the ideas of someone's "ability to understand and use information to make decisions about their health" (NHS digital service manual, 2023).

One of the most recent definitions comes from one of the leading researchers in the field of health literacy, Don Nutbeam, who describes the concept as "an observable set of personal skills and capacities that enable people to find, understand, appraise and use health information" (Nutbeam, 2023). Both, The National Library of Medicine (2023) and the Centers for Disease Control and Prevention (2022) use a very similar definition.

The definition preferred by the World Health Organization (Health Education England, 2017) goes into more depth, stating:

"Health literacy refers to the personal characteristics and social resources needed for individuals and communities to access, understand, appraise and use information and services to make decisions about health. Health literacy includes the capacity to communicate, assert and enact these decisions."

Health literacy now encompasses electronic or digital health literacy (Arndt, 2011), with van Kessel et al (2022) highlighting the depth to which the use of digital has been assimilated into everyday life. The definition of digital health literacy derives from the definition of digital literacy which UNESCO (2011) describe as "the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills".

Digital health literacy is defined as "the ability to seek, find, understand, and appraise health information from electronic sources and apply the knowledge gained to addressing or solving a health problem" by the World Health Organisation (NLM, 2023). Examples of digital health literacy include accessing your electronic health record, online communication with your health care providers, understanding reliable health information from the internet, and using apps for health and wellbeing (NLM, 2023).

The term "health literacy" was first put forward by Simonds (1974) and was considered to be the competence of someone to promote and maintain health in "modern society". Liu et al. (2020) identified that there has been a growth in the attention given to this concept because of the "significant benefits to individual and public health and the sustainability of healthcare systems".

Health literacy and NHS background

The refreshed Knowledge for Healthcare strategy (KfH) includes a section devoted to health literacy and patient information (NHS Health Education England, 2021). KfH details Health

Education England's commitment to "address[ing] the health literacy challenge" and working with partners across sectors to develop health literacy skills (NHS Health Education England, 2021) is detailed. This includes ensuring that knowledge and library service (KLS) staff in the NHS are champions for health literacy and that there is wider collaboration with partners to enable patients and the public to participate in "shared decision making and self-care" in relation to information about their health and wellbeing (NHS Health Education England, 2021).

Health Education England, in partnership with NHS Education for Scotland and the Royal Society for Public Health, have developed a number of tools for KLS staff to bring health literacy to staff across the NHS (Carlyle and Robertson, 2021). These tools include a train-the-trainer programme and e-learning, with geodata maps detailing levels of health literacy in different boroughs being produced in collaboration with the University of Southampton (Health Education England and University of Southampton, 2016). These resources have increased the numbers of librarians and healthcare staff who have become aware of the barriers to health literacy faced by many people in the communities they serve and the consequent impacts on health outcomes.

Barriers to health literacy

In a recent editorial one of the leading researchers in the field of health literacy, Don Nutbeam, summarises the concept as "an observable set of personal skills and capacities that enable people to find, understand, appraise and use health information "and surfaces a number of factors which create barriers to health literacy (Nutbeam, 2023). These include the poor quality of some health communications; the complexity of health systems and information environments which can make it difficult for many individuals to find the health information they need; the lack of regulation of online health information which enables misinformation and disinformation to proliferate (Nutbeam, 2023). Rather than presenting poor health literacy as purely an individual issue, it needs to be placed into a societal context in which government regulation and health service policy are required to break down some of the barriers to population health literacy (Nutbeam, 2023). The need to educate both health care providers and individuals is recognised as key to improving access to and use of health information.

Additionally, issues such as low income (Studman, 2023), low literacy (Mayor, 2012), low numeracy (Mayor, 2012), language barriers (Powell, 2022), poor or non-existent digital skills (Studman, 2023), learning disabilities and neurodiversity (Byrne, 2022) and dementia (Powell, 2022) along with individuals' concerns about privacy (British Red Cross, 2023) have been identified as contributing to the lack of access to health information and healthcare for population cohorts including the homeless (Lacey, 2023), asylum seekers (British Red Cross, 2023), older people (Studman, 2023), gypsy, traveller and Roma communities (Horter, Buckley & Snape, 2022 and Powell, 2022), young offenders particularly those with a language disorder (Powell, 2022) and people on low incomes (Studman, 2023).

The British Red Cross's example in the context of asylum seekers, who often have financial, privacy and language concerns, is that the NHS app will not load on older phones which are unable to run the latest software updates or perhaps have insufficient memory (British Red Cross, 2023). The same report identifies another barrier to using this app; it will not allow

registration for individuals who do not have valid photo identity documents (British Red Cross, 2023). This can be compounded by the unaffordability of wireless contracts, the lack of privacy in hostel accommodation, the difficulty of navigating the app interface for individuals who are not fluent in English and the hesitancy in signing up for an online service which some feel will lead to an invasion of personal privacy (British Red Cross, 2023).

Cultural barriers also exist and need to be addressed to improve access to health information by some communities. In a study of British-Pakistani women's access to information on breast cancer screening it was found that there is no direct translation of the terms 'mammogram' or 'screening' in Urdu or Punjabi, some women were illiterate and would not have been able to read screening letters written in their mother-tongue, some women required family translators who did not pass on all of the available information, many did not realise that translators could be provided by the NHS and some women preferred face-to-face communication but did not want to talk to male healthcare staff and did not realise that breast screening took place in female only environments (Woof et al., 2020).

Another barrier to health literacy is the widespread availability of misleading health information, especially on digital platforms, and the lack of education in critical appraisal strategies for large cohorts of the population. Misleading information about health and healthcare, even when shared without an intention to cause harm or spread falsehoods, is a big problem particularly on social media and this has been exacerbated by the recent COVID-19 pandemic. The sheer volume of information made available or shared during the pandemic led to the rise to prominence of the term 'infodemic' which the World Health Organization (2020) defines as 'an overabundance of information – some accurate and some not – that makes it hard for people to find trustworthy sources and reliable guidance when they need it.'

Misleading health information can come in two forms, namely misinformation and disinformation. The main difference is the intent behind them – misinformation is information shared without an intention to mislead, whereas disinformation is shared with the intent to deceive or cause harm (Wikipedia contributors, 2023). Misleading health information can be incomplete, incorrect or irrelevant, and could lead to problems such as vaccine hesitancy, refusal of medical treatment, wrong diagnoses, and harmful lifestyle choices.

Certainly, during the COVID-19 pandemic, there was an abundance of both misinformation and disinformation; however, both misinformation and disinformation were an issue prior to the emergence of COVID-19 and a recent systematic review estimated that the proportion of health-related disinformation on social media could be as high as 28.8% (Borges do Nascimento et al., 2022). The ease with which information can be spread and shared on social media makes misleading health information a big problem.

Which health-related topics are most liable to misinformation or disinformation on social media? It has been suggested that there are six main areas, namely, drugs and smoking, non-communicable diseases, pandemics, eating disorders, and medical treatments (Suarez-Lledo and Alvarez-Galvez, 2021).

Effective communication of health information can help counter the spread of misinformation, especially at times when the flow of information is slow or when good information is hard to come by. Health literacy guidelines and checklists are suggested as tools in a range of options to help cope with the spread of misinformation (Bin Naeem & Kamel Boulos, 2021) which also includes tools such as machine-based learning approaches (such as Tweet debunking

datasets), promoting the websites of public health organisations via search engines, and verifying the accounts of medical professionals on social media. No single strategy can be effective on its own, but a combination of strategies is recommended. Another strategy is that of psychological inoculation or "prebunking", where people are exposed to a weak dose of a persuasive but false argument to trigger an immune response (Roozenbeek, 2020).

Misleading or inaccurate health information can also be found on many websites, in addition to social media, but health literacy can be a tool to enable people to discriminate between good-quality and poor-quality sources. Schulz et al. (2021) demonstrates that people with higher objective health literacy scores are better able to determine the quality of health information on the internet.

Finally, Bin Naeem & Kamel Boulos (2021) conclude that digital health literacy levels need to be raised to cope with future 'infodemics'.

Medical/Health and Public Library Partnerships

The healthcare landscape in England continues to change with the introduction of Integrated Care Services (Department of Health and Social Care, 2022). The increased numbers of people living longer, often with long term health conditions and the requirement for shared decision making between patients and clinicians, alongside the move to patient-centred care (Fuller, 2022) gives impetus to the need to provide information to inform population health. This information needs to be available for the population to find easily, and accessible in the respect that it is presented in a format that makes it usable by all sectors of the population (Carlyle et al., 2022).

The latest update of the Knowledge for Healthcare strategic framework (NHS Health Education England, 2021), setting out the priorities and direction for the NHS KLS, includes guidance that partnership working is central to mobilising knowledge and ensuring that information is maximised across health systems. NHS KLS are encouraged to share skills and knowledge with local community organisations, such as libraries, prisons and schools, to help develop the digital and health literacy skills of the population, enabling individuals greater agency in their own health management. This can be enabled by the use of non-traditional settings for health promotion which are open access, involve local communities, facilitate informed decision making and address the wider social determinants of health; public libraries have been shown to meet these requirements (Jenkins et al., 2022).

Models for forming strategic partnerships and guidance resources are summarised in a report which presents the outputs from Patient and Public Information (PPI) Task and Finish groups (Case, Howard and Grant, 2017). These teams generated and curated the background materials, for example the PPI Ideas Bank, to enable health KLS staff to work in partnership with external stakeholders (Knowledge for Healthcare, 2017). At a national level, training has been put in place for health librarians so that they can provide training to partners in other organisations on health literacy awareness and the provision of trusted sources of health information (NHS KLS, Health Literacy Toolkit, 2023). The introduction of Health Information Week at a national level in 2017, gave NHS KLS staff the catalyst to broaden their engagement with public libraries and other patient groups. This resulted in the number of NHS KLS teams developing support information for the patient and/or public to rise from 27% in 2014 to 78% in 2018 ⁽Carlyle, Goswami and Robertson, 2022). There is a synergy between NHS librarians providing training and support to staff in public libraries, who in turn pass on advice to local people and communities enables a cascade of reliable, accessible health information. The opportunity to further develop these partnerships was offered by a digital health literacy pilot project scheme, introduced by Libraries Connected, CILIP, Arts Council England and funded by Health Education England in 2022.

This partnership model for educating local communities through programmes supporting healthy behaviours and access to trustworthy health information has been previously seen in a number of countries, including the United States. A case study of the partnership between the Oakland University William Beaumont School of Medicine Medical Library and Auburn Hills Public Library (Swanberg et al., 2022) demonstrates that adult workshops, children and family programmes and a virtual health education programme during the Covid-19 pandemic were well attended and received positive feedback from attendees. In this case, the medical librarians were supported by staff from the medical school faculty and medical students to develop the workshops and facilitate delivery. Lessons learned included the need to actively market the education sessions, the need to be agile in delivery methods (using online platforms during the pandemic) and the requirement to build resilience into the programme to mitigate staffing changes.

In Oklahoma, one of the least healthy states in the United States, interviews of public library staff (Rubenstein, 2018) indicated a lack of confidence in navigating digital health information amongst library staff working in rural areas compared to library staff working in city and metropolitan areas. Librarians working in the urban libraries were given the opportunity to participate in the Medical Library Association's Consumer Health Information Specialist (CHIS) certification. This study showed a willingness on the part of public librarians to participate in the dissemination of health information to their service users, alongside a desire to receive adequate training to improve their confidence in dealing with health information requests. This study offers encouragement that initiating training in health literacy awareness and in evaluating trustworthy sources of information would be beneficial to public library staff.

With the use of the Health Literacy Geodata tool (Health Education England and University of Southampton, 2016), health librarians can ensure that the local health literacy environment in England can be taken into account as they cascade training to staff and volunteers at public libraries, who in turn are able to communicate this learning directly to local populations.

Behaviour change and health literacy

The need to modify individual behaviour has been identified as a key element in addressing public health problems by Public Health England (PHE) (2018). Many of these issues have been traditionally addressed by information and educational interventions, such as health warnings on tobacco and social media campaigns like "Stoptober" to encourage smoking cessation. Low levels of health literacy may make these kinds of interventions less effective, because some individuals are less able to understand or engage with the information provided.

In 2018 PHE called for the increased use of behavioural and social sciences in the public health sphere to ensure that behaviour modifications are evidence-based and effective. The COM-B model is used to find out what is preventing behaviour change, and therefore what an appropriate intervention might be (West, R., et al, 2019). The framework identifies capability, opportunity and motivation as the three factors which must be present to enact change. Understanding what the desired behaviour is and why it is important are necessary for an individual to be capable of carrying out that behaviour.

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