



## Knowledge for Healthcare: a sustainable approach to developing a knowledge and library services workforce

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### Abstract:

*A skilled knowledgeable workforce in appropriate numbers is a key element in the success of every business and this is certainly the case for NHS knowledge and library services in England. The healthcare workforce relies on knowledge and library specialists skills for evidence searching and summaries, knowledge mobilisation, health literacy skills development and more. Health Education England's knowledge and library services team is responsible for workforce planning and development for this highly specialist profession and anticipates challenges with supply and recruitment over the next decade.*

*This paper highlights factors such as the workforce profile, and increased demands, which have been identified as contributing to the challenge. It explores some of the interventions which have been developed to mitigate the effects and provide solutions to these challenges.*

*The importance of working in partnership to tackle areas of common concern is also explored in the paper.*

**Keywords:** Recruitment, planning, workforce, training, development

## Introduction

Health Education England (HEE) is part of the United Kingdom's National Health Service (NHS), and we work with partners to plan, recruit, educate and train the health workforce in England. Within HEE the Knowledge and Library Services team provides strategic leadership for NHS knowledge and library services delivered at a local level across England.

The team works to develop and implement the *Knowledge for Healthcare* strategy 2021-2026 which builds on previous achievements, sets priorities, and informs actions to sustain a coherent national approach to knowledge and library service development in the NHS.

The workforce is the most important element of any business, and this is certainly true of healthcare libraries in England. Therefore, a key strand within the strategy is the need to work towards a sustainable knowledge and library workforce. One of the impact indicators of the strategy reflects this priority:

*The knowledge and library services workforce has the capability, confidence and capacity to meet the evolving knowledge and information needs of the healthcare system<sup>i</sup>*

There are two main elements involved in achieving this goal of a sustainable workforce. The first is around numbers, ensuring that there are sufficient appropriately qualified staff in the workforce and available for recruitment when vacancies arise. The second is around providing a range of focused and high-quality learning opportunities to ensure that the workforce is able to continually refine and improve their skills to meet the changing needs of healthcare.

The focus of this paper is to outline Health Education England's approaches to these challenges and detail some of work we have undertaken in these areas with partners including the UK's Chartered Institute of Library and Information Professionals (CILIP).

It might be useful here to note HEE's definitions around qualified knowledge and library professionals. HEE recognises qualified members of staff to be those who are either in possession of a degree or postgraduate qualification from a CILIP accredited course from a Higher Education institution or who have followed CILIP's professional Registration process and achieved Chartership of Fellowship status with the organisation. The latter ensures that the profession remains open to the increasing numbers of colleagues who have followed non-traditional routes into the profession.

## **Challenge 1: An ageing workforce**

HEE undertakes a biennial survey of the NHS knowledge and library specialist workforce in England<sup>ii</sup> and this survey includes a question relating to age.

Data from the 2019 survey indicates c. 42% of the health library and knowledge services workforce is aged 50 and over and therefore likely to attain retirement age within the next fifteen years, assuming an average retirement age of 65. This does not factor in early retirements or staff leaving to take up information roles outside the NHS, or staff working beyond the age of 65.

Based on likely retirement levels over the next fifteen years, we estimate that around 309 qualified knowledge and library specialists will need to be recruited during this period to maintain the existing workforce levels.

## **Challenge 2: Anticipated increased demand**

The Topol Review, published in 2019 outlined recommendations to ensure the NHS is the world leader in using digital technologies to benefit patients. It identified the need to implement technologies such as genomics, digital medicine, artificial intelligence and robotics at a faster pace and on a greater scale than anywhere else in the world. It included the recommendation:

*“To plan for the future workforce over the next two decades, the NHS will first have to increase the number ....of clinician, scientist, technologist and knowledge specialist posts with dedicated, accredited time, with the opportunity of working in partnership with academia and/or the health tech industry to design, implement and use digital, AI and robotics technologies.”<sup>iii</sup>*

Projected demand for knowledge specialist roles is anticipated to grow with HEE recommending NHS employers increase their staffing ratios to employ 1 qualified knowledge specialist for every 1,250 healthcare staff.<sup>iv</sup> If this were to be implemented in full this equates to an additional 294 WTE new knowledge specialist posts across England.

The demand for the skill set of this group of staff is expected to increase. The drivers for this include the need to enable knowledge management and mobilisation activities, health and digital literacy, and the increased requirement for data management skills. We would expect many of these roles to be embedded to work closely alongside and as part of the wider multi-professional healthcare team.

At present most knowledge and library roles within the NHS in England are hosted within Acute Hospital Trusts. However, we also observe a slow increase in demand for knowledge manager roles within the Arm’s Length Bodies of the NHS and anticipate a demand linked to Social Care and Primary and Community Care.

Taken collectively the figures above suggest a demand for around 600 new qualified knowledge and library professional roles within the NHS in England over the next 15 years.

## **Health Education England's Response**

Health Education England's Knowledge and Library Services team have taken a range of actions in response to this concern.

### **1) Working with Higher Education Institutions offering accredited courses in Library and Information Science**

A basic awareness of health librarianship as a career can be an obstacle. Efforts have been made to increase awareness of knowledge and library roles within the NHS by working with Higher Education Institutions in England offering CILIP accredited courses in library and information studies.

The offer to students has varied depending on preferences of the course organisers and has included supporting full modules on health librarianship such as the one offered by Manchester Metropolitan University covering:

- Overview of Healthcare and Health Libraries
- Quality and Impact Measures in Health Libraries
- Clinical, Outreach, and Embedded Librarianship
- Mobilisation of Evidence and Knowledge
- Health Literacy and Patient Information

Courses offered by other Higher Education Institutions incorporate a shorter two-hour session covering similar topics but in less depth.

Although the longer-term success of this approach has yet to be formally evaluated, there is some anecdotal evidence for this approach yielding results with several former students from these courses taking up roles within health libraries after graduation.

### **2) Apprenticeships Level 3 and 6/7**

Following the introduction of the Apprenticeship Levy in 2017 by the UK Government apprenticeships have become more widespread throughout the NHS. The Levy, which consists of a 0.5% charge on all organisations with a pay bill of £3 million or above per annum, encourages a commitment to Apprenticeships by employers as they can use this Levy to fund their own Apprenticeship training or else lose the Levy costs. Apprenticeships are popular with employees as a means to learn on the job while earning a wage. Apprentices develop and learn while undertaking a paid role. By the end of the apprenticeship they will have a good mix of knowledge and skills, as well as experience, to progress in their chosen career.

Health Education England has worked with CILIP on the introduction of a Level 3 Apprenticeship for Museums, Libraries and Archives, with apprentices employed at a range of NHS Knowledge and Library services. HEE has worked with managers hosting some of these apprenticeship roles to understand how to better support employers and apprentices within this specialist field.

Health Education England is also part of an employer-led trailblazer group developing new apprenticeship standards for a degree level apprenticeship for the profession. It is anticipated that the three-year Level 6/7 apprenticeship will become available in September 2023 with the first cohort leaving the programme in 2026.

Although this work will therefore not yield results until 2026, it is crucial for HEE to continue to support the development of this apprenticeship as we anticipate many new professionals will join the healthcare knowledge and library workforce through this route.

### **3) NHS Health Careers**

NHS Health Careers<sup>v</sup> is the information service about the range of 350 plus careers available in the health service. The aim is to support people in education and at all stages of their career to discover more about the health roles that are available, and how to get in and get on. Health Education England's Knowledge and Library team has worked with NHS Careers to ensure that the information available on the website about knowledge and library specialists is accurate and up to date, including real life examples of NHS knowledge and library roles and incorporating current live job opportunities within healthcare.

The site incorporates the career stories of NHS knowledge and library specialists to provide an insight into the roles outlined. This is supplemented by a series of Resources for Role Redesign<sup>vi</sup>, presented both as a resource for employers and prospective employees to enable them to see the wide variety of roles available within the healthcare knowledge and library field and appreciate the knowledge and skills required for these roles.

The aim of this work is to improve the discoverability and highlight the positive impact of healthcare knowledge and library roles, encouraging more people to follow a career as a healthcare library and knowledge specialist.

In addition to attracting new professionals into the healthcare sector, there is also a need to ensure that the existing workforce is supported in terms of learning and development opportunities.

### **4) Professional Knowledge and Skills Base (PKSB)**

The CILIP Professional Knowledge and Skills Base<sup>vii</sup> (PKSB) charts the skills and knowledge areas required for those working in the information, knowledge, library and data professions. It is a tool which can be used to aid career development and identify training needs to assist in planning learning and development opportunities.

Health Education England worked with CILIP in 2020-21 to sponsor a refresh of the PKSB to ensure it reflects those competencies and skills required for the modern knowledge and library specialist workforce. A key driver and reference source for the work was the *Research Report: The impact of AI, machine learning, automation and robotics on the information profession*.<sup>viii</sup> The report considers how new and emerging digital and data technologies are already impacting the daily work of healthcare information professionals, or will be likely to impact in the near future. The research highlighted a set of skills and competencies that information professionals will need to support their users and organisations to meet new and emerging ways of working.

Health Education England also had representation on the working group which refreshed the PKSB and the associated Healthcare Sector Guide, which places the generic skills into the context of healthcare knowledge and library work.

The PKSB is made available to knowledge and library specialists working in the NHS in England to aid their continuing professional development and learning and is used by the Health Education England team to plan and map learning opportunities.

## **5) Workforce Survey and Development Needs Analysis**

Health Education England's knowledge and library team has a role in providing opportunities to develop the highly specialist knowledge and library workforce. In particular we are keen to respond to learning requirements associated with our Knowledge for Healthcare strategy, or associated with service improvement and aligned with the NHS Knowledge and Library Services Quality and Improvement Outcomes Framework. This ensures value for money by targeting resources most effectively.

Our main means of regular consultation with NHS knowledge and library staff is through the biennial Workforce Planning and Development Survey which incorporates a Development Needs Survey. The survey is anonymous and aimed at all healthcare knowledge and library staff in England. It is made available online for participants and advertised through a range of our regular communication channels with participants usually being allowed one month to respond.

Combined with input from Subject Matter Experts, Senior Stakeholders, and observation of service needs from quality reviews and visits, the results of these surveys inform the provision of centrally-funded short courses, e-learning, and other development opportunities.

## **6) NHS Knowledge for Healthcare Learning Academy**

Launched in December 2021, the NHS Knowledge for Healthcare Learning Academy brings together the range of development opportunities offered by HEE's national knowledge and library services team informed by the regular development needs survey and accredited by the professional body CILIP.

HEE has provided targeted learning and development offers for knowledge and library specialists for a number of years and this latest development builds on this long tradition offering continuing professional development (CPD) for health librarians across the country and offering the following benefits:

- Enabling enhanced visibility and accessibility
- Strengthening the existing offer through robust processes
- Increased clarity over learning outcomes and course content
- Added value through accreditation by our professional body
- Increased confidence of employers and other stakeholders

Accreditation is a particularly valuable element of the new Learning Academy offer. Through accreditation both employers and learners can feel confident that the short course content offered by HEE is high quality and has been tested against the professional standards by an independent assessor. As such, accreditation provides a quality assurance measure for employers and learners taking up the offers.

## **7) Postgraduate Diploma in Clinical Data Science**

As part of Health Education England's extensive work to support the development of data, digital and technology capabilities across the entire healthcare workforce, the University of Manchester has been commissioned to develop a flexible series of postgraduate modules in clinical data science. Taken together these modules can lead to a postgraduate qualification in Clinical Data Science.

The modules in development now will cover: Machine Learning for Health, Biostatistics for Health, Health Data Sciences, Introduction to Programming in Health and an Introduction to Health Informatics.

In order to ensure the relevance of these modules for NHS knowledge and library specialists, and to identify opportunities to address any gaps in provision, Health Education England has funded a part time position for an experienced library manager to work with the team developing the modules.

Once launched there is also an intention to provide support for NHS knowledge and library specialists wishing to study on these modules.

## **Future Priorities**

There is much work still to do to ensure that we are able to meet the demands for knowledge and library specialists in healthcare over the coming decades.

One area for development includes providing a programme of learning for those joining the NHS from other sectors. NHS knowledge and library specialists require a specific skill set which may not have been fully developed in other roles. These include expert searcher skills, a knowledge of critical appraisal, knowledge mobilisation techniques, and health literacy skills. The development of a range of learning opportunities to meet the needs of colleagues new to health librarianship is key both to support new professionals but also to encourage colleagues who may wish to transition from other sectors.

There may also be opportunities to support colleagues who wish to transition from administrative or paraprofessional roles to professional knowledge and library roles. Many of these colleagues will have considerable experience providing a range of services within healthcare knowledge and library services or be newly qualified via the Level 3 apprenticeship route. As more administrative processes are rationalised or become automated, assisting some of these staff to transition to professional roles will ensure their valuable experience and expertise is retained.

During 2022 Health Education England will be working with partners to explore a range of opportunities to grow and expand the knowledge and library specialist workforce to ensure that we can meet the demands of the future NHS.

## Conclusion

Health Education England's Knowledge and Library team recognises the challenges faced in terms of recruitment and development of the knowledge and library workforce, and the key importance of this work in ensuring that the knowledge and evidence needs of the NHS are met in an effective and efficient manner.

This paper outlines some of the work already undertaken to address these challenges and notes some of the priorities for future work in this area.

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