Developing people for health and healthcare

Knowledge for healthcare: a development framework

for NHS library and knowledge services in England
2015 - 2020
Preface to the Framework

“Information will increasingly become the currency of healthcare in the future, and our ability to access, understand and interpret it at individual and population level will be a key determinant in the future success of our healthcare system.” (Framework 15, p.98)

Health Education England leads on developing a flexible NHS workforce, open to innovation and change. It is through education, and sharing knowledge, research evidence and best practice, that we inspire and inform innovation and improvements in patient care and safety, experience and outcomes. To achieve these ambitions, individuals must be supported to broaden as well as deepen their knowledge.

Our healthcare knowledge services will nurture a common culture of bringing the right knowledge to bear on decisions. Today and in the future, these services need to be flexible and active, and offer responsive, problem-based, ‘just-in-time’ and ‘just-for-me’ services.

Health Education England will build on the exemplary record of cooperation between healthcare library and knowledge services in England and on best practice internationally. We will foster greater partnership working between NHS bodies, as well as collaboration between library and knowledge services, moving towards one coherent service that delivers locally and nationally for patients, learners and the healthcare workforce.

Healthcare library and knowledge services are a powerhouse for education, lifelong learning, research and evidence-based practice.

Our ambition is to extend this role so that healthcare knowledge services become business-critical instruments of informed decision-making and innovation.

Professor Ian Cumming, OBE, Chief Executive
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1. Introducing the framework

As stewards of the country’s investment in healthcare library and knowledge services on behalf of the National Health Service, Health Education England is delighted to have instigated the creation of this development framework.

Our framework has been produced to:

- Articulate an ambitious vision through which the outputs and expertise of healthcare library and knowledge staff will underpin improvements in patient care and safety, experience and outcomes through informed decision-making, and the spread of innovation.

- Invite stakeholders to work with us to transform and optimise healthcare library and knowledge services, harness new technologies, and champion service development and re-configuration, thereby extending their reach and maximising value for money.

- Guide investment and procurement decisions, the development of new information products, partnership working and service modernisation.

- Drive the redesign of roles for healthcare library staff, to improve efficiency and enable the adoption of new models of service.

It provides the basis for more detailed conversations with our partners about the challenges and opportunities ahead. It is a framework upon which Health Education England, in dialogue with our stakeholders and partners, will build an action plan – with a focus on customer care and value for money for taxpayers, achieved through better coordination, collaboration and cooperation, including through pooling resources and expertise.

We invite stakeholders to work with us to achieve shared goals.

1.1 The changing landscape of the health service in England

Framework 15 (Health Education England, 2014) is built on our understanding of the global drivers of change in healthcare, an assessment of their likely impact on health needs and the implications for the healthcare workforce. These same drivers impact on our expectations for the service delivery model of healthcare knowledge services.

- The population of England will continue to grow and older people will make up an increasing proportion of that population.

- The population will have an increasing number of people with long term conditions, possibly compounded by environmental changes.

- At the same time improving technologies and treatments contribute to a rising expectation of care by the population, coupled with increasing knowledge and self-care about their conditions.

- The NHS workforce is 1.4 million with another 1.6 million in social care. The workforce will need to be flexible, well-educated and able to adjust to change.

- There are likely to be new roles and ways of working, driven by technological changes, demographic changes and changing expectations.
Healthcare library and knowledge services underpin all aspects of the NHS - supplying the evidence base to the service to make decisions on treatment options, patient care and safety, commissioning and policy, and to support lifelong learning, undertake research and drive innovation.

Health information for patients, carers, and the general public is also high on the agenda.

The purpose of healthcare library and knowledge services is to:

Provide knowledge and evidence to enable excellent healthcare and health improvement.

Use the expertise of their staff to ensure that NHS bodies, staff, learners, patients and the public have the right knowledge and evidence, when and where they need it.

For Health Education England as the system leader of NHS library and knowledge services, working in partnership with stakeholders, these services have a key role to play in realising the ambitions outlined in Framework 15 and in Health Education England’s Mandate (Department of Health, 2014), especially in relation to:

- The importance of information – healthcare knowledge services will enable healthcare staff, and the wider health community, to access, understand and interpret information at individual and population level
- Evidence-based practice - “To continually drive up the standards of healthcare, clinical decision making must be supported by the best available evidence and good practice.” (Mandate, p. 29)
- Patient expectations – knowledge services will help healthcare staff

“to meet the demands of fully informed and engaged patients and support and advise patients and carers who are not informed or active” (Framework 15, p. 69)

- The future workforce – healthcare library and knowledge services will help to equip healthcare staff with the skills to respond to and adopt evidence and innovation to enable whole person care.
2.1 Celebrating the success of healthcare library and knowledge services in England

NHS clinicians and managers will recognise that healthcare library and knowledge services have changed for the better in recent years and there are significant successes to share:


- Making a national set of online databases and electronic journals available 24/7 to all NHS staff and learners in England (the ‘national core content’ collection)

- Embedding knowledge professionals in teams:
  - clinical, outreach and commissioning librarians underpin best practice and patient care by providing the best available evidence, at the bedside and in the workplace
  - librarians working with Trust Boards and executive teams answer complex strategic and policy questions to inform decision making, risk management and governance

- Enhancing physical library spaces to provide modern, flexible learning environments

- Launching a national Impact Toolkit (Health Education England Library and Knowledge Services, 2014b) for healthcare library and knowledge services

- Identifying and spreading library and knowledge service innovation, though the national Sally Hernando Awards

- Implementing practical approaches to better manage organisational knowledge, bring people together with knowledge and people with people

- Collaborative working to:
  - develop and deliver development programmes for library and knowledge services staff,
  - create reciprocal document supply schemes in different areas of the country,
  - produce current awareness and alerting services.

The positive impact of NHS library and knowledge services is illustrated by the case studies that appear throughout this document
2.2 NHS - funded library and knowledge services in England – 2013-2014

**Activity**

215 library services* delivered via
325 staffed physical learning spaces

480,000 registered library service members
298,000 registered users of NHS-funded electronic resources

2.2m items loaned/supplied
1.2m enquiries handled
153,000 staff trained
31,000 expert searches

plus activity involved in acquiring, organising, and disseminating information, and providing specialist support

*There has been a 15% reduction in the number of library services in the past 5 years

**Library and knowledge staff**

1,036 whole time equivalent staff working at
local level**

Of which 594 whole time equivalents (57%) have first or second degree level information qualifications

14.8 whole time equivalent staff working at Local Education and Training Board level***

** There has been a 3% reduction in staff numbers over the last year
*** There has been a 35% reduction in posts at this level over the last 3 years

**Finance**

£50.9m total investment:

59% is spent on staff at local Trust and LETB level

35% is spent on knowledge resources - books and journals (increasingly electronic) and databases at local, LETB and national level

Main sources of funding:

42% from education and training tariff via Learning and Development Agreements
29% from NHS employers at local organisation level
15% from other LETB funding (out of tariff)

See section 6.4 for more details
2.3 Key facts

Users of NHS-funded library and knowledge services in 2013-14

- Medical & Dental: 23%
- Nursing & Midwifery: 27%
- Allied Health Professionals: 10%
- Students*: 18%
- Administrative & Clerical: 6%
- Scientific & Technical: 4%
- Other Clinical: 6%
- Estates & Ancillary: 1%
- Other Staff: 5%

Key services provided by healthcare library and knowledge services

- Information consultancy
- Information skills training
- Document delivery
- Current awareness and alerts
- Digital and print collection management
- Advice on knowledge management

Impact on patient care

Collated data from use of the Impact Toolkit shows how information and support provided by library and knowledge services have:

Informed and/or led to changes in:

- Diagnosis
- Choice of tests
- Choice of treatment
- Length of stay
- Advice given to patients/carers
- Quality of experience for patients/family
- Guideline/pathway development

Helped to avoid:

- Unnecessary admissions
- Patient mortality
- Healthcare acquired infections
- Unnecessary interventions
- Unnecessary tests
- Unnecessary referrals
- Wasted time

Source: Annual statistical returns submitted by NHS Library Services

* Students: defined in accordance with the Electronic Staff Record. Medical Students are included in this category rather than under Medical and Dental
Our aim in publishing this framework is to articulate the direction of travel for healthcare library and knowledge services, to inform priorities and inform decision-making.

We are committed to an ambitious vision:

**Our vision**

NHS bodies, their staff, learners, patients and the public use the right knowledge and evidence, at the right time, in the right place, enabling high quality decision-making, learning, research and innovation to achieve excellent healthcare and health improvement.

There is often a large gap between evidence-based treatment guidelines and current practice (Nolte and McKee, 2008). Therefore, there is much to do to achieve this vision.
4. Partnerships are central to success

To ensure a consistent, equitable, funded core service offer to learners and staff, and offer coordinated information to patients and the public, we will build and foster effective partnerships nationally and locally. We are committed to learning from and partnering with other NHS bodies and external organisations alike. We will strengthen working relationships across the library community. A coherent approach is needed to deliver our vision and optimise investment in products and services in the best interests of staff, learners, patients and the public.

This framework provides the basis for those detailed conversations about joint working to address shared opportunities and challenges and we look forward to early engagement with a number of key players, including:

- NHS England – to address and support the information needs of commissioners and policy makers
- Public Health England – to ensure that the whole public health workforce, whether working at a national or local authority level, has access to quality resources and services and that public health information is available to the public and patients
- Department of Health – to develop options for a sustainable funding model for local healthcare library and knowledge services and support Health Education England in its implementation
- NICE - building on strong working relationships to develop a shared agenda - exploring opportunities for greater central procurement of resources and to engage with publishers and suppliers, working to promote evidence-based practice
- NHS Improving Quality – to ensure healthcare knowledge services engage with this important agenda
- Professional and regulatory bodies (including the Royal Colleges, Care Quality Commission, Monitor, NHS Litigation Authority, General Medical Council and Nursing and Midwifery Council) – to endorse the significance of evidence-based practice and embed knowledge into practice
Patient satisfaction is linked to the quality of information. Healthcare library and knowledge services will work in partnerships with key stakeholders to enrich the information offered to patients and carers, to enable people to better manage their health and wellbeing and make fully informed decisions about their treatment and care. The importance of the public, patients and carers having the right knowledge and evidence, when and where they need it, is a significant element of our vision.

Leadership will be required to drive forward a universal offer that ensures a joined-up approach to informing patient choice and to engagement to promote health and well-being. This will involve working with a number of national and local organisations including:

NHS and third sector organisations – these include NHS Choices, Public Health England, Health Watch, Patient Information Forum and health charities such as Macmillan, British Heart Foundation and MIND.

Local authorities - public health teams, social care, Health and Wellbeing Boards and public libraries are all part of local authorities with significant responsibilities for delivering health information to patients and the public.

Case study – NHS and public library collaboration to provide information for patients and carers

Doncaster and Bassetlaw Hospitals NHS Foundation Trust has worked with Doncaster Public Libraries & Information Service to develop a Health & Wellbeing Information Service. This has included the development of a Health Information Training Programme for all public library staff and the promotion of a Health Information Enquiry Service available to in-patients and out-patients at the hospital and to all residents, patients and carers.

Healthcare library and knowledge services are strongly committed to collaborative working. More impetus will be given to coordinating robust partnerships within and across different sectors. Key partnerships include:

- Higher education institution libraries – to take forward a range of initiatives including collaboration on procurement of e-resources and shared learning on the implementation of new technologies
- Independent health libraries – to ensure two-way communication and joint working with Royal Colleges, professional bodies and health charities
- Chartered Institute of Library and Information Professionals and academic departments of information and library science – to agree a shared agenda in the training, development and redesign of the future and current NHS healthcare knowledge services workforce

Case study – NHS and higher education collaboration to increase access to research journals

The Finch e-journals pilot is an UK-wide National Health Service-Health Education collaborative project flowing from the recommendations of the Finch report (Working Group on Expanding Access to Published Research Findings, 2012). For one year (until 31 March 2015), nine publishers are making academic-licensed content available to NHS staff, giving access to an additional 2,500 journals. If this project proves successful, our ambition is to identify and attract new sources of NHS funding to sustain access to these research journals.
5. Shaping our approach

- Evidence base to inform our approach

**ENVIRONMENT**
- Policy drivers, PESTLE and SWOT

**ENGAGEMENT**
- Surveys, focus groups, interviews

**RESEARCH**
- Literature search, international perspectives

- HEE Mandate
- Framework 15
- NHS Constitution for England
- Education Outcomes Framework
- Political, economic, sociological, technological, legal and environmental drivers

- Review of 221 UK and international studies published since 2005
- Review of models in Scotland, Wales, USA, Australia and Scandinavia

- HEE Advisory Groups Directors of Education and Quality
- NHS staff and learners
- Data from surveys of over 17,000 service users and non-users
- Library and knowledge services staff
5.1 What did NHS staff and learners tell us?

Librarians and knowledge specialists routinely engage with both users and non-users of their services principally through staff surveys, gathering a rich body of evidence about information needs and preferences and the impact of evidence on healthcare. Drawing on responses from over 17,000 NHS staff and nearly 2000 students submitted since 2011, we learned that they primarily use library and knowledge services for patient care, education, research and audit. A comprehensive literature review, which drew on 221 UK and international studies published since 2005, verified these findings.

Users value

- personalised customer service
- expertise and assistance to save time, money and improve patient care
- 24 hour and seamless access to both print and full-text electronic resources
- literature searches and synthesised, pre-packaged information
- speedy supply of documents
- training to find and evaluate the evidence
- physical space in which to study
- information provision at the point of need by outreach and clinical librarians
- access to resources via mobile wireless devices
- experiential learning

Many staff

- are unaware of healthcare library and knowledge services and the benefits for patient care
- are unaware that library and knowledge staff can source documents that are not readily available
- experience information overload and lack time to search for information
- rely on colleagues and professional networks for information
- are frustrated by technical barriers and issues which they experience
- perceive that library and knowledge services are only for use by those studying
- make use of general internet search engines to seek to retrieve specialised information
Nowadays medicine is evidence based and the library service helps me to keep up to date.

Healthcare scientists are a new staff grouping across the NHS and more services for these groups as new roles and training schemes emerge would be helpful.

In an evidence based practice environment assistance to find the relevant information from experienced knowledgeable library staff is essential.

Why should there be a difference in journal access for those clinicians who are actively involved in research and those clinicians that are academics working clinically that have access through Higher Education?

Access to library service via smart phone will increase usage.

It would be nice to have a podcast summary of the latest evidence.

The cost efficiency of having these essential services offered by experts in their field is significant.

What I need is electronic access to journals.

The service is one of the Trust’s best assets.

Libraries need to make more resources available electronically to users of mobile devices.

I think the biggest problem is that colleagues in Primary Care are unaware that the Library is a resource for answering key clinical questions that might help with day to day practice.

Trust network is too slow to support e-learning.

There always seems to be problems logging into Athens… and accessing the article is quite confusing.
The views of healthcare library and knowledge staff across the NHS were gathered through both survey and focus groups. Opinions were gathered on both current delivery, considering challenges to be addressed and opportunities as well as future service delivery. The key identified requirements were:

Leadership
- Effective leadership at national level
- Equity across geographies
- All NHS organisations have access to healthcare library and knowledge services

Transforming the service
- Embedding roles within clinical, commissioning and management teams
- Enhanced roles including knowledge management and technology enhanced learning
- Equity of access to expertise, services and resources
- Extend the reach of services
- National purchasing of resources
- Ensure single, reliable and evolving search facility
- The use of mobile and point of care tools will grow
- Improved IT infrastructure is essential
- Integration of healthcare library and knowledge services into clinical systems

Funding
- Commitment to appropriate levels of investment
- Sustainable funding model

Workforce
- National standards for staffing levels
- Ensuring healthcare library and knowledge services staff have the right skills
- Enhanced career opportunities
- Succession planning

Partnership
- Value and build on existing partnerships between NHS library and knowledge services
- Enhance resource sharing agreements
- More flexible licensing agreements

Quality and impact
- Align the NHS Library Quality Assurance Framework with wider quality processes
- Focus on the impact of healthcare library and knowledge services on patient care, management decisions, commissioning and research

5.3 What did HEE Advisory Groups and Directors of Education and Quality tell us?

Library and Knowledge Service Leads attended several Health Education England Advisory Group meetings, and met with Directors of Education and Quality, to seek their input on our plans to develop a strategic framework. They told us that:

- Finding and applying knowledge is an important aspect of learning and continuing professional development
- Healthcare library and knowledge staff are positioned to play a larger role in enabling inter-professional learning, assisting with the virtual learning environment and developing blended training programmes
- It is imperative that we engage with higher education institutions, Royal Colleges, regulatory bodies and other professional organisations to avoid duplication
- Awareness of healthcare library and knowledge services is not as widespread as it could be across all professions and sectors
- There are perceived barriers that exist around access to knowledge resources
- Independent and community staff need to be able to access online resources on a variety of platforms, including via mobile devices

5.4 What did library and knowledge staff say?
On the basis of all the evidence gathered and lessons learned, the implications for the future of knowledge services are:

- Access to all services has to be as easy and convenient as possible.
- Services will be digital by default and delivery to mobile devices will be standard practice.
- Services need to be highly visible, pushing quality assured information tailored to specific user needs.
- The clinical and outreach models are expanded to become standard practice.
- Information skills training programmes, augmented by e-learning delivery, should continue to be developed.
- There needs to be a greater focus on synthesising evidence.
- There must be greater emphasis on partnership working.
- There is potential to better align healthcare library and knowledge services with technology enhanced learning initiatives.
- The healthcare library and knowledge workforce requires enhanced skills, including synthesising information, knowledge management, marketing, website design and usability testing.
- More sharing and integration of back-office functions is essential to underpin these changes.
6. Our strategic approach

Recognising the scale of modernisation required to achieve our vision, we identified principles and values on which to base decisions, and design criteria for transforming healthcare library and knowledge services.

Guiding principles and values

<table>
<thead>
<tr>
<th>Guiding Principle</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaboration</td>
<td>Do once and share working across boundaries</td>
</tr>
<tr>
<td>Collective purchasing</td>
<td>Central procurement at scale</td>
</tr>
<tr>
<td>Core service</td>
<td>Core service offer, products, tools and expertise</td>
</tr>
<tr>
<td>Digital by default</td>
<td>Digital and mobile by default</td>
</tr>
<tr>
<td>Effective and efficient</td>
<td>Applying the principles of lean thinking</td>
</tr>
<tr>
<td>Equity</td>
<td>Equity of access and opportunity</td>
</tr>
<tr>
<td>Federation</td>
<td>Pooling budgets, staff, resources across boundaries</td>
</tr>
<tr>
<td>Innovation</td>
<td>Flexibility, new models of service, best practice</td>
</tr>
<tr>
<td>Quality</td>
<td>Benefits to patients improving lives, outcomes, Impact</td>
</tr>
<tr>
<td>Streamlined</td>
<td>Streamline structure, management, systems, process</td>
</tr>
<tr>
<td>Technology</td>
<td>Harnessing technology to streamline back-office functions</td>
</tr>
<tr>
<td>Workforce development</td>
<td>Planning, role redesign, specialisation, career pathways</td>
</tr>
</tbody>
</table>
## 6.1 Our strategic approach - design criteria

### Criteria for the redesign of library and knowledge services

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Description</th>
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<tbody>
<tr>
<td>Economy of scale</td>
<td>Function can generate economies of scale, offering value for money if delivered at a large scale.</td>
</tr>
<tr>
<td>Local knowledge</td>
<td>Function requires in depth knowledge of needs of the local health economy and/or strong organisational relationships.</td>
</tr>
<tr>
<td>Nationwide functions</td>
<td>Function will benefit from a geographical focus or nationwide leadership to achieve national delivery, and/or building on the foundation of established regional service/s.</td>
</tr>
<tr>
<td>Opportunity for standardisation</td>
<td>Function can be delivered using a standardised approach across a wide geography/number of customers.</td>
</tr>
<tr>
<td>Specialist skills</td>
<td>Function requires specialist skills that are scarce and may not be widely available at a local level, or equitably across the country.</td>
</tr>
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</table>
7. Transforming the service

We used driver diagrams as a strategic planning tool to:

- explore the factors that need to be addressed in order to achieve our overall goal
- show how the factors are connected
- act as a communication tool
- provide the basis for a measurement framework

Four strategic themes had emerged from our analysis of all the research undertaken and feedback received, and we determined these to be the primary drivers for change:

1. Transforming the service – proactive customer-focussed services
2. Transforming the service – quick and easy access
3. Effective leadership, planning and development of the healthcare library and knowledge services workforce
4. Optimising funding for best value
7.1 Transforming the service

**AIM**

The right knowledge and evidence is used at the right time, in the right place

**PRIMARY DRIVERS**

1. Proactive, customer-focused knowledge services are provided and used
2. Staff, learners and patients benefit from quick and easy access to relevant evidence at the point of need
3. There is effective leadership, planning and development of the LKS workforce
4. Investment in library and knowledge services is optimised for best value

**SECONDARY DRIVERS**

- Design customer-focused services and delivery models
- Ensure awareness and use of services and resources
- Optimise use of existing and emerging technologies
- Develop an appropriately skilled LKS workforce
- Streamline library and knowledge services functions
- Provide effective leadership at national, geographic and local levels
- Redesign LKS roles to meet changing service needs
- Ensure effective talent management
- Rationalise investment at LETB level
- Introduce an equitable, affordable and sustainable funding model for local services
- Work with partners and suppliers to increase available resources

LKS = library and knowledge services
LETB = Local Education and Training Board
7.A Proactive customer-focused services

**PRIMARY DRIVER 1**
Proactive, customer-focused knowledge services are provided and used

**SECONDARY DRIVERS**
- Design customer-focused services and delivery models
- Ensure awareness and use of services and resources
- Optimise use of existing and emerging technologies

**INTERVENTIONS**
- Develop targeted service offers
- Ensure services are available at the point of need
- Improve marketing and promotion of services
- Promote information and digital literacy amongst NHS staff and learners
- Engage more LKS staff in organisational knowledge management
- Embed more LKS staff in clinical and practice settings
- Produce more national products and services for local delivery
- Promote cross-sector LKS collaboration
- Promote collaboration between LKS and other functions
- Influence the development of a robust IT infrastructure
- Influence and inform national and local IT strategy & policy
- Further automation of internal functions to increase time for customer facing service

LKS = library and knowledge services
LETB = Local Education and Training Board
We will undertake a national review of NHS library and knowledge services, making recommendations for the reconfiguration and redesign of services to deliver the right knowledge and evidence, at the right time, in the right place, enabling high quality decision making, learning, research and innovation to achieve excellent healthcare and health improvement.

Much of the development work to achieve a single coherent service that is proactive, and customer-focused is already underway. Our focus is on improving, extending, spreading and embedding approaches that have been tried and tested over recent years. We have identified that a series of interventions are required to deliver customer focused knowledge services.

Our ambition is for healthcare knowledge services to become business critical instruments of informed decision-making and innovation, widening their scope to drive the translation of knowledge into action across the system.

NHS staff tell us that they value targeted services including horizon scanning, current awareness and automated alerts and briefings that present synthesised evidence.

Case study – KnowledgeShare

NHS staff from all professions and sectors across Brighton and Mid Sussex wanted to receive regular, personalised updates about new high-level evidence and policy documents so as to remain informed about the latest developments in their field.

Outcome
The KnowledgeShare system was developed, allowing knowledge services staff to capture the professional interests of thousands of individual staff at a granular level. It also enables NHS colleagues to connect with one another based on shared interests.

Impact
Updates provided through the system have informed service-wide decision making, patient education conferences, research bids and the development of national guidance. It puts our staff in touch with the evidence and with each other.
7.A.2 Promoting evidence into practice

At the centre of successful knowledge management is the right organisational culture – one in which knowledge is valued, and knowledge sharing is embedded within day to day working practice. This is not simply a matter of capturing and sharing local successes with pride, but also of acquiring an appetite and developing capacity to learn from and invest in the adoption of the best practice demonstrated by other services and organisations.

<table>
<thead>
<tr>
<th>Goals</th>
<th>Key activities</th>
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<tbody>
<tr>
<td>Connecting people to people</td>
<td>Helping colleagues share ideas, question and learn; supporting networks and communities of practice</td>
</tr>
<tr>
<td>Connecting people to the evidence base</td>
<td>Providing access to knowledge derived from research; literature searching and synthesis; providing tailored information products; signposting to services and knowledge</td>
</tr>
<tr>
<td>Connecting people to best practice</td>
<td>Providing access to knowledge derived from experience; investigative searching; capturing and spreading best practice; sharing knowledge through communities of practice; using social media; signposting high quality patient information</td>
</tr>
<tr>
<td>Helping people keep up to date</td>
<td>Horizon scanning; alerting services; policy briefings</td>
</tr>
<tr>
<td>Sharing learning</td>
<td>Facilitating e-groups and learning sets; implementing techniques to learn from experience (including knowledge harvesting and After Action Reviews)</td>
</tr>
<tr>
<td>Connecting people to corporate knowledge</td>
<td>Mapping knowledge assets; collating and enabling shared access to directories, policies, guidance and protocols</td>
</tr>
<tr>
<td>Collegiate working</td>
<td>Contributing local information to national electronic resources; facilitating distributed authorship</td>
</tr>
</tbody>
</table>
### 7. A. 3 Organisational knowledge management

Knowledge is a valuable asset that needs to be managed so that healthcare organisations are able to apply knowledge, build know-how and continue to learn in order to improve organisational efficiencies and patient outcomes. Knowledge management is a vehicle for organisational development and service improvement. It involves deliberate efforts to:

- Turn information into knowledge, making it explicit, usable and available to answer the right question at the right time in support of planning, policy and guideline development, project work and patient care.
- Bridge the gap between research, policy and practice in order to improve outcomes.

<table>
<thead>
<tr>
<th>Mobilising knowledge to deliver on NHS priorities</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Using knowledge to inform healthcare policy</strong></td>
<td>Embedding best evidence into practice</td>
</tr>
<tr>
<td><strong>Developing an organisational memory</strong></td>
<td>Supporting innovation</td>
</tr>
<tr>
<td><strong>Making implicit knowledge explicit</strong></td>
<td>Meeting the information needs of staff</td>
</tr>
<tr>
<td><strong>Horizon scanning; keeping staff up to date</strong></td>
<td>Meeting the information needs of patients</td>
</tr>
<tr>
<td><strong>Knowledge sharing – to spread the learning</strong></td>
<td>Promoting actionable knowledge tools</td>
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</table>

**Case study – knowledge retention and transfer toolkit**

Surrey and Sussex Healthcare NHS Trust realised that when staff left the organisation, knowledge about the priorities, contacts, context and documents relevant to their posts often went with them, making it difficult for their successors to pick up their work in a timely manner.

**Outcome**

The Head of Library Services created a knowledge retention and transfer toolkit comprising a number of tools and techniques that leavers and their managers can use together.

**Impact**

The toolkit has been used by a number of departments as people have left the organisation or transferred posts, and its use is now an integral part of the Trust’s Leaver’s Policy.
7.A.4 Mobilising knowledge

Increasingly, library and knowledge staff will have a greater role as knowledge brokers, sharing their expertise in all aspects of the knowledge cycle to support NHS staff to find and evaluate the information they need:

- Define the question.
- Identify knowledge sources.
- Discovery: find the knowledge.
- Evaluate the information.
- Combine knowledge from various sources.
- Generate and add new knowledge.
- Share knowledge with others; reflect.
- Apply and embed knowledge into action.

There is much to do to develop and improve knowledge management at every level – nationally and locally.

The NHS invests in a range of knowledge management tools such as the NHS Atlas of Variation. Healthcare library and knowledge services play a critical role in signposting staff, both commissioners and clinicians, to raise awareness of these tools. There is also a need to take an overview, and to identify gaps. Knowledge staff are ideally positioned to do this.

We are committed to working with partners to produce knowledge solutions that can be embodied within decision-making tools (for clinicians and patients), and embedded into practice, so that staff adopt best evidence, doing the right things right first time.

Graphic from and based on: http://www.infoliteracy.scot.nhs.uk/home.aspx
7.A.5 Deliver customer focused services at the point of need

“Evidence does not speak for itself but needs to be mobilised at the right time, and through the right people, to make a difference in decision making.” (National Institute for Health Research, 2013 p. 11)

Increasingly the NHS will see knowledge specialists embedded within clinical, commissioning and management teams. Delivery of high quality evidence in the workplace at the point of need, by professionally qualified knowledge staff, demonstrates significant benefits. NHS staff and learners want to receive a personalised service.

Case study – neonatal arterial thrombosis
A neonatal intensive care registrar at the University Hospitals Leicester needed urgent information about neonatal arterial thrombosis that would help the baby's parents understand the risks associated with therapies as there was a risk to their baby's arm.

Outcome
An urgent and detailed search was carried out by library and knowledge staff at University Hospitals Leicester.

Impact
The baby's parents had the information they needed to consent to the treatment which saved the baby's arm.

Case study – anticoagulation monitoring services
The medicines management project team at the Coastal West Sussex Clinical Commissioning Group asked West Sussex Knowledge and Libraries to conduct in-depth research to inform commissioning of anticoagulation monitoring services in Sussex.

Outcome
The results of their comprehensive review informed the decision to improve the current service rather than outsource provision. The medicines management team gained national recognition for their contribution to shaping NICE guidance.

Impact
Commissioners identified the best way to improve quality and save money, and the reputation of the team was enhanced.
The work of the University Hospitals Coventry and Warwickshire NHS Trust’s CEBIS (Clinical Evidence-Based Information System) exemplifies the beneficial impact of proactive customer-focused knowledge services on therapeutic decisions and patient outcomes, patient experience and safety and cost savings.

<table>
<thead>
<tr>
<th>Query</th>
<th>Findings</th>
<th>Outcome</th>
<th>Impact</th>
</tr>
</thead>
</table>
| Does the use of local anaesthesia in vitreoretinal surgery compromise the patient? | There was no evidence of compromise to surgical outcome or patient safety | Change from 80% GA to 80% LA procedures                                   | • Change in service delivery  
• Cost saving estimated at £140,000 p.a.                                                  |
| Is it safe for patients with intraocular gas tamponades to travel by air following vitreoretinal surgery? | Evidence showed that it was not safe for patients to undertake any activities at high altitude or to receive nitrous oxide anaesthesia | Patients now leave theatre with a warning wristband. The wristband is provided on the purchase of intraocular gas internationally, the team achieved a national award for evidence in practice | • Prevention of risk  
• Prevention of morbidity  
• Change in care pathway  
• Knowledge base                                                                 |
| Managing challenging viral retinitis and fungal endophthalmitis        | Rapid review alongside virologist, microbiologist, GU medicine and geriatricians to give these patients the most appropriate treatment | Significantly shortened hospital stays and very favourable clinical outcomes | • Hospital length of stay shortened (£6,356 per patient saving)  
• Waiting time to treatment reduced  
• Change in choice of therapy                                                                 |
Library and knowledge staff at University Hospitals Morecambe Bay work with non-clinical teams to identify products and equipment that work well and provide value for money.

The Clinical Librarian was invited to contribute to the Trust Supplies Group, convened to consider the research around the clinical efficacy and safety of clinical items available for use and make recommendations based on clinical and cost effectiveness.

**Outcome**
During the past two years the Clinical Librarian has delivered nine critically appraised evidence summaries to underpin procurement decisions where change to a product may impact upon clinical efficacy.

**Impact**
The Trust Supplies Group succeeded in meeting their target of £100,000 savings in year.
We will implement a marketing strategy for the provision and awareness of services and resources, raising awareness of knowledge services, demonstrating how these are fully aligned to organisational priorities. It is clear that social media will play a key part in marketing knowledge services.

Clear and consistent signposting is needed to help the healthcare workforce and learners locate information resources, whilst information skills training will remain a key element of the offer from NHS knowledge services.

Promoting awareness of the library service offer

Cornwall Health Library Service has found an effective way to promote awareness of the service and its impact is by illustrating how the searches that their staff have done over the last three years relate directly to helping each of its stakeholder organisations meet their priorities, objectives and targets.

The need for information literacy skills to complement clinical skills

The Royal College of Nursing identifies a “need for information literacy competencies to complement the clinical competence framework, helping nurses, midwives, healthcare assistants and nursing students develop their skills in using information and knowledge and apply this to their practice.” (Royal College of Nursing, 2011 p.3)
7.B Quick and easy access to relevant evidence

**PRIMARY DRIVER 2**

Staff, learners and patients benefit from quick and easy access to relevant evidence at the point of need

**SECONDARY DRIVERS**

- Optimise use of existing and emerging technologies
- Streamline library and knowledge service functions
- Foster effective national partnerships

**INTERVENTIONS**

- Provide an enhanced single search portal
- Provide simplified sign-on to resources
- Ensure access via multiple platforms and mobile devices
- Influence and inform national and local IT strategy & policy
- Influence the development of a robust IT infrastructure
- Produce more national products and services for local delivery
- Agree a consistent, equitable core service offer
- Increase central procurement of e-resources
- Increase central management of e-resources
- Ensure that policy and funding support eligibility for all
- Engage with and influence publishers and suppliers
- Engage with national stakeholder organisations

IT – information technology
7.B.1 A knowledge hub for healthcare

Services and resources should be ‘digital by default’. We are committed to building on the existing www.libraryservices.nhs.uk website to develop a single, user-friendly healthcare knowledge hub, to enable the NHS to:

- apply knowledge, build know-how, foster a culture of continuous professional development and share learning
- enable access to knowledge management tools
- signpost nationally procured databases, and sources of evidence and technology enhanced learning, including a link to NICE Evidence services
- promote information literacy
- inform the work of healthcare knowledge staff

In progressing this development, we will build on the legacy of prior initiatives in England and seek to benefit from the expertise of colleagues in other parts of the United Kingdom and internationally.
7.B.2 Optimising use of new technologies; reflecting trends in academic publishing

Utilising the opportunities afforded by technology emerged as a consistent theme from our engagement with stakeholder groups.

Enabling timely access to the best sources of up-to-date, relevant knowledge to inform clinical decision making is highly valued, as is the need for e-resources to be available remotely, via mobile devices, on Wi-Fi, with immediate access (including access to ever-more full-text electronic resources) at the point of care and need, with seamless authentication and navigation, either via open-access or free of charge.

In summary - there is a clear desire across the NHS workforce for searching, access to full-text and sign-on to resources to be easier, for access to be available via mobile devices, and for IT systems to be robust.

We recognise the challenges and the need for strong leadership and partnership working in this area. We will work with national and local partners, including content suppliers, to influence and inform strategy, policy and investment decisions.

While we cannot be sure of the technical solutions that will best serve healthcare knowledge services to achieve our vision, we can predict that fast-paced advances in new technologies and the acceleration of their adoption will expand access to information, opportunities to personalise and embed information, provide tools for collaboration – and require knowledge services staff to continually develop their awareness and skills. (Varnum, 2014)

Our strategic approach will also reflect trends in publishing - in particular the gradual move away from subscription-based models towards Open Access publishing, which provides free online access to peer-reviewed research. Publishers recognise the demand for synthesised evidence and summaries of research results. The sheer increase in volume of published content, requires ever more sophisticated methods of filtering content and ‘mining’ data to find reliable quality evidence.
A national portfolio of electronic information resources, known as “national core content” has been made available to the whole healthcare workforce for over 10 years. This has yielded benefits in terms of equity of access and cost savings, on which we will build going forward.

Key steps now are:

- Scaling up the procurement of electronic resources from local to national level, to achieve better deals with publishers and suppliers.
- Exploring the feasibility of setting up an open access repository for the NHS in England, to showcase NHS-funded research activity and to meet the requirements of the government-endorsed Finch report on expanding access to published research findings. (Working Group on Expanding Access to Published Research Findings, 2012)
- Streamlining the management of these resources, by establishing a single, centralised e-resources team.

“Through participation in the national collaborative procurement of bibliographic databases and electronic journals, we have calculated that the London Health Libraries network has realised savings of around 50%, compared with the cost of purchasing the same resources at regional or local level”.

Richard Osborn
Strategic Lead for Library Services and eLearning
London
There are significant opportunities to harness technology, to streamline internal functions, in order to improve efficiency and so release time to prioritise customer-facing services.

We will oversee a review of healthcare library and knowledge service back-office functions to determine where improved automation, more consistent use of technology and centralisation of services will result in benefits to NHS staff and learners while improving performance of knowledge services.

Case study – a library network covering three Local Education and Training Board areas in the south of England

The healthcare library services in South West, Thames Valley and Wessex share a centrally hosted library management software system, and have built a single library service network, with the following benefits:

- Staff, trainees and students can search the holdings of all the healthcare libraries in the region (over 100) via a single catalogue, whilst a single library membership card enables them to use any of the services in the network, as they move between posts and placements

- Shared processes and policies have been developed, helping to ensure equitable services for staff and students, wherever they are based within the network, and saving time for individual library teams

- The Trusts within the network do not need to pay for and maintain separate software systems for managing local library functions, resulting in considerable cost savings
There is a significant opportunity to rationalise, share information products, and standardise approaches across the country, ensuring that work is only done once. We are committed to reviewing existing document delivery schemes and exploring opportunities to further extend these, and have identified a number of business critical products which could be developed collaboratively for local customisation and delivery. These include:

- Marketing and promotional initiatives.
- User guides.
- Training materials.
- Current awareness and alerting services

**Case study – collaboration in the production of horizon-scanning bulletins in North West England**

Library and knowledge staff in the North West have collaborated to create a series of over 20 horizon scanning bulletins covering clinical and management topics. Each librarian takes responsibility for a particular bulletin which is published monthly on the internet and shared with library and knowledge services across the North West, so that each can in turn distribute them to their local service users. This reduces duplication, makes the best use of staff time, ensures consistent quality, and helps keep clinical staff and managers across the area updated.

7.C Effective leadership and planning and development of the knowledge service workforce

**PRIMARY DRIVER 3**

There is effective leadership, planning and development of the LKS workforce

**SECONDARY DRIVERS**

- Provide effective national and LETB-level leadership
- Redesign library and knowledge service staff roles to meet changing service needs
- Develop an appropriately skilled knowledge services workforce
- Ensure effective talent management of the whole knowledge services workforce

**INTERVENTIONS**

- Secure senior level owner and advocate within HEE
- Design leadership model with national LKS lead
- Streamline and rationalise LKS structure
- Drive role enhancement and enlargement
- Establish a national training programme
- Establish and agree core and specialist competencies for library and knowledge services staff
- Build detailed profile of workforce and take steps to improve recruitment, retention & succession planning
- Develop an appropriate career structure
- Design a national LKS staff survey

LKS = library and knowledge services
LETB = Local Education and Training Board
Many of the healthcare knowledge staff we will have tomorrow are part of the current workforce. The services that they provide are rightly valued by learners and staff alike. Locally, librarians and knowledge specialists often lead in adopting new technologies and media, and use their experience to teach others to access, evaluate and apply knowledge.

Focused on NHS priorities, new models of service delivery call for flexible, multi-skilled knowledge specialists confident to apply their expertise within healthcare teams and at points of care and decision-making. Accordingly, investment in the continuing professional development of the existing healthcare library and knowledge workforce is essential. Now, and going forward, many more responsive, problem-based, ‘just-in-time’ and ‘just-for-me’ services are needed. The principles that we have set out shape our workforce development agenda by signalling the skills and experience that will be important.

To turn the rhetoric of our vision into reality requires the establishment of a national, strategic professional lead for healthcare library and knowledge staff to inspire and sustain the implementation of this development framework. We will initiate a review of the existing structures and shape a robust leadership model that also:

- recognises the requirement for geographically focused and more local professional leadership to head up local healthcare library and knowledge services networks, engage with local partners and crucially to ensure the strategic framework is turned into action and
- bolsters collegiate working, while streamlining decision-making structures; avoiding wasteful duplication and optimising specialist skills.

7.C.1 Effective leadership and planning and development of the knowledge service workforce
Healthcare knowledge services must be professionally led to ensure the right expertise and experience is deployed to maximum effect. Collaborative working across England is central to making the best use of the available expertise within this small specialised workforce. Together, we will drive up the quality of healthcare library and knowledge services to enhance outcomes and the experience of staff and learners by working in a collegiate style, as a single team within Health Education England.

We propose a national lead supported by geographically focused professional teams with responsibility both for specific national functions and for ensuring local stakeholder engagement.

### Key elements of the national professional lead role:
- Strategic thinking and action planning
- Working with strategic partners
- E-resources procurement and contract management
- Developing quality assurance systems
- Managing funding streams
- Programme and change management
- Supporting consumer health information national programmes
- Team building and people motivation
- Leading innovation

### Key elements of the LETB role:
- Leading and co-ordinating local knowledge service networks (inclusive of libraries and Technology Enhanced Learning)
- Implementing a quality assurance programme to accredit healthcare knowledge services
- Delivering continuous professional development
- Providing strategic advice and professional leadership to NHS organisations and healthcare library and knowledge staff
- Local partnership working
- Project management
- Supporting local consumer health information initiatives

In addition to a programme manager to drive the work forward nationally, each of the 13 LETBs should have a senior lead responsible for knowledge services, including healthcare libraries and Technology Enhanced Learning.
Managers of healthcare library and knowledge services in Trusts and other NHS bodies such as Clinical Commissioning Groups and Commissioning Support Units all require excellent leadership skills.

Local leaders will need to be identified, nurtured and developed through programmes that focus on the skills required and these in turn will feed in to a more rigorous approach to succession planning.

**Key elements of a local role:**

- Planning and implementing local knowledge services strategies
- Engaging with senior staff to champion the role of knowledge services within the organisation
- Leading knowledge needs analysis on which to design, deliver and monitor healthcare knowledge services
- Effective management of resources including funding, staff, and physical space
- Identifying best practice and innovation to modernise healthcare library and knowledge services delivery
- Assessing the impact the service has on patient care and the core business of the organisation

### The current workforce

1.4 million NHS staff are served by NHS library and knowledge services

= 1 qualified library and knowledge specialist for every 2,335 NHS staff

59% (594) of the 1,036 people working in NHS library and knowledge services hold first or second degrees in library and information science

58% of services provide a clinical librarian or outreach service

29% of paraprofessional staff have a vocational qualification

*(data from 2013-14)*

### Our ambitions

- Establish a national workforce planning process:
  - Complete a workforce review, identify key issues and, recognising that this is an ageing workforce, address succession planning
  - Establish a national workforce survey plus a regular survey of development needs
  - Set national priorities for ongoing training to meet the needs of future service delivery
- Up-skill staff to apply lean thinking, streamline systems and processes, and create and share information products to deliver equitable, efficient and effective services
- Empower knowledge staff to drive and deliver our vision by fostering innovation and service development, through role enlargement, role enhancement and role substitution
- Up-skill our paraprofessional staff, expanding their roles to take further responsibility in supervisory work, customer care and oversight of back-office functions
Our ambition is to align the healthcare library and knowledge workforce to NHS and organisational priorities, through service redesign and workforce development, focused on where the service can make most impact on the improvement of healthcare:

- Role enhancement and enlargement will create new roles for librarians that focus on informing decision-making and translating knowledge into action
- Product and service development will build on the learning from exemplars. By extending these and piloting new approaches, knowledge services will extend their reach
- The range of healthcare library and knowledge roles is diverse, encompassing research, management and technical skills
- Technology is moving rapidly. It presents exciting opportunities that shape ongoing training and development needs

There will be exciting opportunities for library and knowledge staff to innovate, enlarge and extend their roles. Working collaboratively within multi-disciplinary teams, and with other information providers, to aggregate information, knowledge brokers will enhance their skills and contribute their expertise to the production, management and mobilisation of knowledge in the local context.

Investment in the continuing professional development of the existing healthcare library and knowledge workforce is essential. To make the greatest impact on health improvement we will establish both a competency framework that defines core and specialist competencies, and a national training programme to address skill gaps.

Research shows that library and knowledge staff see the following skills as essential: communications, people and project management; personal qualities of intellectual versatility and perseverance; health literacy; great customer care; specialist skills to drive evidence-based practice, enable knowledge management and support guidelines development; enhanced technical skills from robust synthesis to document management, procurement to costing, and data mining. (Sen, Villa and Chapman, 2014)

We will build a detailed profile of the healthcare library and knowledge services workforce. Steps must be taken to shape career pathways for this speciality and to improve staff recruitment and retention. Given that the relative proportion of experienced senior healthcare library and knowledge staff is falling, there is a pressing need for effective succession planning and talent management.

Alongside innovative workplace and health-economy wide initiatives, self-directed personal and professional development learning are key. Service improvement projects, skills-sharing and networking, shadowing and mentoring are as important as onsite tailored training and externally facilitated events.

As the service is modernised, greater investment will be needed to support the development of first contact healthcare knowledge service assistants (staff in bands 2-4).
7.D Optimising investment in knowledge services

**PRIMARY DRIVER 4**
Investment in healthcare library and knowledge services is optimised for best value

**SECONDARY DRIVERS**
- Rationalise investment at Local Education and Training Board level
- Introduce an equitable, affordable and sustainable funding model for local services
- Work with partners and suppliers to expand available resources

**INTERVENTIONS**
- Develop leadership model and appoint national healthcare library and knowledge services lead
- Increase central procurement of e-resources
- Streamline and rationalise healthcare library and knowledge services structure
- Engage with DH and Health Education England about options
- Explore options for pooling tariff funding
- Develop and implement an appropriate funding model for local healthcare library and knowledge services
- Demonstrate increased return on investment in healthcare library and knowledge services
- Engage with and influence strategic partners
- Engage with and influence publishers and suppliers
Healthcare library and knowledge services funding is historically complex, characterised by a relatively high dependency on postgraduate medical education funding, and variable levels of investment by employers.

The total annual investment in healthcare library and knowledge services is in the region of £51m. The largest element of this spend is on staff, followed by knowledge resources (databases, journals and books, increasingly in electronic format). Of this investment 89% is made by local NHS organisations, and 11% is made by Local Education and Training Boards (LETBs).

Our ambitious vision can only be realised by making our finite resources go further and make more impact, and improve quality by reducing inappropriate levels of variation.
Expert knowledge support and study space must necessarily be provided locally, but to complement this local provision, we will exploit the potential for doing more just once, and sharing the outputs for the benefit of all. Leadership for ‘do once and share’ initiatives may rest at national, geographical or at Local Education and Training Board level.

With the establishment of Health Education England as the lead body with responsibility for NHS library and knowledge services, we will take advantage of the unique opportunity to start to pool budgets and make strategic and collaborative investment decisions, initially in relation to the 11% of total investment made currently made by Local Education and Training Boards, and with a focus on increasing collaborative procurement of electronic knowledge resources, to achieve larger discounts and improve equity of access.

This will not be without challenge, because of the large current variation in healthcare library and knowledge services budgets at Local Education and Training Board level. Equity of access and opportunity is one of our key guiding principles and only by pooling resources can we start to leverage system-wide improvement.

### 7.D.2 The opportunity to rationalise investment

<table>
<thead>
<tr>
<th>Description</th>
<th>Spend</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaborative spend on ‘national core content’</td>
<td>£2.1m</td>
<td>12%</td>
</tr>
<tr>
<td>LETB area spend on additional e-resources</td>
<td>£2.3m</td>
<td>13%</td>
</tr>
<tr>
<td>NHS organisation level spend on print and e-resources</td>
<td>£17.9m</td>
<td>75%</td>
</tr>
<tr>
<td>Annual spend on knowledge resources</td>
<td>£13.5m</td>
<td>75%</td>
</tr>
</tbody>
</table>

*Based on 2013-14 data*
There is clear potential to further streamline services and improve efficiency at local level, by harnessing technology to streamline ‘back-office’ functions, and through greater collaboration between services.

Recognising the challenges of rationalising funding at local level, we will nevertheless take steps to realise our ambition to introduce an equitable, affordable and sustainable funding model for local healthcare knowledge services.

Initially this will involve:

- exploring options for pooling library and knowledge services funding to support shared services
- facilitating more collaborative purchasing and resource sharing
- contributing to national work to establish education reference costs
- working with employers to ensure they make a proportionate investment in knowledge services for their staff
- ensuring that Learning and Development Agreement quality monitoring processes are robust and reflect our strategic principles

### Sources of income at local organisation level (based on 2013-14 data)

- **Education and training tariff (via Learning and Development Agreements)**
- **Other LETB funding (non-tariff)**
- **NHS employers**
- **Higher education institutions (through service level agreements)**
- **Charitable trusts and local authorities**
- **Source not stated (i.e. combination of tariff and NHS employers)**

- **£45.1m**
- **£21.3m** (42%)
- **£14.8m** (29%)
- **£7.3m** (15%)
- **£667.8k** (1%)
- **£3.5m** (7%)
- **£3.2m** (6%)
7.D.4 Engaging with partners to improve return on investment

We will commission a study of return on investment in healthcare library and knowledge services for the NHS in England. Comparable services in several other countries have already published evidence to demonstrate how investment in library and knowledge services delivers cost savings for health care systems. (HLWIKI International, 2014)

In addition to rationalising investment and working to demonstrate value for money, we will engage with strategic partners who share a stake in ensuring that the staff of NHS bodies, learners, patients and the public have access to and use best knowledge and evidence, to explore further opportunities to optimise investment.

Worth every cent and more

An independent assessment of the return on investment of health libraries in Australia found that they return $9 for every $1 invested.

The results took into account time saved by medical practitioners in searching for answers, and how much it would cost healthcare staff to buy information they gain free from the library.

**7.D.5 Our ambition for optimising investment in NHS library and knowledge services**

**From**

- Healthcare library and knowledge services funding at local level is unevenly distributed and uncertain.
- Highly variable levels of investment by employers in provision of healthcare library and knowledge services for their staff and learners.
- Only £2 million of the total £50 million annual investment in healthcare library and knowledge services is spent collaboratively (on central procurement of e-resources).
- Limited collaborative working or shared investment amongst the different national organisations with a stake in ensuring that the staff of NHS bodies, learners, patients and the public access and use knowledge and evidence.

**To**

- An equitable, sustainable funding model for local healthcare knowledge services, which reflects that to fulfil their purpose and vision, they must be multi-disciplinary, support staff as well as learners, and service as well as education.
- Recognising the value and impact of healthcare knowledge services to their core business, all employers across all sections of the NHS will make a proportionate financial contribution to the cost of ensuring that staff and learners access and use knowledge and evidence.
- A much higher proportion of spend will be made strategically and collaboratively, to ensure that finite funding delivers best value and impact.
- A much higher degree of strategic and collaborative investment, for instance between Health Education England and its key national partners, to leverage system wide improvement for the benefit of all.
We have identified the following metrics for measuring success, to be achieved within three years. These metrics will be reviewed and additional meaningful measures introduced as part of action planning to implement the strategic framework.

**Increase in evidence of impact**
- Increase in use of the refreshed *Impact Toolkit*: used by 95% of services

**Increase in quality**
- Proportion of library and knowledge services over 90% compliant with NHS Library Quality Assurance Framework: 98%

**Increase in use**
- Increase the proportion of staff in four target groups (medical and dental; nursing and midwifery; allied health; scientific and technical) using NHS-funded knowledge resources and services: by 20%
- Across the whole NHS workforce, increase the number of staff using NHS-funded knowledge resources and services: by 10%

**Improvements in service offer**
- Increase in proportion of knowledge services with clinical/outreach librarians: from 58% to 80%
- Increase in production and use of nationally-produced horizon scanning bulletins: 25% increase in Year 1; 10% in Years 2 and 3

**Improvements in knowledge services workforce development**
- Define and publish core and specialist competencies (then set ambitious targets to increase the proportion of staff with these)

**Optimised investment**
- Double the amount of investment in national, collaborative procurement of e-resources
8 Improving quality and demonstrating impact

The NHS Library Quality Assurance Framework (LQAF) England enables robust quality assessment of healthcare library and knowledge services. It provides a clear focus for action planning across all NHS organisations, steering local quality improvement plans by setting direction for service managers.

Health Education England monitors compliance with the Framework and the reports issued provide a transparent benchmark of areas of development required to meet business and client need. We will refresh the Library Quality Assurance Framework to ensure it continues to drive service improvement and is aligned with wider education and service monitoring processes.

Data from LQAF show an overall improvement in quality across the country (2011–2013).

As part of our commitment to quality, knowledge teams will continue to undertake and publish research in the field, thereby building the evidence base for service improvement and sharing best practice.

<table>
<thead>
<tr>
<th>Area</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Midlands</td>
<td>84%</td>
<td>86%</td>
<td>90%</td>
</tr>
<tr>
<td>East of England</td>
<td>78%</td>
<td>77%</td>
<td>84%</td>
</tr>
<tr>
<td>Kent Surrey and Sussex</td>
<td>93%</td>
<td>95%</td>
<td>97%</td>
</tr>
<tr>
<td>London</td>
<td>81%</td>
<td>81%</td>
<td>83%</td>
</tr>
<tr>
<td>North East</td>
<td>79%</td>
<td>82%</td>
<td>85%</td>
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<tr>
<td>North West</td>
<td>86%</td>
<td>86%</td>
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<tr>
<td>South West</td>
<td>91%</td>
<td>94%</td>
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<tr>
<td>Thames Valley</td>
<td>87%</td>
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<tr>
<td>Wessex</td>
<td>87%</td>
<td>90%</td>
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</tr>
<tr>
<td>West Midlands</td>
<td>81%</td>
<td>90%</td>
<td>89%</td>
</tr>
<tr>
<td>Yorkshire and the Humber</td>
<td>89%</td>
<td>94%</td>
<td>95%</td>
</tr>
<tr>
<td><strong>Mean (average) for all 10 areas</strong></td>
<td><strong>85%</strong></td>
<td><strong>88%</strong></td>
<td><strong>91%</strong></td>
</tr>
</tbody>
</table>
8.1 Impact

Through this development framework for the future of healthcare knowledge services, we have demonstrated the ways in which they make a positive impact on patient care by:

• providing information to support evidence-based patient care including treatment decisions
• informing commissioning decisions
• guiding service development decisions
• supporting guideline and pathway development

Feedback also illustrates the value that students and staff place on the services provided to support education, training and continuous professional development.

Thank you for all your help this year. It has made a massive difference to my course to have access to a library that has been so supportive.

Student Nurse, Buckinghamshire Healthcare NHS Trust

Availability of the library and the resources have been pivotal to my professional development. If it had not been for the knowledge and support available, I would not be where I am today as a nurse specialist

Nurse Specialist, Isle of Wight NHS Trust

I went to the library training session with little knowledge and confidence. I am now carrying out thorough literature searches and very confident doing them.

Midwife, Oxford University Hospitals NHS Trust

Our Impact Toolkit is a comprehensive resource and has a solid academic foundation. It provides a template for gathering qualitative and quantitative evidence to demonstrate the value of knowledge services to the NHS. Our next steps are to refresh the tool, promote widespread adoption and publish case studies in order to attract more decision-makers to make best use of these services.
9 Delivering the vision: what changes will you see?

<table>
<thead>
<tr>
<th>Proactive knowledge services</th>
<th>Quick and easy access to evidence</th>
<th>Knowledge services workforce</th>
<th>Optimise funding</th>
<th>Quality and impact</th>
</tr>
</thead>
</table>
| • A standard core offer for all  
  • Personalised services.  
  • Widespread awareness and use of services  
  • Clinical and outreach librarians embedded in teams  
  • Information specialists leading organisational knowledge management  
  • Joined-up approach to promoting information for patients and carers  
  • Services covering larger geographies, with more streamlined ‘back-office’ functions | • Increasingly equitable, seamless and mobile access to high quality electronic resources  
  • Individually tailored current awareness and alerting services  
  • More quality-filtered and synthesised evidence | • Clear national leadership  
  • A national training programme to address development priorities  
  • Redesigned roles and enhanced skills to meet changing needs  
  • Improved career opportunities | • One coherent service - nationally led, locally delivered  
  • Greater partnership working  
  • Concordat with national stakeholders to extend reach and return on investment  
  • Centralised and collaborative procurement  
  • Increased return on investment | • Clear alignment to NHS priorities  
  • Case studies of impact on patient care and safety, patient experience and outcomes |
9.1 How can you get involved?

We are committed to dialogue as we shape the NHS library and knowledge services of the future. Opportunities to initiate conversations will include:

- Face-to-face meetings and presentations where there will be the opportunity to discuss the strategic aims and develop programmes of work together
- Regular briefings to keep partners up-to-date with how the work is progressing
- Development of web pages where key outputs from the programme will be housed and signposted
- A regularly updated blog which will also provide a forum for discussion, comments and queries
- Articles in professional journals and newsletters to raise awareness more widely.

For further information about how to get involved please contact:
HEE.knowledgeforhealthcare@nhs.net
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The framework has been developed with input from:

- Susan Austin – Health Education North East
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11.1 Sources – References


11.2 Sources – Bibliography

CIPD (2014)
Leadership resource summary. [online]
Available from http://www.cipd.co.uk/hr-resources/factsheets/leadership.aspx
(Accessed 20 August 2014).

Department of Health (2013)
(Accessed 20 August 2014)

Department of Health (2013)
(Accessed 20 August 2014)

Hill, Peter (2008)
(Accessed 20 August 2014)

Imison, C. and Bohmer, R. (2013)
NHS and social care workforce: meeting our needs now and in the future? (The King’s Fund Perspectives) [online]
(Accessed 20 August 2014)

‘Working towards liberation: using a collaborative approach to assess the impact of library services within the NHS.’ Paper to accompany presentation given within Health & Biosciences Libraries section at WLIC Conference, Helsinki, 11 to 16 August 2012. IFLA, Helsinki, August 2012. [online]
Available from http://conference.ifla.org/past-wlic/2012/ifla78.htm
(Accessed 20 August 2014)
11.2 Sources – Bibliography

Kruse, K. (2013)
*What is leadership?* [online]
(Accessed 20 August 2014)

Miller, C. (2014)
(Accessed 20 August 2014)

NHS Education for Scotland (2014)
(Accessed 20 August 2014)

NHS Executive (1997)
*Health Service Guideline 97(47) Library and information services.* [online]
Wetherby: Department of Health.
(Accessed 20 August 2014)

National Institute for Health Research (2012)
*Evidence in management decisions (EMD): advancing knowledge utilization in healthcare management. Executive summary.* [online]
Southampton: NIHR Health Services and Delivery Research. [online]
(Accessed 20 August 2014)

‘Building evidence of the value and impact of library and information services: methods, metrics and ROI.’ *Evidence Based Library and Information Practice*, 8(2), pp. 270-274.
(Accessed 20 August 2014)

(Accessed 20 August 2014)
Alerting services: a service, usually provided by email, notifying staff of news or new publications relevant to their area of work.

Bibliographic database: a collection of citations (references), which may include full-text digitized articles, searchable by author, title, or keyword.

Clinical librarian: a role embedded in a clinical team, providing information as required by team members to support evidence-based practice and high quality patient care at the point of care or decision-making.

Current awareness: a service, often provided in bulletin or email form, alerting staff to new or recent publications on topics of current interest; selection of items is often tailored for particular groups or interests.

Document delivery: obtaining for library users materials outside the library’s own collections; may be in print or digital form, free of charge or, more often, purchased by the requesting library.

E-resources: electronic resources, an umbrella term for materials provided and accessed digitally; includes electronic full-text journals, electronic books and electronic databases.

Expert search: a comprehensive literature search conducted by a librarian with expertise and experience in this area of work.

Horizon scanning: analysing emerging trends and developments in order to anticipate future changes which might affect current policy and practice, enabling a longer-term strategic approach to decision making, service planning and policy development.

Information consultancy: a service which includes the provision expert advice on information management and knowledge management

Information literacy: knowing why information is needed, where to find it, and how to evaluate, use and communicate it

Information skills: the ability to locate appropriate information sources and to navigate, evaluate, organise and communicate the information that they find.

Knowledge assets: knowledge relevant to an organisation’s strategy and operations. Knowledge assets can be human (individuals, teams, communities), structural (strategies, policies, processes, procedures) and supporting technologies.

Knowledge harvesting: the process of capturing, eliciting and organising unwritten knowledge from individuals and teams within an organisation, to make tacit knowledge explicit, and to improve and utilise knowledge assets.

Knowledge management: the creation and management of an environment which encourages knowledge to be gathered, shared and used efficiently and effectively within an organisation to develop, improve performance and avoid errors.

Library and knowledge service: a service within an organisation/Trust offering access to a wide range of information sources, both printed and electronic, and support from specialised staff in using these effectively.

Literature search: a systematic search, using a range of indexes and bibliographic databases, for material relating to a specific query or subject, often annotated or including abstracts.

Outreach librarian/service: designed to support the work, learning and development needs of staff in their workplace.