



REPORT OF A NATIONAL REVIEW OF NHS HEALTH LIBRARY SERVICES IN ENGLAND:

From knowledge to health in the 21st Century

Peter Hill
March 2008



“Knowledge enormous makes a god of me.”

“Hyperion: A Fragment” (1820) bk.3,1.113
John Keats (1795-1821)

Content

Foreword	4
Acknowledgements	5
Executive summary	6
Introduction.....	7
Preface.....	8
Authority in the NHS	9
Chapter 1 Terms of Reference and the process adopted.....	11
Chapter 2 The context for this Review	12
Chapter 3 What does the literature tell us?.....	16
Chapter 4 Evidence and its relationship to health and health care.....	20
Chapter 5 Some key concepts that have emerged	23
Chapter 6 The National Knowledge Service and the National Library for Health.....	26
Chapter 7 Some anomalies	27
Chapter 8 What's in a name?.....	31
Chapter 9 Library and knowledge services, and clinical care: Delivering the vision	33
Chapter 10 Library and knowledge services, and clinical care: Governance and assuring quality.....	35
Chapter 11 Library and knowledge services, and clinical care: Changing the culture and developing the workforce	43
Chapter 12 Library and knowledge services, and commissioning and policy making.....	47
Chapter 13 Library and knowledge services, and lifelong learning.....	51
Chapter 14 Library and knowledge services, and research.....	52
Chapter 15 Consequential technical issues	55
Chapter 16 The further development of the National Library for Health	59
Chapter 17 The interface with the public.....	63
Chapter 18 Conclusion.....	64
Chapter 19 Summary of recommendations in order of appearance	65
Chapter 20 Summary of recommendations by target audience	72
Chapter 21 Summary of recommendations: Strategic and operational	89
Chapter 22 Looking to the future: suggestions for implementation	97
Appendix.....	99
An outline biography.....	99
References.....	100

Foreword

To: Mrs Beverley Bryant, Chief Information Officer and Programme Director, NHS Choices, Department of Health, England
Professor Sir Liam Donaldson, Chief Medical Officer
Dr Stephen Singleton, Chair, National Library for Health and Regional Director of Public Health, North East England Strategic Health Authority
Professor Sir Muir Gray, Director of the National Library for Health, and Chief Knowledge Officer

December 2007

Dear Beverley, Liam, Stephen and Muir

In June 2007, I was asked by the Chairman of the Board of the National Library for Health to carry out a Review of NHS Libraries in England and report by the autumn of 2007. Please find attached a Report of my findings.

The context for this Review is the extensive changes and developments that have taken place since the Department of Health last issued guidance for this area of NHS work in 1997. Many changes are technical, whilst others are societal. Added urgency stems from recent reports and reviews concerning the nature and shape of the future National Health Service. These reviews challenge us to aspire to excellence and embrace change.

The key assumption underlying my Review has been that any decision, both in relation to health care, and commissioning and health policy, should be made on the basis of the best available evidence. I would echo the Chief Medical Officer's view, i.e. that it is imperative for the NHS to make the best use of available resources in order to provide high quality, equitable care for patients.

In making recommendations I hope to add the weight of this Review to the range of initiatives designed to improve health and health care. I have made some suggestions for implementing my recommendations, and I have indicated my willingness to continue offering support.

Yours sincerely

Professor Peter Hill

Institute of Health and Society, Newcastle University

Acknowledgements

Firstly, I wish to acknowledge the great debt that is owed to Professor Sir Muir Gray for his leadership and vision in bringing NHS library services to their current elevated position. As Director of the National Library for Health and NHS Chief Knowledge Officer, he has developed a service that is poised to play a central role in delivering world class health care to the people of this country.

In the process of this Review I have been overwhelmed by the willingness of the vast number of people nationwide, both within and outside the health library service, who have given freely of their time and energy to provide evidence and information thus enabling me to understand the nature and needs of, and for, a modern library service to support health and health care.

In addition to the full support of all my contacts, a few people have been particularly helpful. Sir Muir has given me great support, and given freely of his experience, time and ideas. This support has been complemented by the Chairman of the Board of the National Library for Health (NLH), Dr Stephen Singleton, and by Sir Iain Chalmers (Editor of the James Lind Library and Co-Convener of the James Lind Alliance). Whilst I have drawn on the insights and skills of many people, particularly the present Strategic Health Authority leads on library services and members of the NLH Board, I am particularly indebted to Mr Colin Davies (NLH Service Development Manager), who has given me considerable practical help with this project; Kim Montacute (NHS Yorkshire and the Humber Knowledge Service Manager and Chair of the NLH Coordinating Group) who led a literature search and responded to my frequent queries promptly and comprehensively, and Lynda Cox (Project Manager, ICT and KM, North East SHA and Chair of the Advisory Group, NLH Knowledge Management Specialist Library).

I am also more generally indebted to the other members of the National Library for Health team, and members of the National Library for Health Co-ordinating Group, who have all been supportive and helpful.

Finally I am extremely grateful to the very many people who contributed, often in substantial ways, to this Review.

Professor Peter Hill

December 2007

Executive summary

1. Pandora's Box is open. The explosion in the volume and availability of knowledge in the age of the internet and World Wide Web means that the National Health Service (NHS) has to take account of all the implications that stem from this in providing health care for patients. It is inconceivable that such care should not be founded on the best available evidence. Not to use the best available evidence risks harm to, or even the death of, patients.
2. This Review has highlighted four key purposes for library and knowledge services in the NHS. These are to support:
 - Clinical decision making by patients, their carers as appropriate, and health professionals
 - Commissioning decision and health policy making
 - Research
 - Lifelong learning by health professionals.
3. From these core purposes flow the remainder of the proposals made in this Report. The centrality of library, knowledge and information services within the NHS has emerged as a key concept.
4. The Report goes on to analyse aspects of the existing provision for health library services, and makes detailed recommendations to strengthen these arrangements so that they are fit for purpose for the future, and as efficient and effective as possible in making a positive impact on the health of patients and the population. A number of technical issues and implications are raised. The Report also indicates the need for further work to be undertaken.
5. Finally, a number of recommendations are made, along with some suggestions for taking them forward.

Introduction

The National Library for Health is a fabulous concept which intuitively feels right to our staff. The digital information world, the growth of knowledge and the increasing specialization of every health and health service field, the potential gap between new science and the service world, and the ever changing role facing library professionals are all ingredients in a recipe for either confusion and lost opportunity, or a new and better way of benefiting the public and patients. We are building on success, and it is time to accelerate change and secure further successes. It is a pleasure to work with a group of optimistic fellow board members on the National Library for Health Board who can see where we are going. The recommendations of this review start us on a journey to improved library and information services in the NHS. For all of our professional lives, for the education and training of those who will follow us, and for the benefit of our patients now and in the future, this is another important forward and upward step.

Dr Stephen Singleton

Chair, National Library for Health Board

Regional Director of Public Health, Government Office North East

Medical Director, North East Strategic Health Authority

Preface

The National Library for Health is a core function of the NHS and the NHS Institute is proud to host it. Since the library team came to the Institute, we have been keen to support librarians and library services in reviewing and developing their contribution to decision-making, and the quality and safety of care. We have also been pleased to see the developments in improving information for public health professionals, managers and commissioners.

However, it is all too easy for people to take librarians and library services for granted, to assume that they will always be there like they always have been there, but of course the Internet changes everything in the knowledge business – changes everything apart from the need to have well qualified and motivated professionals who understand the needs of users. We were therefore very keen to support this review which was carried out on the same principles and using the same approach as reviews of clinical services, and rightly so.

We look forward to the next year when Peter Hill will be working within the Institute to lead the implementation of the review's recommendations.

Professor Bernard Crump

Chief Executive Officer

NHS Institute for Innovation and Improvement

Authority in the NHS

A new type of authority will be highly influential in 21st century healthcare - sapiential authority, that is, authority derived from knowledge.

Until about 1950, charismatic authority, the authority of the medical profession, was the dominant type of authority. From 1950 onwards, bureaucratic authority became increasingly important as the amount of resources invested in healthcare increased, reflecting the dramatic changes that were taking place, and the potential of healthcare to prevent, treat and cure disease as a result of the healthcare revolution of the 2nd half of the 20th century. However, we have now reached the limits of bureaucratic authority. At the end of the 20th century, eight problems were still outstanding, apparently beyond the ability of bureaucratic solution:

- errors;
- poor quality care delivery;
- poor experience of patients;
- waste;
- unknowing variations in policy and practice;
- failure to introduce high value interventions;
- uncritical adoption of low value interventions;
- failure to recognize uncertainty and ignorance.

One of the reasons for this is that healthcare is just too complicated for any bureaucracy to be perfect for the job. Frequently organisations have not created a bureaucratic solution but part of the problem has been that the limits of bureaucracy have not been recognised, nor indeed its strengths. Bureaucratic authority is needed to employ staff, to manage budgets, and to ensure the resources are used to best effect, but the patient with a chronic disease may be getting care from four or five different bureaucracies and the co-ordination of care should be based on knowledge, rather than setting up another bureaucracy to manage their care pathway.

It should be recognised, however, that promoting sapiential authority, authority based on knowledge, is not a managerial innovation. It is also a reflection of what Manuel Castells calls the “third industrial revolution”, and he cites the revolutionary forces as being citizens, knowledge, and the Internet. Even if we were to do nothing within healthcare, citizens and the Internet would be using knowledge to change the way in which healthcare is organised and delivered. All we can do is to seek to recognise what is happening and to use these forces as well as we can.

Library services play a vital part in any knowledge economy. Librarians are professionals best trained to manage documents, using the term “document” to mean any representation of a knowledge object – digital or paper. They are trained to identify the needs of people working within the organisation and to help those people with their needs. Library services play a part of central importance in education and research as well as in the delivery of clinical care and the management of clinical services. Library services also focus on public health and commissioning, and are ideally positioned to play a part in the promotion of health and the prevention of disease in the management of healthcare.

The authority of knowledge will be evident in many places in the 21st century. Patients, for example, will be expected to play a part in managing the evidence on which clinical decisions are based, and given the support and skills to do so if they want. New types of service management will evolve, cutting across bureaucratic boundaries, and the main tool is the Map of Medicine to create systems of care, based on knowledge, and required by commissioners.

All of these communities require the recognition of the skills potential of librarians and library services and this review focuses on the role of library services in 21st century healthcare.

J A Muir Gray, Kt, CBE, DSc, MD, FRCPSGlas, FCLIP
Director – National Knowledge Service
Chief Knowledge Officer to the NHS

Chapter 1

Terms of Reference and the process adopted

- 1.1 I was asked by the Chairman of the National Library for Health (NLH) Board, at the instigation of the NLH Director and NHS Chief Knowledge Officer, having been nominated by the Chief Medical Officer and on behalf of the Chief Information Officer of the Department of Health, to undertake a Review of the library and knowledge services in the National Health Service (NHS) in England, and to produce a Report. The full terms of reference for this work are contained in the Project Initiation Document ¹.
- 1.2 In carrying out this Review the following open and inclusive process was adopted.
- 1.3 As well as reviewing relevant literature, I have visited many NHS and non-NHS health libraries in most parts of England. I have met with individuals, groups of librarians, and their support staff, as well as individual, and groups of, NHS library users. I have also met with a range of individuals and other groups with a role or interest in health library services. In addition three conferences have been held in Bristol, Birmingham and London; these were open to people to make their own observations, through verbal or written contributions. These conferences also enabled me to report on the progress of my Review and emergent findings. I have also received and reviewed a considerable number of other written submissions.
- 1.4 Given the time scale and resources available it has not been possible to meet with everybody who might have an interest in this area of work. Nevertheless I am satisfied that I have identified and covered the most important issues and as many other related aspects as possible.

Chapter 2

The context for this Review

- 2.1 The National Health Service (NHS) remains challenged by change, and continues to have a high political profile. This is an observation and not a complaint: this is how things are. Change, whilst problematic at times, offers great opportunities, as well as challenges.

Modernisation

- 2.2 An extensive programme of modernisation is underway in the NHS, accompanied by unprecedented levels of public funding ².
- 2.3 Policies, that arguably started with the NHS Plan ³, are designed to provide greater choice for patients ⁴, and the devolution of decision making nearer to the front line ⁵, but with a much greater involvement of patients in the decision making process ⁶.
- 2.4 The progressive increases in levels of funding have been associated with a number of reports relating directly or indirectly to financial matters, and their relationship to various aspects of service provision and delivery. These include the Wanless and Gershon Reports ^{7 8}.
- 2.5 Lord Darzi has reviewed the NHS in London ⁹, and has been asked by the Prime Minister and the Secretary of State for Health to carry out a wide-ranging Review of the NHS ¹⁰. Lord Darzi believes that the NHS is “perhaps two thirds of the way through its reform programme”. He thinks our “ambition should be nothing less than the creation of a world class NHS that prevents ill health, saves lives and improves the quality of people’s lives.” His wide-ranging Review is currently well underway, but his London review identifies issues and makes recommendations that have wider utility. His current Review represents an opportunity for this Report to have a significant influence since, in his interim report, he wishes to “improve the evidence base” by creating a “national clinical evidence base ... housing what local, national and international clinicians believe to be the best available evidence about clinical practice, pathways and models of care and innovations”. This work will involve relevant bodies such as NICE (the National Institute for Health and Clinical Excellence) ¹¹, and including the National Library for Health.
- 2.6 Of relevance, too, are changes in education and training, some of which are profound. Within the NHS, themes such as lifelong learning and multi-disciplinary working and learning ¹² have been steadily developing over a number of years ¹³. Other changes, such as Modernising Medical Careers (MMC), have been controversial ^{14 15 16}. The report of the Tooke inquiry into MMC ¹⁶ (page 85) makes specific reference to “The doctor’s role (which) requires a profound educational base in science and evidence based practice as well as research awareness”.

Research and evidence into practice

- 2.7 Of particular significance to the context of this Review is the considerable time which has elapsed since it was first shown that patients have been harmed by failure to prepare scientifically defensible reviews of existing evidence ¹⁷. In 1992 Antman and colleagues pointed out that some treatments continued to be recommended by clinical experts, despite evidence that they had no effect on mortality or were potentially harmful ¹⁸. If, for example, original studies of the effects of clot busters after heart attacks had been systematically reviewed, the benefits of therapy would have been apparent as early as the mid-1970s ¹⁹.
- 2.8 Some consider it to be unscientific and unethical to embark on new research without a systematic analysis of what can be learned from existing research ¹⁷. The Chief Medical Officer (CMO) has drawn attention to this concern on a number of occasions. In his annual report for 2005 ²⁰ in the chapter on reducing variation in clinical practice to deliver effective treatment equitably, he highlights a number of examples. Of relevance to this Review, he points out that inappropriate variation may be a function of poor knowledge. In particular, the CMO recommends that attention should be paid to the active management of knowledge and to the roles that the National Library for Health and Connecting for Health can play in improving and systematising access to quality-assured information at the time and place of need.
- 2.9 Additional emphasis to this Review has now been given by the Report of the High Level Group (HLG) on Clinical Effectiveness ²¹.
- 2.10 In his introduction to this report, the CMO highlights the imperative for the NHS to make the best use of its resources to provide high quality, equitable care for patients. Suggestions include the need for a more effective partnership between the NHS and higher education; arrangements for oversight of the whole innovation pathway; a National Institute of Health Research (NIHR) that will include translating research findings into improved outcomes for patients; and more active knowledge management to improve access to quality assured clinical information.
- 2.11 The view of the High Level Group is that the NHS does not systematically address evidence-based clinical effectiveness (EBCE) ²¹, although it acknowledges that EBCE is complex and requires a systematic and organisation-wide approach.

The challenge for health libraries

- 2.12 Elsewhere, there is a fear that healthcare libraries will have difficulty in surviving unless librarians can show that they support the mission of the organisation and be part of the evidence based health care movement ²². Ultimately all NHS organisations exist to provide the best possible patient care. The challenge for health care librarians is to demonstrate that the services they provide actively support clinical care.

2.13 This challenge to libraries is not unique to the health service. In the wider community “Reports of the death of the library have been greatly exaggerated”²³. Public libraries are busy re-inventing themselves²⁴. All new library buildings of the past decade in the UK are packed with computer terminals, technology suites, seminar rooms, and hot-desking facilities²³; these measures are part of the way of increasing access to knowledge and other cultural resources.

The wider world

2.14 It is also important to consider the wider context. There are other relevant changes taking place outside the NHS, indeed on a world wide scale. Alongside the burgeoning NHS policy agenda, there are rising expectations among patients and the population at large, fuelled by better education and an ever increasing range of technological developments and possibilities²³. The “death of distance” means that health, and indeed health care are becoming increasingly global^{25 26}.

2.15 Part of the global context is the rapid expansion of knowledge, coupled with its greater dispersal, such as through the internet²⁴ and digital developments in publishing. The increase in availability of knowledge stems partially from the digitising of books. Potentially this will create “the biggest library ever built”²⁷ with millions of books a year appearing online. Paradoxically, technology has not supplanted paper books, which we are reading and buying more than ever. The printed book will therefore not die overnight²² but more and more information will not be in paper form.

2.16 The massive explosion in the amount and availability of knowledge is such that Pandora’s Box could be considered to be already wide open^{28 29}. Pandora and her mythical box were the bearers of evil for mankind³⁰. The ready availability of knowledge, for example on the World Wide Web is considered “evil” by some. Certainly its content and quality are often a source of concern.

2.17 The knowledge economy has become a reality for many organisations and nation states. The success of organisations in this economy depends on the ability of their leaders to create a culture and style where knowledge is valued, nurtured and used. Chief Knowledge Officers from a number of leading organisations have developed a “Knowledge Proposition”³¹.

2.18 ‘Expertise, information and ideas’ have been substituted for the term ‘knowledge’, perceived by some to be unhelpful. The Knowledge Proposition states that there is significant advantage to be gained if expertise, information and ideas are continually developed and used through three dimensions of intervention – people, processes and tools. For organisations with an orientation to operational excellence, such as the NHS, this approach can drive improvement in efficiency, effectiveness and cost reduction.

2.19 In addition there have been developments in social software, with firms considering the implications as to whether or not such technology can aid the distribution of knowledge within companies, and whether its use by staff at work can contribute to effectiveness and efficiency³².

- 2.20 The relevance of this context will be explored further in relation to particular themes and aspects identified in this Report.

The United Kingdom dimension

- 2.21 We must also take into account the progression to devolved administrations in the four countries of the United Kingdom. This is a Review of NHS library arrangements in England. However, much of the evidence, adductions, deductions and recommendations will have relevance and utility for all four countries of the UK.

Chapter 3

What does the literature tell us?

- 3.1 What does the literature tell us that is relevant to NHS library services? In Chapter 2, the current context within the NHS and more widely, has been explored, with reference to the literature.
- 3.2 Within the NHS and with particular regard to NHS libraries, given the time constraints and the resources available for this Review, it has not been possible to carry out an exhaustive literature search and review. The Library and Information Science Abstracts database lists 301,788 items as of November 2007³³. There is published work and research, based on both quantitative and qualitative methods. Overall, the literature is comparatively sparse, especially in the area of measuring the impact of health of library and knowledge services. Within this body of published work, however, a number of themes emerge that provide an evidence base underpinning the direction and in some respects the detail of what is proposed and recommended in this Report.

The global context

- 3.3 Some references, which relate to the global context, are relevant to this Review. For example, the paperless office has been heralded since the 1980s, but evidence from several sources estimates that our consumption of paper in the UK is still rising by about 5% a year, and that most of the costs of paper, printing, storage and disposal go unnoticed³⁴.

NHS health libraries and librarians in the last ten years

- 3.4 The extant guidance for health library and knowledge services remains HSG(97)47 Library and information services³⁵. Now ten years old, the principles set out in the guidance are judged still to be relevant. What has changed massively is the structural setting in the NHS.
- 3.5 In June 2004 the NHS Information Authority, in supporting the development of the National Library for Health (NLH), commissioned a study of the financing of NHS libraries and information resources. Although the main focus of the final report was on funding, there was related research on relevant wider aspects³⁶. This report noted that the landscape of the NHS was moving and modernising, with a stronger emphasis on evidence-based practice and with an increasingly patient-centred focus. Within this modernising topography, NHS libraries were considered to have an integral role to play. The role of the NHS librarian was not considered to be diminishing, but merely evolving. The report noted that, following the Gershon Review of civil service activities in the UK⁸, an efficiency savings target of 2.7% per annum had been established for the Department of Health (£6,470 million in 2007-8).

- 3.6 Importantly, the Huggins report identified the annual spend on NHS library services as being £52.37 million, the source for the often quoted figure of about £50 million. NHS education centre libraries were identified as receiving an annual income of about £150K, with over 40% coming from the Multi-Professional Education and Training levy (MPET), and over 20%, the second largest source, from each library's own NHS Trust. Overall the report considered the NHS library funding arrangements to be "unnecessarily complex and unsustainable"³⁶ (page 6) and "under funded"^(page 61). This report, like others referred to below, also indicated that assessing value for money (for the NHS) and the impact of NHS library services on patient care was "complex and difficult to measure"^(page 83). However, a number of examples of good practice were identified^(page 89), including: clinical librarians; 'Knowledge Share' librarians (who, operating in line with evidence-based guidelines, fed information tailored to the needs of those registered with the librarian); and outreach librarians.
- 3.7 It is worth noting that, during the course of evidence gathering for this Review, considerable doubt was cast on many of the detailed findings in the Huggins report. One commentator made the somewhat pithy observation that "(Huggins) did not do what it said on the tin"!
- 3.8 There is renewed interest in clinical librarians world-wide, who have been around in some shape or form for some thirty years. Recently they have been the subject of a number of studies and systematic reviews in this country and elsewhere^{37 38 39}. Clinical librarians seek to provide quality assured information to health professionals at the point of need, to support clinical decision making. The literature appears to be generally descriptive rather than comparative, qualitative or analytical. However, there is some evidence of services provided by clinical librarians described as being useful and of high quality, and some evidence that these services contribute to improved patient care.
- 3.9 There are particular difficulties associated with providing library and knowledge services in primary care and mental health care. The user groups associated with these aspects of care are largely community based, and difficult to reach due to their dispersed, fragmented and mobile nature. During this Review, for example, there were several examples of single mental health trusts each with over a hundred sites and some physical library presence on as many as ten or so of these. There are some examples of outreach arrangements for the provision of NHS library services to such users, and some attempts to evaluate their impact⁴⁰. Although successful in some respects, the longer term impact in terms of improved patient care is difficult to assess. However, examples of positive impact were identified.

Innovations

- 3.10 It is exciting to find examples of innovation. One notion is based on seeing health librarians (as well as health professionals) as "guests in the lives of patients"⁴¹, a potentially powerful philosophy when designing services for patients. Another innovation is the "Chasing the Sun" project⁴². This service is an after-hours virtual reference service between two groups in the UK and Australia. Use is made of the

time difference between the two countries. The service makes it possible for medical practitioners to be in contact with librarians when urgent help is required in finding clinical medical information out of hours to answer urgent patient-related queries. This service was observed and is shortly to be expanded to include Canada.

- 3.11 In the changing, and sometimes fast-paced, environment of health care, on occasions health professionals sometimes need instant access to the best possible evidence. In order to use this evidence, they require not only the relevant knowledge and skills but, more fundamentally, a commitment to the notion of best evidence-based practice.
- 3.12 In parallel, the challenge for information professionals is to deliver a new generation of electronic information services personalised to the specific needs of their users. There has been some research into this relatively new field ⁴³.

Measuring the impact of health library and knowledge services

- 3.13 Health librarians and information professionals working in the field of health care should always seek to make a positive impact on patient care. However, this is very difficult to measure.
- 3.14 Of particular relevance are studies that attempt to assess or measure the impact of providing library and knowledge services to health professionals, as a way of influencing clinical decisions. This is perhaps not surprising, given that it is particularly difficult to design studies that can measure the impact of a particular piece of knowledge or information on any individual clinical decision or the effect on any population.
- 3.15 Nevertheless research studies do show that professionally led library services can have an impact on health outcomes for patients, and may lead to time savings for health care professionals ⁴⁴. This effect has been shown in a number of countries ⁴⁵. It is difficult enough to demonstrate an impact from such services for care provided in hospitals, but even more difficult in primary care. There is a small body of evidence, however, to demonstrate the positive impact of library and knowledge services, not only on the direct care of patients but also on the care of future patients through the application of evidence to multiple patients ⁴⁶.
- 3.16 Evidence-based clinical practice is an approach to decision making in which the clinician uses the best evidence available, in consultation with the patient, to decide upon the option which suits that patient best ⁴⁷. This definition is explored further ⁴⁸. More relevant to this Review is the exploration of its importance to librarians ⁴⁹, not least because of the well recognised phenomenon of knowledge decay in memory ⁵⁰.
- 3.17 Library standards and performance measurements have in the past been based primarily on inputs (such as funding, staffing resources, collection size), and throughputs (such as numbers of people using the service, numbers of requests for books, journals and searches) ⁵¹. Brophy describes approaches that look at

economy, efficiency and effectiveness, and examines inputs, processes, outputs, outcomes and impacts ⁵².

- 3.18 What the evidence also shows is that, for this modern paradigm, there are methods that can usefully be applied to advance the scientific base. In recent years this has evolved into Evidence Based Library and Information Practice (EBLIP) ⁵³. Methods, literature and evidence continue to grow ^{54 55} and, crucially, now embrace performance measurement ⁵⁶.
- 3.19 These references demonstrate that a range of methodologies can help, for example, the application of critical incident approaches, and researchers, including those from qualitative disciplines, may be able to further illuminate the challenge of measuring impact. This need not exclude the application of methods involving proxies for such measurement. The value of researching both structure and process as contributors to outcome, as suggested by Donabedian ⁵⁷, should also be recognised.

Life long learning

- 3.20 The issue of lifelong learning is relevant to the needs of all health professionals, including librarians. It is here that the whole realm of information literacy is also relevant ^{58 59}.
- 3.21 This brief review of relevant literature supports the key theses and themes that have emerged during this Review. Other relevant references are made directly as appropriate throughout this Report.

Chapter 4

Evidence and its relationship to health and health care

- 4.1 Despite the relative paucity of studies that are able to demonstrate a direct and positive impact of the provision of library and knowledge services on patient care, it is inconceivable that the principle of applying the best available evidence in making decisions about care, should not apply.
- 4.2 In order to make decisions, related to health and health care, reliable information is required, by:
- Patients (and their carers)
 - Practitioners, and
 - Policy makers.
- 4.3 Potentially, there is an enormous amount of material available, so questions arise about what is reliable, and how to filter out material that is unreliable. There are now a considerable number of approaches that filter and assess the evidence and information. It is possible to construct a picture of what filtering level is targeted at front line health professionals. This can be shown in Figure 1.

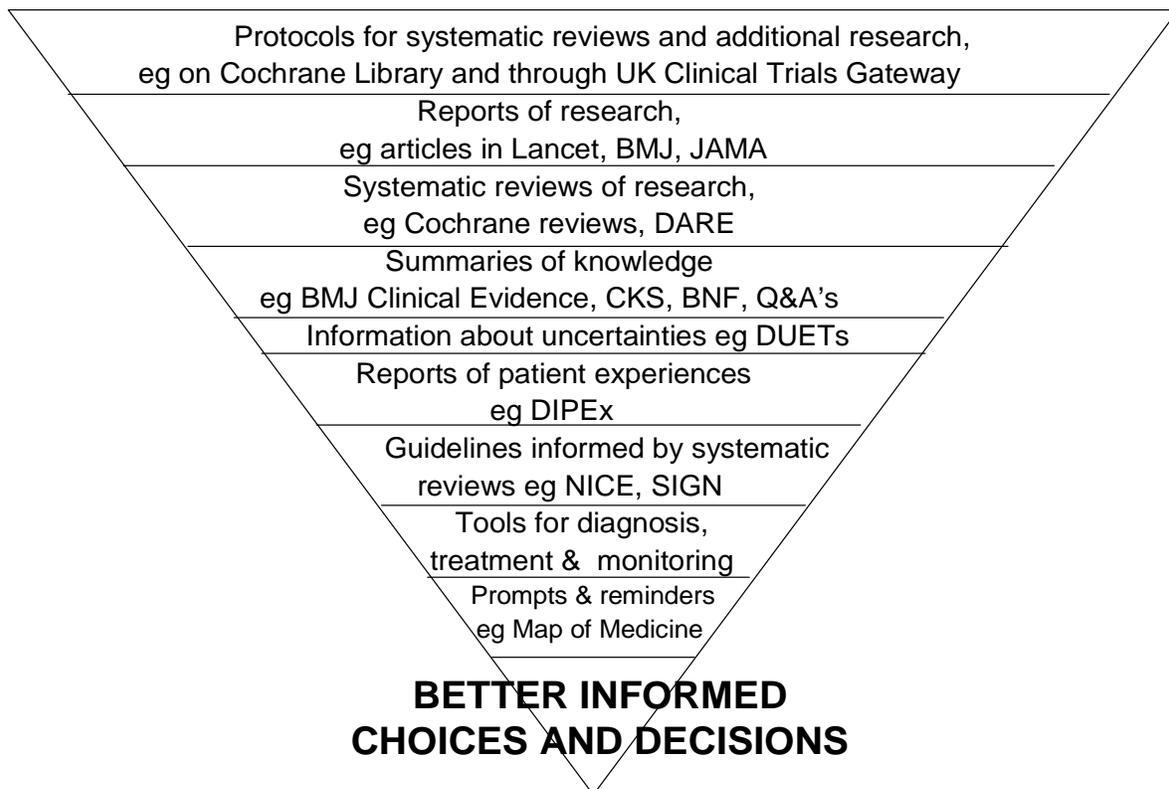


Figure 1

JA Muir Gray 2007 NKS

- 4.4 In seeking to deploy resources to maximum effect, it is important to decide where best to concentrate. Balances have to be struck in providing information for clinical staff, policy makers, patients and researchers. Whilst moves towards open access are supported (see chapter 14 paragraph 15), there is a danger of an unfiltered avalanche.
- 4.5 The solution is likely to be a combination of top-down and bottom-up. At the top will be filtering organisations or arrangements, such as NICE and the National Knowledge Service. For front line health professionals there will be the helpful local health librarian.
- 4.6 This can be shown diagrammatically as in Figure 2.

National Knowledge Service

“Information system as a supplement and extension of the human memory, delivering knowledge where and when it was needed”

J A Muir Gray 2006 NKS

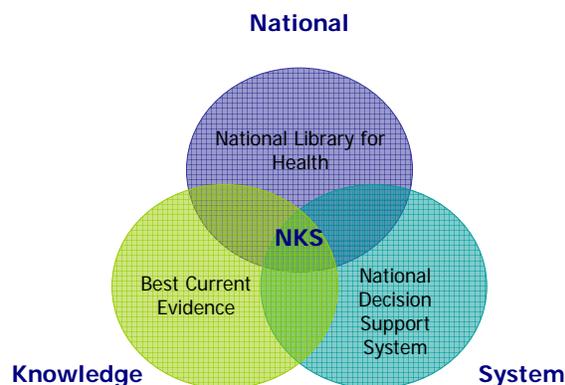


Figure 2

- 4.7 This model, however, does not sit comfortably with present structures in the health service. For example, much knowledge and evidence sits in silos, such as with specialist societies and colleges. Organisation of information therefore has to take account of this structure; this theme is developed later in chapter 15.

Chapter 5

Some key concepts that have emerged

- 5.1 A number of key concepts have emerged from this Review. It has been said “That form ever follows function”⁶⁰. Although originally derived from an architectural context, the notion is based on the relationship between the form of an object and its intended purpose. In a more modern context, structure is said to follow strategy in organisations⁶¹. Strategy is the determination of long-term goals and objectives, courses of action and the allocation of resources. Structure is the way in which the organisation is put together to administer and manage the strategy.

The core purposes of NHS health library and knowledge services

- 5.2 It is important to understand that, whilst the NHS has an overall focus on health, most of its core business is about providing care for patients. Therefore, the foremost purpose for library and related services is to support the making of clinical decisions involved in the care of patients. Such decisions should normally be made by patients and (sometimes with, and occasionally only by) carers, in partnership with relevant health professionals. These decisions should always be informed by the best evidence available, because otherwise death or harm may befall patients, as recent examples have vividly shown^{62 63 64 65}.
- 5.3 These two episodes are exemplary because of the numbers of deaths involved; thousands in relation to the CRASH (corticosteroid randomisation after significant head injury) trial, and some 90 people in the investigation into an outbreak of *Clostridium difficile*.
- 5.4 For many years, corticosteroids had been used to lower intracranial pressure after head injury. In the 1990s, reviews of the evidence called the effectiveness of this approach into question. A large trial was needed to answer the question definitively, hence the CRASH trial. The result was a surprise, and alarming, with a large number of excess deaths. This treatment seemingly caused more than 10,000 deaths during the 1980s and earlier⁶³.
- 5.5 Outbreaks of *Clostridium difficile* at Maidstone and Tunbridge Wells NHS Trust prompted a Healthcare Commission investigation. About 90 patients died from this infection. Trust guidelines for the management of patients infected with *Clostridium difficile* were not clear, and appropriate measures to manage and prevent infection were not put in place⁶⁵.
- 5.6 Whilst there may be evidence of effective interventions, for many interventions there is uncertainty, and this may be just as important to know⁶⁶. It is this sort of gap that the Database of Uncertainties about the Effects of Treatments (DUETs) is designed to address⁶⁷. This parallels the second purpose: making commissioning decisions and developing health policy, i.e. the best available evidence should inform such decisions.

- 5.7 The third purpose for NHS library, knowledge and information services is to support lifelong learning¹². Every member of every discipline has an ethical responsibility to keep up to date and remain abreast of the most recent developments in their field.
- 5.8 For doctors, this requirement is explicit in “Good Medical Practice”⁶⁸, the guidance document from the regulator of the medical profession. “Good Medical Practice” sets out the principles and values on which good practice is founded. Although the guidance is addressed to doctors, its principles have a wider utility. For the purpose of this Review, the guidance sets a number of benchmarks. In providing care, doctors are expected to “provide effective treatments based on the best available evidence”. They are also expected to keep their knowledge and skills up to date throughout their working life. There is also a requirement for doctors to “help resolve uncertainties about the effects of treatments”.
- 5.9 The fourth purpose of library and knowledge services in the NHS is in relation to research. A simple model of research consists of posing or refining a research question that is based on an understanding of the most up to date position from the available evidence about the field of enquiry (the role of library and related services), before deciding on the most appropriate method. This process is an iterative one. To assess the contribution of a new study, its results must be considered systematically in the context of an up-to-date review of the totality of the relevant evidence¹⁷.

Recommendation 1:

The Department of Health should issue formal guidance to the service indicating that NHS library, knowledge and information services are essential for supporting:

- **clinical decision making**
- **commissioning decisions and policy making**
- **life-long learning by all NHS staff, and**
- **research.**

The structure of the NHS in relation to health library and knowledge services

- 5.10 The present structure of the NHS should be considered as operating on different levels.
- 5.11 At a national level, the Department of Health determines policy and sets strategic direction, on behalf of the government of the day, and there is also the most senior executive arm of the National Health Service, presided over by its Chief Executive.
- 5.12 The second, regional, level can be considered in different ways.
- 5.13 There are now approximately 130⁶⁹ Primary Care Trusts (PCTs). PCTs are responsible for ensuring that the health needs of the local community are being met. PCTs now control 80% of NHS budgets and are perceived by the centre as being at the heart of the NHS. In some areas, groups of PCTs have come together to form larger commissioning organisations to increase their effectiveness through greater power to purchase services for their resident populations, and to increase their efficiency through economies of scale. Some PCTs have retained provider

functions, such as the provision of community services (for example nursing, health visitors and health promotion resources). Elsewhere such services may be provided by a community trust, separate from the commissioning function.

- 5.14 The role of Strategic Health Authorities (SHAs) is to ensure the delivery of stronger commissioning functions⁶⁹, and they are the vehicle for performance management of NHS organisations within its area. Within SHAs there is a regional librarian or similar.
- 5.15 At a local level there are hospital trusts. Trusts may be acute, mental health, occasionally specialist, and some are foundation trusts (with additional freedoms, finance and accountability arrangements).
- 5.16 These levels have been defined because they are relevant to NHS health library and related services.
- 5.17 There are some matters relating to NHS library and knowledge services that should be undertaken only once for the whole service, and hence carried out at national level. Examples would be the procurement of journals for the NHS; issues such as copyright and licensing. This issue will be considered later.
- 5.18 As well as performance management of NHS library and knowledge services, there are a number of functions that should fall either to PCTs (or aggregated commissioning organisations) or to SHAs. These will be considered in due course.
- 5.19 At a local level, within individual trusts, there is a range of responsibilities, particularly related to the provision of library and knowledge services, which will inevitably fall to them. These too will be considered further, later in this Report.
- 5.20 This Report will not be prescriptive about the detailed arrangements for the provision of NHS library services and related matters. These are matters for chief executives, librarians and others. Hopefully the ideas, theses and evidence derived from this Review and developed in this Report will provide guidance to support such arrangements, in order to meet the purposes of NHS library and knowledge services set out at the beginning of this chapter.

Chapter 6

The National Knowledge Service and the National Library for Health

- 6.1 A detailed analysis of the National Knowledge Service and the National Library for Health, and their structures and functioning, is not part of the brief for this Review. Nevertheless, the findings and recommendations of the Review will have a profound effect on their agendas, particularly for NLH. Some observations may therefore be helpful.
- 6.2 The National Knowledge Service was announced by the Department of Health in its response ⁷⁰ to the Report of the Public Inquiry into children's heart surgery at the Bristol Royal Infirmary between 1984 and 1995 ^{71 72} and in the House of Commons on 23 June 2003 ⁷³ when the National electronic Library for Health (NeLH) was also mentioned. The stated intention of the NeLH was the provision of high quality health information resources for use by the public as well as NHS staff. With the development of a partnership with the 1275 staff delivering the NHS health library services, the strategic outcome was that the NeLH subsequently became the National Library for Health ⁷⁴. The National Knowledge Service was to develop a co-ordinated approach to information services across the NHS ⁷³.
- 6.3 The starting point for the National Knowledge Service is that "Knowledge is the enemy of disease" ^{75 76}. Its thesis is that the application of what we know will have a bigger impact on health and disease than any drug or technology likely to be introduced in the next decade. The NKS believes that eight major health care problems can be prevented or minimised:
- unknowing variation in clinical practice and service delivery
 - errors of commission and omission
 - waste
 - failure to implement new knowledge and technology systematically and appropriately
 - over-use and under-use - inappropriate care
 - unsatisfactory patient experience
 - poor quality clinical practice
 - failure to manage uncertainty or ignorance.
- 6.4 The National Knowledge Service (NKS) has an overarching role that is fundamental to the main thesis stemming from this Review. That role is to ensure that every decision about the care of a patient can be supported by the best current evidence. The NKS brings together arrangements for providing the best current evidence, the National Library for Health (NLH), and the National Decision Support Service ⁷⁴.
- 6.5 The role of the NLH has also recently been given added emphasis by both the Darzi Review ¹⁰ the Tooke Report on clinical effectiveness ²¹.

Chapter 7

Some anomalies

- 7.1 During this Review a number of anomalies were discovered. Some of these were accidents of history; others were simply absurd. Examples will be used to highlight issues. Suggestions for addressing them will be made here or in relevant sections and chapters.

The culture of the NHS

- 7.2 There are examples where the pervasive NHS culture means that behaviours may transcend or defy the evidence, and this may impact adversely on clinical practice. Examples provided include the question of axillary versus elbow crutches. Whilst conventional wisdom holds that axillary crutches are best, evidence indicates that this is not so. Axillary crutches also happen to be cheaper than elbow crutches. An example was provided where a particular personal experience by an experienced and senior clinician of a bad outcome led to the subversion of evidence based policy.
- 7.3 Another example of an NHS culture based problem relates to falls in the elderly. A multidisciplinary approach to such cases led to the formulation of appropriate evidence based care plans, often including simplification of medication regimes. It is not uncommon for reinstatement of the earlier (inappropriate) medication regime on referral back to the general practitioner to occur, highlighting the need for the application of evidence to the whole of the care pathway.

Assuring quality

- 7.4 A system known as Helicon has been used for some time for quality management of NHS library services. This is a system of peer review in place at SHA level. One example encountered during this Review relates to a health library with an experienced and able librarian recently in post. The library had received approval under the Helicon system some two or three months earlier. However, in the view of the new librarian, based on evidence in a number of domains, the library was not “fit for purpose”. Such anomalies indicate that the structures and processes, which are the focus of the Helicon approach, are not sufficient, and that attention to outcomes is also required. Any accreditation criteria need to be externally valid in relation to the available evidence, as well as being internally valid to the context of a particular library. All systems need to demonstrate robust evidence of conformity with national standards, and enjoy the confidence of the NHS.

Access

- 7.5 One medium-sized acute hospital trust had a conventional health library, originally established, as were many such libraries, as a postgraduate medical library within

a postgraduate medical education centre. Such centres are now multi-disciplinary education centres, and the library in question is multi-disciplinary and multi-professional. On the hospital site is an out post of the neighbouring mental health trust, providing care for people with drug and alcohol problems. The staff in this out posted service are employees of the mental health trust. As they are not employees of the acute trust they are not allowed to use the health library.

- 7.6 In another acute trust with a similar health library, a consultant can request almost any reasonable service at no direct cost. This is probably universal. An occupational therapist working in the same hospital has an elderly patient at significant risk from falls. The therapist is aware of a tool that would allow her to assess the risk and put in place strategies for prevention. She sought the help of the hospital librarian to track down the tool. The librarian helped by providing the therapist with a copy of the information she needed. The therapist was charged £6.30 for this service.
- 7.7 These two examples illustrate the fundamental need for full and equitable access to library and knowledge services by all NHS staff. This issue is addressed later in the Report
- 7.8 A small number of imaginative arrangements to have a single health library providing services to a number of NHS organisations were seen during this Review. Although there are potential economies of scale, there can be problems in trying to meet disparate needs. One example seen was that of a health library service in an acute trust which had contracts to supply, in addition, library and knowledge services to two PCTs, a mental health trust and a higher education institute. The biggest problem identified was the exorbitant car parking charges endured by staff from this service traveling to each of its constituent organisations.

Procurement

- 7.9 In the field of procurement a number of anomalies were observed.
- 7.10 Journals are frequently marketed and purchased, in bundles, both nationally and locally. It may be understandable that publishers or their agents attempt to market less popular journals by linking them with sought after publications. However, the content of such bundles may often appear odd, even absurd, and may impact on the cost to tax payers. For example, one such bundle of medical journals also included “Good Housekeeping”!
- 7.11 A related anomaly concerns highly restrictive covenants in purchasing contracts. Sometimes it is not possible to cancel journals that are no longer required, without losing journals that are required. The notice periods appear on occasions to be excessively long.
- 7.12 There is a general move towards the electronic provision of journals. Some hospitals that were aggregated to form bigger trusts, with single budgets and policies, previously had their own procurement arrangements. They now find publishers unwilling to provide single licenses, so some library services have to buy multiple licenses for a single organisation. Not only is this expensive but some hospital sites are unable to share materials or gain access across the organisation.

An arbitrary rule based on distance e.g. three miles apart, appears to have been externally imposed in some cases.

- 7.13 Another anomaly linked to procurement and access, is the question of VAT. This is payable on electronic journal procurement but not on paper journals!

Recommendation 2:

As part of the regulatory process, the Department of Health should ask the appropriate Government authority to look at the anomalous issue of VAT on electronic versus paper journal procurement by the NHS.

- 7.14 The rate of inflation of journal subscription prices presents a significant problem. It is frequently well above NHS inflation levels, which are linked to a national arrangement, of the order of 2.5%. Some annual rises in subscriptions are of the order of 8%. In addition, such rises are often notified after national and local budgets have been set.

Some “lost tribes”

- 7.15 Some of these solutions are about enabling access for people who are registered with higher education institutes for health related courses or programmes. They “belong” to their host HEI but frequently undertake work and training in NHS premises in order to gain experience and develop skills in the care of patients. These students are not NHS employees, but need access to library and knowledge services to learn and work.

- 7.16 One example of good practice highlighted the less good practice of other services. Students such as those identified in the previous paragraph may live in one area, be registered with an HEI elsewhere, and be on placement in an NHS organisation somewhere else. The good practice encountered was of students going home, for example out of term time, but continuing to pursue their academic work. In order to do so they sometimes seek the help of the local NHS health library services, and, in a number of examples, after appropriate checks, are warmly welcomed. This practice is not universal but should be.

- 7.17 There are some 250,000 registered ATHENS users. The NHS employs approximately 1.4 million people. The NLH holds the national contract for Athens and is establishing a national “Knowledge Sign-On” for the NHS. A new contract has been awarded. Integral to this contract is a programme to migrate the NLH Knowledge Sign-on in that allows it to be integrated with HE frameworks and to join up with other NHS sign-ons. There is thus the possibility of a single sign on for staff between these boundaries. An essential part of this contract will be the development of the NLH Knowledge Sign-on to “follow” the NHS staff throughout their training/career path within the NHS

Recommendation 3:

All NHS health professional staff should be registered automatically as ATHENS users.

Duplication and waste

- 7.18 All staff involved in providing NHS services should have access to NHS library and knowledge services. Access, however, remains a significant issue. A multitude of solutions have been reached to address this in local areas. Whilst this is admirable, it represents duplication of effort, and often expense, with consequent opportunity costs.
- 7.19 A number of other examples of duplication were observed, such as a variety of current awareness bulletins. There would be utility and economies of scale in systematically unifying some of these initiatives.
- 7.20 For example, the development of alerting and current awareness services should follow the principle of “Do Once and Share”. That is, they should be done once, where they are done best and shared nationally.
- 7.21 In relation to this, the NLH Design Authority have included, in their work on Enterprise Architecture, a framework for “Channels” The NLH Channels Framework will develop an infrastructure to allow networks of librarians to collaborate on producing alerts and current awareness feeds electronically. These would then be made available through a variety of channels, including web feeds, email and paper. Local librarians will be able to add “local flavour” and channels will be promoted to Athens users on registration. This will maximise the re-purposing of current awareness work, whilst collaboration will promote quality improvement. Individual users will be given tools to aid their discovery, subscriptions to feeds, and they will be able to personalise channels. Using social networking tools, users will be able to share and feedback on current awareness items with their peers and professional networks, rather like Journal Clubs.

Recommendation 4:

A programme to systematise and unify initiatives, such as current awareness bulletins, should be led by the National Library for Health in partnership with SHA library leads, to achieve consistency, efficiency and economies of scale.

Recommendation 5:

The National Library for Health should act as a clearing house for examples of good practice in NHS health library services and facilitate their widespread adoption through the NIHS Institute for Innovation and Improvement.

Bureaucracy

- 7.22 In one area a particular absurdity was observed. Because general practitioners are independent contractors (and by definition not NHS employees) they were not able to access local NHS library and knowledge services. While there was no opposition to access by providers, the local management solution was for the SHA person responsible for library services to write to the relevant service provider about each general practitioner on an individual case-by-case basis.

Chapter 8

What's in a name?

- 8.1 In gathering evidence during this Review questions about the term “Library” and the use of other possible terms arose frequently. In essence, these questions revolved around two distinct views. On the one hand, there is a view that the term “Library” is still widely understood. On the other hand, there is a view that a major and fundamental shift in culture is needed among those providing and using the full range of library, information and knowledge services. This shift is essential if such services are to be central to the NHS. The view purported is that such a culture shift demands a change of name.
- 8.2 The debate about the name is long running and continuing, not only within the NHS but also more widely, for instance in relation to public library services ⁷⁷.
- 8.3 The term “Library” means either a collection of books (or videos or records, for example), or a building or room containing books (for reading or reference, rather than for sale) ⁷⁸. Libraries have existed since ancient times, famously at Nineveh, Alexandria, and Athens, where the first public library opened in the 4th century BC ⁷⁹, although the term “Library” was not used until 1450 ⁸⁰. All ancient libraries were reference libraries, where books could be consulted but not borrowed. Lending or circulating libraries did not appear until the 18th century, becoming accessible to the general public in the 19th century with the growth of literacy and the development of free public book-lending services supported by philanthropists.
- 8.4 Having listened to differing perspectives in this debate, the Board of the National Library for Health has decided to adhere to the use of the term “Library” ⁸¹.
- 8.5 However, it is instructive to understand some of the different perspectives on both an appropriate title and term for the kind of services envisaged in this Report.
- 8.6 A predominant view of the library is one of space. Nowadays, however, this may be well removed from the repository concept of a place merely to store books and journals, although this is still important. Other concepts associated with the library as space include:
- A place for reflection, quiet contemplation and working undisturbed
 - A meeting place e.g. for staff, and students
 - A point of access to technology e.g. internet access; a virtual space
 - Meeting rooms and areas
 - A place for training, and the library as learning enabler
 - A repository for resources, for example health promotion materials.
- 8.7 Human interaction emerged as a crucial feature during this Review. Repeatedly, what was valued was the dynamic interchange between health librarian and user. It is the dialogue that is central to articulating the clinical, policy or research question in the right way so that the information subsequently provided is exactly that which is needed.

- 8.8 The vast majority of people seen during this Review favoured retention of the term “Library”. Most were happy where the service was covered with a title “Library and ...”, the additional element most commonly referring to knowledge services. In a small number of cases other labels were used. The decision to use the term “Library” does not preclude the addition of other appropriate terms (such as “Library and knowledge services”, or “Library, knowledge and information services”). Such terms would be a matter for local decisions, reflecting particular local circumstances.
- 8.9 There is merit in considering the adoption of an additional explicit strap line that links any local NHS library service to the National Library for Health. This aspect is considered later in this Report, both in relation to the role of the National Library for Health, and the National Knowledge Service, as well as to issues of branding and marketing of NHS health library services.

Recommendation 6:

The term “Library”, even if qualified by additional terms to reflect local circumstances and wishes should always be used in relation to such services in the NHS; all NHS libraries should be “Part of the National Library for Health”.

Chapter 9

Library and knowledge services, and clinical care: Delivering the vision

- 9.1 Accepting the thesis so far developed, it then becomes possible to construct a vision of how library, knowledge and information services within (and sometimes outside) the NHS might support the four key purposes that have been identified.

Library and knowledge services as part of NHS core business

- 9.2 Of fundamental importance, library and related services must become, and be seen as, part of the core business throughout the NHS.
- 9.3 This is essential, not merely to ensure that libraries and related services do not exist on the margins, or, for example, that they are vulnerable to resource cuts, but because of the central axiom that the services they deliver should inform clinical and other decision making.

Recommendation 7:

Library and related knowledge and information services must be regarded as part of the core business of the NHS by the Department of Health and all NHS organisations, all of whom need access to an appropriate service and an appropriately skilled librarian.

- 9.4 From this central axiom flows almost every aspect of library services in the NHS.
- 9.5 Ensuring that health library and knowledge services, in support of evidence-based professional practice, are part of core business entails engagement throughout NHS organisations. Some implications for governance are considered in the next chapter.
- 9.6 It is not the role of this Report to be prescriptive about management arrangements; indeed, chief executives would certainly not wish to be told how to run their organisations. Various effective models of management arrangements were encountered during this Review. These generally reflected local circumstances, and included examples where library and knowledge services were managed as part of education and training; or as part of information services more widely, and covering, for example, data gathering and analysis; and within human resources. Cogent and logical arguments can be made for these and other managerial arrangements.
- 9.7 It is the need for library and knowledge services to be at the heart of NHS organisations that is critical. Therefore, what matters is that the arrangements are supported at a senior level of management, as well as by staff managing and providing the service, and that there are adequate resources, accepting that resources are always the subject of fierce competition. One lateral thought offered to the Review was that the library and knowledge service dimension should be reflected in an additional few pence on the payment by results tariff for any intervention e.g. 2p on a hip replacement.

- 9.8 This thesis goes further. Whilst the relevance of knowledge and evidence to health professionals involved in making clinical decisions is perhaps obvious and easy to grasp, and would include, for example, ambulance and paramedic staff as an important group of health professionals, this applies equally, to a greater or lesser extent, to the majority of staff in the NHS. Another example, given the current high profile of, and risks from, hospital acquired infections, would be an expectation that cleaners and others whose responsibilities cover aspects of hospital cleanliness would be appropriately knowledgeable and equipped with relevant skills, based on what we know about such infections (what steps reduce, and what behaviours increase, the risks). The same is true of hospital kitchen and canteen staff, both in relation to, for example, issues of nutrition in the frail and the elderly, and the rising prevalence of obesity.
- 9.9 Another group of colleagues in a special position are health professional colleagues in the Ministry of Defence. Their needs differ only in that they span both primary and secondary care and both at home and abroad. Most of the issues set out in this Report apply equally to health professionals working in other Government Departments and organisations, such as the Home Office, for prisons, and Education, for child health needs.

Recommendation 8:

The Department of Health should liaise with colleagues in the Ministry of Defence and other relevant Government Departments and organisations, in collaboration with the National Library for Health, to ensure that issues relating to health library and knowledge services, and best evidence into practice initiatives include health professional colleagues, so that they are not disadvantaged.

- 9.10 Whilst the concept of applying the best available evidence in everyday professional practice may appear obvious, there are challenges to making this universal. One challenge is posed by the randomised controlled trial (RCT). Whilst for most professionals this is perceived as the 'gold standard' of research, it poses difficulties in real life. One problem with the RCT is how it is applied to the case of Mrs Bloggs, sitting in front of the doctor for her consultation. She may have multiple disorders and therapies. People like Mrs Bloggs are often excluded from participating in RCTs so it is difficult to apply any results in individual case like hers. Some would argue that this is exactly the province of professional judgment.
- 9.11 What this all means is that significant cultural change is needed, throughout the NHS. Ideas about how an appropriate culture may be fostered and developed are described later.

Chapter 10

Library and knowledge services, and clinical care: Governance and assuring quality

- 10.1 Accountability through basing decisions on sound evidence is a key issue for clinical practice ²² and for managers ⁸², policy makers and commissioners. Such accountability rests with all NHS managers, from Chief Executives downwards, and all health professionals as part of their obligations.

Collecting evidence of the impact of health library and knowledge services

- 10.2 It is crucial that libraries and librarians begin or continue systematic evidence collection, including customer service and operational data, to prove their cases to their institutions ²². One useful axiom is that “Delivery is our licence to operate”. Some pointers have been identified in the review of literature described earlier in chapter 3.

Recommendation 9:

Research to measure the impact of the application of best available evidence in decision making should continue to be pursued vigorously and routinely by health librarians, in partnership with researchers.

Recommendation 10:

This research should be overseen by the proposed National Institute of Health Research.

Governance in the organisation

- 10.3 If the availability and provision of library and knowledge services, as a key aspect of making the best available evidence accessible to staff, is to assume its proper place at the heart of core business in the NHS, then its governance needs assuring. This will need to take place at a number of levels.
- 10.4 The notion of a Chief Knowledge Officer in NHS organisations has already been mooted by Professor Sir Muir Gray ^{83 84}; indeed his own title is that of Chief Knowledge Officer for the NHS. The Chief Knowledge Officer (CKO) should have organisational responsibilities that include, but are far wider than, library services. The CKO should steer the development of a knowledge management (KM) strategy for their organisation, of which library services will be a part. The KM strategy needs to be aligned with organisational strategy, and needs to address, amongst other things, developing the organisational culture.
- 10.5 In all NHS organisations it is suggested that this role should be at board level, as part of the commitment to the clinical effectiveness agenda ²⁴. Such a role could be held by an executive director, or be part of the portfolio of a non-executive director. The issue is about responsibility and accountability.

- 10.6 The responsibilities of the Chief Knowledge Officer in the organisation need to include leadership for library and knowledge services. By acting as a champion, such a person should be the conscience of the board on this issue, ensuring that the provision of such a service to support and enable all staff to function effectively and efficiently remains constantly on the agenda for the board. This role has helpfully been defined, albeit in other contexts ^{85 86}.

Recommendation 11:

In every NHS organisation someone at board level should be entrusted with the role of Chief Knowledge Officer for that organisation, with the broad responsibility as described.

Recommendation 12:

The National Library for Health should promulgate a description of the responsibilities required of those assuming the role of Chief Knowledge Officer in NHS organisations.

Recommendation 13:

Confirmation of implementation of recommendations 11 and 12 in NHS organisations should be sought within one year, by Regional Directors of Public Health, who should have the responsibilities of the Chief Knowledge Officer for their Strategic Health Authorities.

Governance in teams and networks

- 10.7 Now that clinical care is largely delivered through clinical teams, rather than individual health professionals working in isolation, it is possible to envisage such a CKO role at clinical team level. A model exists for a team with a range of professionals taking on leadership roles. Examples include that of clinical director, or a lead person for education and training, whether it is undergraduate or postgraduate, medical or non-medical ⁸⁷.
- 10.8 One model encountered during this Review is that of “Clinical Librarian” as part of a clinical team. This role has been described ^{88 37}, although sometimes with a different title, but can be considered as that of “team knowledge officer”. This role includes seeking the most up to date evidence for the clinical care of individuals and for systematically applied protocols or guidelines. Team discussions of clinical or related topics, and “journal clubs” may also be supported. The clinical librarian can usefully act as a bridge or conduit to the local NHS library service, not least because most such people have a background or training in librarianship.
- 10.9 The clinical librarian role can be considered as the logical consequence of the themes set out above for supporting clinical decision making. However, to provide such a role, even on a part time basis (usually a third or at most half time), for every clinical team in the NHS, would require many thousands of such colleagues. Currently there are approximately 1275 health librarians nationally ¹ and about 50

clinical librarians ⁸⁸. Even with an ambitious and successful training and development programme, it is unrealistic to expect the widespread implementation of such a policy.

- 10.10 A more modest and potentially realistic approach could be envisaged. There are a relatively small number of specialties (perhaps six or eight) involved in the care of patients admitted to acute hospitals where critical clinical decisions are made, and benefit obtained in terms of lives saved or individual health impact, this could be maximised by the application of the best available evidence. Such specialties include intensive care, and paediatric intensive care; paediatrics; acute admissions requiring surgery (i.e. the application of best evidence in the operating theatre); anaesthetics; acute medical admissions; and obstetrics.
- 10.11 There are slightly fewer than 200 acute hospital trusts in England ⁶⁹. If a clinical librarian (say one third to half time, to include some librarian liaison work to maintain librarianship skills and act as a link) was appointed for each of these specialties, this would require three or four whole time equivalent people per acute trust, or fewer than 800 nationally. A programme of development on such a scale would not be impossible, and its feasibility and cost effectiveness should be explored.
- 10.12 Given the direction already taken by many specialties (e.g. cancer), clinical librarians should develop their own networks, as well as working in teams. Such librarians can support the various clinical networks and collaborative networks in a variety of ways, such as cascading relevant new information, helping to develop networks, and delivering training tailored to needs to develop information skills. This might be a more appropriate manifestation for current and developing NHS structures, and could be supported by the proposals in chapter 7 paragraph 21 for “Channels” for current awareness bulletins, for example. The “Do Once and Share” axiom should also apply.

Recommendation 14:

Every clinical or management team in the NHS should identify someone in the team as “Team Knowledge Officer” (or equivalent). The Team Knowledge Officer will have responsibility for ensuring the effective input of evidence to enable the team to function properly.

Recommendation 15:

The National Library for Health should draw up a generic description of the responsibilities for the “Team Knowledge Officer” function to be adopted, which should be adapted locally as circumstances dictate.

Recommendation 16:

The feasibility, cost-benefit and cost-effectiveness of a development programme providing part time clinical librarians for the six or eight key areas of care in acute hospitals should be studied with a view to appropriate policy development.

- 10.13 Whilst such a development may not be possible for teams providing care in other specialties, including primary care (where over 90% of patient contacts occur) and public health ²¹, the role would be the responsibility of a team member. This and the clinical librarian model would also be applicable in primary care.

A systematic approach to training by health librarians

- 10.14 From evidence provided to this Review, it is clear that librarians are routinely involved in delivering training to many people inside and outside the NHS. However, there is no evidence that such training is provided systematically. Mostly it is provided to individuals who are self selected. An important observation was made that “training is the beginning of a relationship”, i.e. an opportunity to advance evidence into practice. The content of training has been defined in different ways in different organisations, but often involves a hierarchy of need. The required skills have been set out in the NHS Knowledge and Skills Framework ¹³.

Recommendation 17:

NHS health libraries should develop evidence based strategies that focus their limited training resources for maximum effect.

Recommendation 18:

NHS health library training strategies should be reviewed by SHA library leads.

The role of the regulators

- 10.15 Ensuring that services, including management as well as education and training, are provided in support of evidence based practice must be the business of relevant regulators, such as the Healthcare Commission. Regulators will need to ask appropriate questions and seek relevant evidence about management arrangements, the provision of library and knowledge services, and relevant training and development for staff. The need for satisfactory answers to such probing will help to ensure that robust arrangements are in place, supported by adequate staffing and resources.

Recommendation 19:

All relevant regulators should seek evidence about the management arrangements and resources supporting the provision of library and knowledge services to enable NHS staff to make decisions based on the best available evidence.

- 10.16 A key feature of regulation is the establishment of national standards. Implementation of the standards, in detail, may vary and is a matter for local determination. These standards are not expected to be diluted by variations in approaches to delivery. Good regulation is now considered to be underpinned by five principles ⁸⁹:

- Proportionality

- Accountability
- Consistency
- Transparency
- Targeting.

Quality assurance

- 10.17 The approach to regulation is increasingly represented as moving towards “light touch” in order to reduce the burden of regulation without sacrificing rigour and accountability. For simplicity the regulatory focus on governance is increasingly at three levels. Quality control is expected at organisational level. In the NHS this is manifested principally by local arrangements for clinical governance. At a regional level there is an expectation of quality management by Strategic Health Authorities (SHAs). At a national level the regulators carry out quality assurance, making sure that the regional tier has satisfactory arrangements in place to reassure it that all is well. Testing of these arrangements, for example by sampling, is carried out periodically. Increasingly there is an expectation that all organisations and levels have adequate arrangements for governance and quality in place, with an ability to produce robust evidence as appropriate.
- 10.18 NHS health libraries should expect their quality to be overseen by exactly the same arrangements. Two aspects are particularly relevant.
- 10.19 First, the national standards for NHS health libraries will be defined in the forthcoming National Service Framework ⁹⁰. This important document has been out for consultation and is currently being piloted prior to being issued in January 2008. In its final form it will represent the benchmark (national) standard for health service library service provision to which all should conform.

Recommendation 20:

As with other National Service Frameworks, all NHS organisations should have library and knowledge services that meet the standards set out in the NLH National Service Framework.

- 10.20 Secondly, health libraries have for some years used the Health Libraries & Information Confederation (HeLicon) library accreditation scheme ⁹¹. This is a peer review programme designed to assess and accredit health care library services across the NHS. The elements of HeLicon consist of a checklist used as the basis for self assessment, linked to a portfolio of evidence with a commentary stating how it is believed the assessment criteria are met. This is followed by a pre-arranged visit by a panel of peers (usually two SHA library or knowledge service managers and an external lead manager from another SHA).

Features of a quality health library and knowledge service

- 10.21 It has been argued that good practice can be identified reasonably easily: “I know it when I see it”. Health library services may be no different. Features of a good service have been articulated: such a service should be “On TARGET” ⁹²:

- Targeted: meeting clear, specific objectives; focused on priorities
- Accessible: broadening access; ensuring consistent and equitable access
- Responsive: flexible; responding to changing needs and opportunities
- Guaranteed: high quality information; delivering high quality service
- Efficient: blending local and national services; delivering value for money
- Tailored: services geared to the needs and preferences of customers.

10.22 Good services also have a number of other characteristics⁹². They are:

- Quality assured
- Professional
- Responsive
- Approachable
- Open to all
- Efficient
- Flexible
- Patient centred
- Committed to education, training and life long learning
- Committed to evidence based care
- Support getting knowledge into practice
- Providers of research support
- Change agents.

Quality management

10.23 Whilst the principle of peer review is entirely sustainable in the quality governance approach described above, some features of its process require further development in order to ensure that it is fit for purpose and has the confidence of professional librarians and relevant senior managers (see an anomaly described in chapter 7.3).

10.24 It is open to misunderstanding for someone responsible for library services at an SHA to act as visitor or lead visitor, under the proposed new arrangements for quality management at SHA level that will replace the HeLicon system in the light of the planned National Service Framework, to services in the same SHA area. It is entirely appropriate that such senior professional librarians should be involved in peer review of health library services but this should be as visitors to patches other than their own. In addition it may be appropriate for the SHA lead for library services to be seen by a visiting team as part of their evidence-gathering process.

10.25 There are a number of other sound principles for such a programme.

10.26 Firstly, all members (perhaps of a pool of visitors) of visiting teams should have appropriate training. The provision of such training should be by, or under the auspices of, the National Library for Health, to ensure validity and reliability.

10.27 It is not clear from which source the leaders for such visits should be selected. The SHA library leads are an obvious possibility, but will be potentially vulnerable to

perceptions of bias or collusion. It could be argued that lead visitors should be competitively selected. One source might be the cohort of Chief Knowledge Officers. Whatever arrangement is adopted, lead visitors should be trained and should not visit sites on their own patch or where there may be a conflict of interest for other reasons.

10.28 Teams must include professional librarian input. It would be appropriate to ensure that such input also covers any special dimension: for example, visits to higher education institute libraries (since some provide the NHS with library and knowledge services), or libraries on specialist sites, such as those providing mental health care, or neurodisability and rehabilitation.

10.29 Whilst teams should not be large (three or four visitors would be expected normally), consideration should be given to including either or both lay and user perspectives.

Recommendation 21:

Quality control of health library and knowledge services locally should be overseen by Chief Knowledge Officers, within local clinical governance arrangements, where appropriate.

Recommendation 22:

In developing the new process of quality management through peer review at SHA level, certain features should be adopted. Such reviews should:

- **Be overseen nationally by the National Library for Health**
- **Include training for a pool of visitors and lead visitors**
- **Adopt, as far as practicable, elements of good practice, including where feasible lay and user perspectives**
- **Have a complete cycle within three years.**

The Strategic Health Authority role

10.30 The case for clinical quality being more strongly heard at Strategic Health Authority level has already been made ²¹. There is an important duality in this: on the one hand the role of SHAs is to support and nurture; on the other hand they have a performance management role. SHA library leads therefore have to strike a balance. They need to be seen within the SHA as the champion for library and knowledge services: but they are also likely to become aware both of good practice and of less than optimal performance. The use of a robust tool (if developed as suggested) will give SHA library leads the necessary leverage for quality. Through accountability, their senior managers, and indeed SHA chief executives, need to have confidence in the services provided in and to organisations within their purview.

10.31 There is a further opportunity for SHAs in relation to library and knowledge services on their patch. In future the management of the Multi-Professional Education and Training levy (MPET) will be governed by Learning Development Agreements (LDAs). These LDAs offer an opportunity for SHA library leads to influence their content,

including descriptions of and requirements for library and knowledge services. Several effects are possible from the use of this tool. Governance should be strengthened. The visibility of library and knowledge services may be increased. There will be opportunities to ensure that library and knowledge services are seen as part of core business.

Recommendation 23:

Strategic Health Authorities should continue to have a designated lead person (who should be a librarian), to support local health librarians and their services, and to oversee local quality management arrangements. These lead people should invoke managerial action where appropriate to ensure quality and promote the pursuit of excellence. SHA health library leads should also be expected to contribute to national work generally, including leadership, coordination and development, and quality assurance arrangements in particular.

Chapter 11

Library and knowledge services, and clinical care: Changing the culture and developing the workforce

11.1 Culture change is an essential part of the developments proposed in this Report. Such changes need to apply not only to library staff but also to other staff in the NHS and within NHS organisations. For example, one interesting observation provided to the Review was that medical students were often “over confident” about their computer literacy.

The culture change for health librarians

11.2 For many but not all librarians, the shift required is substantial. It means that libraries should no longer be thought of as book repositories, but be seen as a modern and essential part of a service to support the NHS by adding measurably to health improvement of individuals and populations. This can be characterised as moving from the “back office” to be “front of house” (literally so in some examples seen during this Review).

11.3 Librarians also need to understand the nature of the NHS as a complex and adaptive organisation, in order to work within the system to best advantage. Visibility becomes important: being seen to offer a service that is valued, that makes a difference, and capable of solving problems. For example, are librarians involved in helping their Trusts achieve with regard to the NHS Clinical Negligence Scheme for Trusts (CNST)?

11.4 The proposed arrangements, will act as a considerable force for driving the required cultural changes, not only within NHS organisations, but also among libraries and their staff, and NHS staff more widely.

11.5 Workforce development, in the context of this Review, refers not only to the development of members of the library community (both professional and non-professional) who are providing library, knowledge and information services within and for the NHS, but also to all other NHS staff. Depending on roles and responsibilities, there will be varying levels of need for appropriate attitudes, knowledge and skills in relation to evidence provided and supported by library, knowledge and information services. These levels will need to ensure fitness for purpose, and to generate the sort of culture change described previously.

11.6 For librarians this professional journey may begin either at Library School or with postgraduate training after gaining a first degree.

11.7 The roles of librarians have been developing in recent years in relation to the changing context in which they practise. It was suggested on a number of occasions during this Review that the health librarian should be thought of as “navigator”. In part this is about helping NHS staff and health professionals find their way through sometimes complex systems. In the public library arena this would be a very important role too. Or consider a new concept, that of “Digital

Librarian”; who also navigates the complexities of the digital environment. The changes proposed as a result of this Review require further, and sometimes substantial, change.

Recommendation 24:

The National Library for Health Co-ordinating Group and Strategic Health Authority library leads should engage with local library schools and their national bodies, to ensure the output of such training is fit for purpose.

- 11.8 For NHS library staff, whether professionally accredited or in supporting roles, there are a number of consequences. The competencies required of health science librarians are defined ⁹³. As in many other specialties, there is increasingly a tendency towards narrower but higher levels of skill. An example would be the high level skills required of those who provide search support for NHS and other researchers. Others who train need education and training skills.
- 11.9 For head or lead librarians, it is clear that a further skill set is required, beyond the skills and insights derived from a background of librarianship. With library and knowledge services in the NHS as part of core business, these leaders must compete with and operate alongside other NHS managers.
- 11.10 To compete successfully requires that the library manager needs a set of high level skills. These will include skills in:
- Leadership
 - Strategic thinking
 - Strategic partnership development
 - Business case development
 - Negotiating skills
 - Marketing (the service locally)
 - Managing and handling people.
- 11.11 Many senior librarians encountered during this Review possessed some, and occasionally all, of these skills and attributes. Being a part of the wider community of librarians, through the Chartered Institute of Library and Information Professionals (CILIP) ⁹⁴, was generally seen as very positive. This was not least because of the support offered in terms of being seen as being on a par with other professions, such as clinicians and NHS managers. CILIP’s route to accreditation also appears to be valued and seems appropriate ⁹⁵.
- 11.12 Developing and aligning existing examples of training, and offering and delivering such professional development to librarian leaders are further examples of functions that should be overseen nationally. There is a healthy plurality of potential and actual providers and this could, and perhaps should, largely be self-funding from employers.

Recommendation 25:

The National Library for Health should devise and commission a national development programme for senior and lead librarians.

Librarians, appraisal and performance review, and continuing professional development

- 11.13 However, such development must, as in the rest of the NHS, be considered in the wider context of continuing professional development (CPD). Librarians, in common with other NHS staff, have to continue to deliver services locally, and yet make time for ongoing CPD. Distance and e-learning programmes have been developed to meet these needs.
- 11.14 CPD has only two purposes. Firstly, it should help an individual perform better in their job or role. Secondly it should contribute to the further aspirations and development of that person in order that they may reach their professional goals.
- 11.15 Librarians, like other NHS employees, should be subject to appraisal and performance review. Such reviews should take place between the librarian and their line manager on an annual basis, and conform to best practice. A personal development plan (PDP) should be one of the outputs of this process.
- 11.16 From evidence seen in this Review, library managers (almost invariably those with librarianship backgrounds) may be managed by people with a variety of (non-librarian) professional backgrounds. Though a variety of entirely satisfactory management arrangements for NHS health library services was encountered during this Review, few exhibited the pattern of appraisal and performance review described above. Even fewer had professional librarian input.
- 11.17 Regional librarians or an equivalent (i.e. someone with accredited librarianship skills and experience) exist in all SHAs. They appear to have knowledge and insights into the quality and performance of health libraries and librarians on their patch. Such colleagues should be willing and able to provide objective and justifiable evidence about performance as input (in person or in writing), to the appraisal and performance of head librarians.

Recommendation 26:

All NHS library staff should have annual appraisals and performance reviews in the same way as other NHS staff. These will lead to Personal Development Plans.

Recommendation 27:

The annual appraisal and performance review of heads of NHS library services by their line managers should include the input of a senior experienced professional librarian: such a perspective could be provided by SHA regional librarians.

The culture change required of other NHS staff

- 11.18 This Report has already emphasised the need for the NHS to provide the best and most up to date evidence to inform various categories of decisions and lifelong learning. From this flow a number of requirements for wider staff development.

- 11.19 All NHS staff, and in particular health professionals, need to have appropriate attitudes, knowledge and skills in relation to evidence and the use of library and knowledge services. Whilst these have been defined for some staff groups ^{12 13}, this is by no means universal in curricula. Reference has already been made to the needs of doctors ¹⁶, but few of the curricula for the 57 medical specialties have any such explicit statements ⁹⁶. All bodies responsible for health professional curricula should develop and publish relevant curricular components.
- 11.20 This is also part of the information literacy agenda, identified in chapter 3.

Recommendation 28:

All relevant statutory and professional bodies should develop an element of their curricula that emphasises the need for appropriate attitudes, knowledge and skills in relation to the need to apply the best available evidence in professional practice, and the basic skills required to make appropriate use of library and knowledge services.

Recommendation 29:

Relevant regulators, responsible for overseeing curricula, should ensure curricula contain appropriate content relating to attitudes, knowledge and skills for making best use of health library and knowledge services for evidence-based health practice.

Chapter 12

Library and knowledge services, and commissioning and policy making

- 12.1 Although much of the focus of this Review and Report may appear focused on the relationship between library and knowledge services and the provision of health care, the underlying theses and principles can be applied to the fields of commissioning decisions and the formulation of health and social care policies. This is given added impetus by the Department of Health current drive towards “World class commissioning”⁹⁷.

Primary Care Trusts

- 12.2 The policy direction has for some time been to make PCTs the ‘power house’ of the NHS, both to embrace the change agenda, and to reflect more closely the health needs of the local population. However, this aspiration has been hindered by the need for time for PCTs to develop their commissioning role whilst at the same time coping with the impact of other drivers. These include increasing demands and expectations, and the ever-advancing boundaries of new technology, which are increasing the number of possible effective treatments, and the population groups to which they and existing technologies can be applied.
- 12.3 Many PCTs continue to provide services, such as community nursing, and health promotion, in addition to their necessary interaction with primary care with all its complexities. There is a tendency for the needs of primary care staff to be overlooked. PCTs therefore need to grapple with the duality of providing library and knowledge services to inform clinical decision-making in primary care, as in the hospital sector, and policy decision making. Although some community trusts are being created to manage the provider functions, it is likely that this duality will continue in many places for a number of years.
- 12.4 Another provider function that must not be forgotten is that of ambulance trusts. Given the role of ambulance and paramedic staff in managing complex emergency and life threatening situations, the need for access to the best available evidence is essential.
- 12.5 It is just as much a key issue for those making commissioning and health policy decisions as for those involved in decisions about clinical care to overcome the apparent disconnect between research and its application. The ultimate aim of researchers should be to ensure that the health service’s workforce, employers and others gain knowledge of the facts provided by the results of research, and to use this knowledge in professional practice and policy making.
- 12.6 For many PCTs there is a tension between library and knowledge services supporting evidence-based practice in primary care, and the need for the statistical information about local populations needed to support effective commissioning decisions. Primary care health professionals have the same need in principle as their counterparts in acute and other health services. There is a separate public

health intelligence function that supports commissioning and related policy decisions.

- 12.7 The additional complexity lies in the need for primary care staff to have public health intelligence and evidence to enable them to make properly informed contributions in their commissioning role, in addition to their clinical role.
- 12.8 Detailed aspects of the public health intelligence function are not a feature of this Review, this is being addressed at SHA level, supported by both the Public Health Observatories and the public health specialist library (see chapter 16).
- 12.9 During this Review examples of effective working in both these areas were seen. This dual responsibility, referred to above, defines a slightly different form of core business for PCTs compared with their hospital trust organisations.
- 12.10 The question that follows is about how well organised research is to achieve this aim, and how receptive are health services: the answers appear to be “not well” and “not very”⁹⁸. One solution in use is that of “knowledge brokering”⁸⁶.
- 12.11 Historically, the provision of evidence to inform policy and commissioning decisions has largely been regarded as the province of Public Health. Commonly library and knowledge services in PCTs are managed by the directorate of Public Health. Unlike the acute hospital sector, PCT library and knowledge services have not profited from access to funding streams that were part of the Medical and Dental Education Levy (MADEL) and are now within the Multi-Professional Education and Training (MPET) budget, although in effect this is now part of the SHA overall budget. This happens to be also true for mental health trusts, although in recent years some have been successful in negotiating access to MPET funding in deaneries. Given that their services are normally widely dispersed and often community based, many of the issues are similar.
- 12.12 Given the NHS need for library and knowledge services to be part of core business, this perspective should drive the resources issue and help determine management arrangements, depending on local circumstances. This is the way to change historical patterns of funding for library and knowledge services in PCTs and in other NHS organisations too.

Recommendation 30:

Using this Report as guidance, Primary Care Trusts must implement the recommendation that health library and knowledge services should be part of core business, but it is for them to decide how best to do this.

The issue of access to health library and knowledge services

- 12.13 A key issue for PCTs is access. In part this is about their direct primary care services. It can be argued that there is a much wider issue. In chapter 7 a number of anomalies, some of them absurd and some related to access, have been described. Two key principles should be in harmony here. Given the theses set out earlier, all NHS staff need access to the relevant knowledge and information, based

on the best available evidence, that they need to do their jobs effectively and efficiently. The same can be said of health professionals working in the independent sector. Equally, public money needs to be spent in the most efficient and effective way.

- 12.14 Given the considerable sums of public money disbursed by PCTs to their NHS providers and other non-NHS providers, it would seem be reasonable to expect them to “hold the ring” on enabling access to NHS library and knowledge services for all NHS staff.
- 12.15 The variation in access highlighted in the anomalies described, and the potential for duplication and waste of resources in finding a multitude of solutions to a single problem, would seem to be justification for this recommendation. The Electronic Staff Record, shortly to be in use throughout the NHS, may be one part of the solution.
- 12.16 A more difficult issue raised during this Review, but one that needs consideration, was the issue of access for certain professional groups, with physiotherapists as a particular example. There are a considerable number of physiotherapists who have nearly all been trained in and by the NHS. It is understood that about 50% do not have a full time job. Although many work in private practice, this is as an adjunct to the NHS. Whether they are unemployed or working they need access to the best available evidence for professional practice purposes and lifelong learning. Currently they do not have health library access. The plight of these groups should be looked at and their needs addressed.

Recommendation 31:

Primary Care Trusts must ensure that all their health providers allow access by all NHS staff and other appropriate people (e.g. students registered on health profession courses or programmes) to health library and knowledge services.

Recommendation 32:

There are groups of health professionals who may not be currently employed in the NHS but have perhaps been trained by or at its expense, and therefore it could be argued that the NHS has a responsibility for them, and who are a potential resource for it, also need health library and knowledge service access; this issue should be explored, solutions identified and applied.

Meeting needs

- 12.17 Providing access is not the same as meeting needs. There is a link with aspects such as marketing of services (so, for example, colleagues and other services know who is providing what), and the identification of the various repositories, collections and the specialist libraries.
- 12.18 By exercising their power through their commissioning role, PCTs could have an important impact on the governance agenda as it relates to the need to apply best available evidence in making decisions (be they clinical or policy). This could be

achieved by an appropriate specification in all contracts and service level agreements (SLAs) entered into by PCTs, and should apply not only to those with NHS organisations, but also those in other sectors, public or private.

Recommendation 33:

Primary Care Trusts will ensure that all their contracts, Local Development Agreements and SLAs refer to the use and application of best available evidence by their commissioned providers.

Recommendation 34:

Strategic Health Authorities will monitor implementation of Recommendations 31, 32 and 33 by PCTs and report annually.

The social care dimension

12.19 The policy of integrating health and social care ^{99 100} also means that the theses and themes developed in this report also apply to social care and social care staff. They are also fragmented and widely distributed, but their need for access to best evidence is just as great. With some 300,000 staff this is a significant challenge. The Social Care Institute for Excellence ¹⁰¹ reflects similar organisations for health.

12.20 The structure of health service libraries described earlier is not replicated for social care, and neither is there the same volume of literature and evidence. Health service librarians, during the course of this Review, have expressed concerns about the capacity of existing health library and knowledge services to meet the needs for social care. Nevertheless, the needs of practitioners and social work teams are probably similar in principle to those of health professionals. There is likely to be steady progress towards greater integration, for example, co-location of social care teams or staff in general practice premises or resource centres. Consideration nationally and locally needs to be given as to how these developments may best be supported.

Recommendation 35:

The principles set out in this Report must apply equally for social care and social care staff. Consideration centrally and locally, as appropriate, needs to be given as to how best to support evidence based practice in social care and other non-NHS bodies, for example through Local Strategic Partnerships.

Chapter 13

Library and knowledge services, and lifelong learning

- 13.1 There is a need for all health professionals to have an awareness of the evidence base for their discipline throughout their professional life time. These continuing education needs must be supported by health library and knowledge services.
- 13.2 As one of the four purposes underlying the need to provide library and knowledge services within the NHS, the contribution to lifelong learning has already been outlined. For doctors, this has been given added relevance by the Tooke Report on MMC ¹⁶. This Report calls for the inculcation of a new professionalism that embraces not only the technical aspects of evidence-based practice, but also the associated need for change management, resource management and service responsibilities which extend to other clinical leaders ²¹.
- 13.3 Similarly, Tooke's Report of the High Level Group on Clinical Effectiveness makes the same point ²¹.
- 13.4 Laying the foundation for clinically effective practice through appropriate curricula is therefore fundamental. See Recommendation 29 on page 48.
- 13.5 Current awareness or update sessions have long been a feature of continuing professional development and postgraduate opportunities. Technological developments, such as those contributing to electronic learning, are enlarging the range of methods available to support this fundamental ethical obligation. Some needs can be met by distance and e-learning programmes, as has been highlighted for librarians in chapter 11 paragraph 13; there is therefore the potential for librarians to act as navigators to e-learning opportunities for other health professionals.

Recommendation 36:

NHS health libraries should see the support of lifelong learning in NHS health professionals as part of their core business and reflect this in health library strategies, business plans etc.

Recommendation 37:

Strategic Health Authorities should assess the extent of implementation of Recommendation 36.

Chapter 14

Library and knowledge services, and research

14.1 It has been argued that support for research in relation to the NHS is one of the core purposes of library and knowledge services in the NHS. One of the main purposes of the British Library is to support biomedical research, for example through its leadership of a partnership chosen to run UK PubMedCentral ¹⁰². For the purposes of this Review there is also a focus on clinical research mainly within NHS hospitals, which is often supported by library services within these hospitals, as well as on the support provided by medical libraries associated with Higher Education Institutions (HEIs).

Supporting research

14.2 The support provided for clinical research is a highly valued service. Such support forms a significant part of NHS library service provision.

14.3 Medical school libraries appear to be ahead of the NHS in the sense that they seem to be regarded as an essential part of core business. They figure prominently in strategic plans and literature from their parent universities. Their boundaries with arrangements in the NHS and between the two sets of staff seem to be increasingly blurred, but to good effect.

14.4 In part this has been driven by the significant expansion in medical students, and students in an ever widening range of health professions and related disciplines. Such students may be enrolled in a range of local higher education institutes for their courses, but work, train and learn alongside each other and NHS staff in NHS organisations.

Partnership working with higher education

14.5 A call has already been made for a more effective partnership between the NHS and higher education ²¹. An important link is with the work of the Joint Information System Committee (JISC) ¹⁰³. The role of JISC, as well as providing a world class Joint Academic Network (JANET), is to support education and research by promoting innovative new technologies.

14.6 At a national level, such links are also exemplified by the NHS-HE Forum ¹⁰⁴, especially in relation to information management and technology. Set up in 2001, as well as being of crucial importance to links concerning research, such links are highly relevant to the lifelong learning agenda. Issues being addressed include the NHS-HE Connectivity Project, which is looking at how to bridge the gateway between JANET and the NHS information network, using technology rather than duplication of hardware.

14.7 During this Review numerous examples of strong local partnership working between many organisations were seen to enable effective working and learning.

Examples of arrangements seen included NHS staff holding honorary appointments with related HEIs (and vice-versa); jointly funded library staff, or library staff funded by an HEI but based in the NHS health library; and jointly funded or sponsored mutual recognition arrangements to ensure access for a wide range of staff and students to library and knowledge services. A strong desire was expressed repeatedly for even more blurring of these boundaries. There were, however, still some anomalies and absurdities, usually associated with access (see Chapter 7).

Recommendation 38:

Existing partnerships, such as that with JISC and the NHS-HE Forum, should be fully supported by the NHS to ensure development and maximum benefit to all parties. The National Library for Health Board should review existing arrangements within one year and identify ways in which these partnerships can be strengthened and developed e.g. stronger NHS manager representation on the NHS-HE Forum.

Research evidence into practice

- 14.8 One further aspect relates both to research and procurement (considered further in Chapter 14), and concerns the output of research. This can be considered from the perspective of the availability of the product of research to the NHS, and its application to the service, including embodiment in professional practice.
- 14.9 The translation of research into practice is an enormous subject in its own right, with its own research and knowledge base. The provision of high quality library, knowledge and information services is but one part of a complex picture and process. Whilst aspects of knowledge delivery are relevant to the National Knowledge Service, a detailed consideration of the issues involved in translation of research are beyond the scope of this Review but are addressed in the Tooke Report ²¹.
- 14.10 The particular issue of payment for research output in, for example, journals and other publications, is relevant to this Review, because the existing situation may not represent good value for the expenditure of public money. In simple terms, the public purse may often be supporting the publication of research output in at least four ways.
- 14.11 First, the NHS spends a considerable sum on research; following the Cooksey Report ¹⁰⁵ the Government announced in Budget 2006 that it intended to create a single health research fund of at least £1 billion per annum. It is also worth noting that charities who fund health-related research spend a similar amount ¹⁰⁶.
- 14.12 Library services provide crucial and significant support early in the research paradigm. A key thesis set out earlier is the need for an accurate and up to date picture of the evidence in formulating any research question. NHS libraries and their staff are key players, especially in relation to clinical research carried out by NHS staff in NHS organisations, in both primary and secondary care. However, the resource use involved may well be hidden and not explicit. As a principle, any such requirement should be part of the costing, and hence funding, of the research.

- 14.13 On successful conclusion of research, publication of findings is to be expected. Such findings will ideally be published in prestigious journals, many of which will be procured at a cost paid centrally by the NHS (further details of this arrangement will be explored in Chapter 14). In addition, in some instances, these same journals may be procured through local arrangements (sometime, for example through a health library, or by an individual clinical department). Individuals may also subscribe to journals, directly or indirectly, for example via subscriptions to professional organisations; such payments are allowable against income tax.
- 14.14 It is therefore possible for the public purse to fund the dissemination of the outcome of a single piece of research at least four times.
- 14.15 There is a good case for the NHS to put its own house in order, including an aspiration to require open access for the outputs of research, especially that which is publicly funded. There is evidence that, although some 90% of articles resulting from NHS-funded research now exist online in full text form, only 40% of these are immediately accessible to NHS hospital staff ¹⁰⁷. Surely this figure should be 100%?

Recommendation 39:

The National Library for Health, in conjunction with Department of Health Research and Development colleagues, should explore ways in which the knowledge and evidence aspects (related to inputs, outputs and outcomes) of research can best be handled and managed to the advantage of the NHS and the public purse. An approach should be defined within one year.

- 14.16 The necessity for librarians to evaluate the impact of their services has already been identified. This should be a standard expectation of librarians working in NHS health libraries

Recommendation 40:

All NHS health library staff should have an explicit statement in their job descriptions that they are expected to contribute to local and national evaluations of the impact of their health library services.

Chapter 15

Consequential technical issues

- 15.1 From the themes developed so far during this Review, and set out earlier, there are a number of important technical issues and implications that flow. These include:
- Technology, especially information technology
 - Procurement and core content
 - Joining up of other relevant bodies and initiatives.

Technology

- 15.2 It is beyond the brief of this Review to explore detailed aspects of technology, in particular information technology. However, not least because of the inexorable move towards the availability and provision of information electronically, some evidence that has emerged during the Review is directly relevant and will be explored in this chapter.
- 15.3 Technology has enormous possibilities for the NHS. These possibilities enable technology to provide the potential solution to many problems besetting the service. This casts technology in the role of servant, and not master, without negating the frequent need to consider and adapt to consequences i.e. technology is also a driver for change. To fulfil this role the National Programme for Information Technology (NPfIT) for the NHS was set up in 2003. Under the umbrella of 'Connecting for Health' ¹⁰⁸, there are a wide range of initiatives that will deploy information technology as part of a programme of change seen as vital for the NHS, and part of enhancing patient safety. For instance, Web 2. technologies offer the potential for individual or person-specific information searches, customized news feeds, customized search engines etc.
- 15.4 The National Library for Health has established a Design Authority for knowledge services, and this is developing a "Service Oriented Architecture" (SOA) ¹⁰⁹ as part of an approach to enable library services to exploit technologies ultimately to the benefit of patients and the public.
- 15.5 The output of this work, since information frequently exists in silos, will be a set of standards for interoperability between NHS produced digital services. These will enable the conversion of silos of knowledge, such as individual library on-line catalogues, and locally purchased electronic content, into objects that can be viewed on what ever computer screen the clinician is using at the time.
- 15.6 These requirements have, for the first time, been built into contracts for digital content purchased through the new national framework contract for library content purchasing. Contracts let for content from 1 April 2008 will require commercial knowledge providers contracting with the NHS to comply with these SOA standards and principles. This will mean and NHS owned and controlled architecture. Content and services will no longer be locked into a series of proprietary web portals, often purchased from international publishers, each with their own interface, and driven by the publisher's imperative to lock the user into one system. Knowledge content

procured by library services will be available over the web to the user, and be capable of being integrated into multiple digital services. At a point in the near future, users will be able to access their library services via Microsoft Word or “My Google”, as much as via a website address such as “www.library.nhs.uk”.

- 15.7 This approach should improve the quality and safety of patient care through enabling more clinicians to use library services which are focused on patient care. Such access should be seamless, and span primary and secondary care, and ought to provide better value for money for the NHS. In addition, new services can be added and developed around such architecture.

Recommendation 41:

There must be appropriate interaction, and input from the National Library for Health to information technology development colleagues in the Department of Health, to ensure appropriate recognition and embracing of health technology and evidence. This is part of ensuring that NHS staff are supported in applying best evidence to decision making. This should be overseen by the Department of Health Chief Information Officer in partnership with the NHS Chief Knowledge Officer.

Procurement and core content

- 15.8 Other important links to technology have already been described in relation to research and education. It is worth underlining the potential value to both the NHS and HE public sectors of more joint work, as recommended earlier, particularly in advocating and sharing technical solutions to problems, such as procurement, which is a major issue for the NHS and health libraries.
- 15.9 On the one hand there is the move towards electronic and digitised forms of communication and information provision. On the other hand the paper format seems destined to be with us for a long time yet. One observer suggested that it would be almost impossible for, say, a group of four colleagues to meet over coffee and discuss a recent journal article with access only to an electronic version, rather than a paper copy. A key challenge is to manage these two parallel systems simultaneously.
- 15.10 It has already been shown that it is possible for the public purse to cover the payment for publication of the output of research several times. There are other related areas concerning procurement where value for money, the avoidance of duplication, and efficiency could all be improved. The direction of travel seems to be towards open access to published research output ¹¹⁰.
- 15.11 The NHS is a relatively modest player in the field of procurement of library and knowledge service content. Higher education spends considerably more on the acquisition of content, particularly electronic content, than the NHS, a ratio of approximately 10 to 1 (approximately £100M by HE and £10M by the NHS). This means that the NHS on its own does not carry enough financial weight to convince publishers to modify their terms.

- 15.12 Back issues pose particular problems. Although the half life of research knowledge tends to be short, there is still wide variation. In some specialties new evidence emerges almost daily (e.g. medical genetics; oncology), while psychiatry still refers to texts a hundred years old. The NLH, on behalf of NHS health libraries, should consider carefully whether there is a need to archive information older than 10 years, in either paper or electronic formats. The potential for third party digital archiving solutions should be investigated. The possibility of partnership with the British Library and Higher Education Institutes should be explored in the context of the emerging proposal for a National Research Reserve (NRR) ^{111 112}.

Recommendation 42:

The National Library for Health, working with The National Archive (TNA) and the National Research Reserve (NRR), should develop a strategy on the need to archive information older than 10 years, and explore the potential for archiving solutions.

- 15.13 It certainly seems sensible to have a nationally defined “core content” ^{113 114}, and there is overwhelming support for such an approach. There is already a national group within NLH that oversees this work ¹¹⁵, although the clinical input to this may need strengthening. This would also seem to be a situation where there is benefit in having the national core content but with local discretion. It is likely there will always be some particular need, for example, highly specialised fields where service is available from only a few centres nationally. The Pareto principle and the 80/20 rule ¹¹⁶ would seem to apply here, with, for example, 80% covered by national procurement once and 20% by local discretion.

Recommendation 43:

The National Library for Health, through its working group, should consult on and gain consensus on “core content”, covering approximately 80% of NHS health library journal needs. This core content should form the basis of the national process for journal (paper and electronic) procurement.

- 15.14 Whilst the NHS, through the NLH Group on its behalf, should determine, by discussion and agreement, what the national core content should be, there would be great advantages in the NHS and HE working together on joint procurement. There are already links with the Joint Information Systems Committee (JISC) ¹⁰³ and through the joint NHS/HE Content Group, part of the NHS-HE Forum. A report to the executives of JISC and the Library, Knowledge Development Network (LKDN) of the National Library for Health highlighted a number of successful collaborative initiatives, given that the NHS and HE both spend large and growing sums of money on electronic content ¹¹⁷. This report suggested three possible paths for cooperative activity: covering information sharing and advocacy, technical infrastructure, and joint procurement.
- 15.15 Now would seem to be a good time for cohesion through convergence of these various initiatives, although quality must never be compromised.

Recommendation 44:

Existing arrangements for collaboration and partnership working with Higher Education should be supported and strengthened. In particular a joint approach to procurement of both paper and e-resources should be developed (through collaboration between NLH and the NHS-HE Forum) to the benefit of both sectors and the public purse but without sacrifice in quality.

Partnership working

- 15.16 Not only does there need to be joined up discussions and activity between the many and various bodies, some of whom have been part of the discussion above, there is also an opportunity for joining and collaborating with our three neighbouring countries. At present it appears that Higher Education and its organisations such as JISC have to have separate discussions on these issues with the NHS in each of the four countries. The exemplar model of the NHS-HE Forum could usefully be considered as a model for a high level advisory arrangement for the UK where mutual benefit may be derived.

Recommendation 45:

The Department of Health should consider approaching the other three UK countries to develop an appropriate four country high level advisory arrangement to promote joined up approaches regarding health library and knowledge services (and related issues such as procurement and appropriate technology inter-connectivity).

- 15.17 There are also a range of other relevant bodies and initiatives which would benefit from joint initiatives, in the interests of efficiency and effectiveness, as well as better value for public money. These might include, for example, the Cochrane Database of Systematic Reviews ¹¹⁸, the BMJ Clinical Evidence ¹¹⁹ and Best Treatment ¹²⁰ web sites, and the work of NICE ¹¹.

Chapter 16

The further development of the National Library for Health

- 16.1 The setting up and role of the National Knowledge Service has been described in chapter 6.

Strategic partnerships

- 16.2 Strategic partnerships will be crucial for the future. The National Library for Health has a major role in developing these nationally. Examples already identified include the Higher Education Sector; the desire by the national British Library for better links, and the wider public library sector; the Society of College, National and University Libraries (SCONUL) ¹²¹ and the Chartered Institute of Library and Information Professionals (CILIP) ⁹⁴. Areas identified for joint working include:

- Evidence
- Intellectual property and other complexities, such as citing
- Workforce development.

- 16.3 There is another important area where it is likely that the NLH is best placed to help in partnership. This relates to the various non-NHS and independent libraries. Particular examples include the renowned King's Fund Library, and the many College and specialist libraries. Many of these happen to be sited in London. The Consortium of Independent Health Libraries in London (CHILL) ¹²² currently has 44 members and 4 affiliate members from outside London. These libraries contribute indirectly to the NHS. This contribution needs recognition, and these libraries should be included in relevant collaborations and activities.

- 16.4 The National Library for Health is, like the National Health Service itself, composed of a number of independent entities. The NLH can, and should, be regarded as consisting of every NHS healthcare organisation that employs or uses the services of librarians.

The NLH Board

- 16.5 The National Library for Health Board is charged with the development of a health library service, and with identifying those activities best done once, those best done ten times (i.e. in each SHA), and those best done in every NHS organisation. Not every healthcare organisation either employs or has access to the service of a librarian.
- 16.6 The Chair of the NLH Board is a Regional Director of Public health and Medical Director of an SHA. He is responsible for ensuring good communications between the NLH Board and the ten Strategic health Authorities. The NLH Board receives regular reports from the NLH Co-ordinating Group and takes decisions that should be taken once.

- 16.7 In discharging its responsibility for the development of library and knowledge management services, the NLH Board has to relate to other national bodies, notably the Healthcare Commission and the NHS Institute for Innovation and Improvement. The Institute hosts the biggest single collection of library and information scientists in its team responsible for the national digital knowledge base and the development of specialist libraries and library services. As with other aspects of health care, executive responsibility rests with the Chief Executive of the organisation responsible for delivering the service.

The NLH Co-ordinating Group

- 16.8 Co-ordination is required for a range of activities, and this is the responsibility of the NLH Co-ordinating Group. The Group has no executive function, and has no resources other than the enthusiasm and skills of its members, and a small amount of service support for it to run. Resources sit with individual organisations, and the aim of the NLH Co-ordinating Group is to ensure that there is good communication within and between all NHS health library services. The Chair of the NLH Co-ordinating Group is a Strategic Health Authority library lead, and she is, like other SHA library leads, by virtue of her office, a member of the NLH Co-ordinating Group.

The specialist libraries

- 16.9 The NLH acts as steward for a number of important ventures that are aimed at supporting the translation of evidence into practice. One of these is the specialist libraries, of which there are now 27. The specialist libraries were reviewed about a year after they were established ¹²³, although some had been running for a number of years. In October 2007 a study by LBi made recommendations to the NLH about the specialist libraries and their direction for the future ¹²⁴.

Future developments

- 16.10 Both these reports made recommendations, some of which are technical. From the perspective of this Review, the specialist libraries were generally viewed very positively, although there is also a view that their quality varies. Their value appears to stem from the breadth and depth of the evidence they contain, and their functioning as communities of practice for members of the specialty. They appear to fall into the category of something that should only be done once and done at national level.
- 16.11 What NHS health librarians would like to see from the NLH include:
- Improvements to the NLH search engine
 - A national journal holdings database
 - Overseeing collections and repositories
 - Maintaining a national catalogue of all holdings

- Better publicity materials
- Greater transparency via engagement with health librarians
- A perception that accountability should be two-way
- Improved communication
- Getting good representation from the field
- The need for focus (given the size of the agenda)
- Model service level agreements for the provision of library services
- Collaboration on projects
- The 'single portal' role for problems and sharing good practice.

16.12 Additionally, a number of key roles emerge from this Review:

- Leadership and vision
- Strategy
- Partnership development
- Including public health
- Standard setting and benchmarking
- Overseeing quality management
- Defining national core content
- Procurement
- Branding and marketing
- Support for NHS health librarians
- Problem solving
- Horizon scanning.

Copyright and licences

16.13 Two areas of difficulty encountered over some years, and with only partial or short term solutions, relate to copyright and licensing. These are complex legal issues that need particular expertise. The National Library for Health should take responsibility, with the Department of Health (who may have the necessary specialist expertise within it), to clarify, and then find solutions to, the issues identified.

Recommendation 46:

The National Library for Health, with the Department of Health and through partnership working e.g. with the higher education sector, should resolve issues related to copyright and licensing.

Problems and solutions, and sharing good practice

16.14 One recurring example that fits the “Do Once and Share” axiom relates to repositories of various sorts. During this Review a number of unique collections were encountered; these are separate from the specialist libraries that are already overseen by the NLH. An exercise to identify existing repositories, and possible future repositories that may be needed, should be undertaken, and arrangements

for placements identified, and mechanisms for sharing necessary information on whereabouts, contents, access arrangements etc. The HE SHERPA ¹²⁵ network is acknowledged as a model of best practice. This is another area where there is a possibility for partnership working between HE and the NHS in repository development, and this should be explored.

Recommendation 47:

The National Library for Health should undertake an exercise to identify repositories that exist or will be needed, and propose arrangements for managing and publicising.

- 16.15 Another issue identified during the Review relates to the numerous problems encountered round the country, for which solutions were often identified or created. However, many of the problems seemed the same or very similar (for instance, solutions to local access issues), but where there had been significant duplication, often of effort and sometimes of expenditure. It would make sense for the National Library for Health to create or act as a bi-directional single portal. Questions and problems could be placed, and solutions and examples of good practice shared.

Recommendation 48:

The National Library for Health should explore and establish a single bi-directional portal arrangement for NHS library staff to share questions, problems and solutions, to avoid duplication of effort and expenditure, and in the interests of efficiency.

Chapter 17

The interface with the public

- 17.1 The brief for this Review did not involve covering the breadth and depth of the issues involved and the needs of patients and the public for, arguably, the same services to support them in making decisions about their care through the provision of up to date evidence and information. These aspects could justifiably be the subject of a further similar review.
- 17.2 Nevertheless, this Review has benefited from exploring to some extent this crucial interface. There are some points worth making.
- 17.3 One key principle should be that the public and patients should have access to the same knowledge and evidence base as professionals. Moves towards open access make this more achievable.
- 17.4 NHS health libraries are already crossing the boundary by responding to requests for information and, in some cases, providing training for public librarians about how best to access health information. Health promotion already works across the boundary between professionals and the public, and many health promotion units sit comfortably in health libraries. There are inevitably capacity and resource issues if this becomes a significant element of the work of health libraries.
- 17.5 The “NHS Choices” ¹²⁶ agenda will inevitably give impetus to initiatives to blur the boundaries even further. The impression gained is that health librarians would welcome developments, subject to the capacity and resource issues highlighted above. However, with approximately 3,500 public librarians, engagement will be a challenge. The opportunity is that they could be key allies and a route for health, the health service and health librarians.

Recommendation 49:

As part of the development of the “NHS Choices” agenda, the Department of Health should lead on developing a programme of further work to continue the engagement with the public library sector.

Chapter 18

Conclusion

- 18.1 From the evidence collected during this Review from a number of sources, it is clear that, without the use and application of the best available evidence in the National Health Service, death or harm may befall patients. From this evidence too, four key purposes for NHS health library and knowledge services have been identified. It is argued that these services have to be central to the purpose and business of the NHS. The Recommendations made are all designed to achieve this.
- 18.2 The National Library for Health has a key leadership role to play. As such, it should “hold the ring” for issues raised in this Review that may not have specific recommendations, and oversee implementation of all the recommendations made. {Progress should be reflected in its 2008/9 Annual Report

Recommendation 50:

Unless otherwise specified, the National Library for Health and its Board should oversee the implementation of Recommendations made in this Report. Progress should be demonstrated in its Annual Report for the financial year 2008/9.

Chapter 19

Summary of recommendations in order of appearance

Recommendation 1:

The Department of Health should issue formal guidance to the service indicating that NHS library, knowledge and information services are essential for supporting:

- clinical decision making
- commissioning decision and policy making
- life-long learning by all NHS staff, and
- research.

Who: The Department of Health

By when: As soon as possible

Recommendation 2:

As part of the regulatory process, the Department of Health should ask the appropriate Government authority to look at the anomalous issue of VAT on electronic versus paper journal procurement by the NHS.

Who: The Department of Health

By when: As soon as possible

Recommendation 3:

All NHS health professional staff should be registered automatically as ATHENS users.

Who: The National Health Service in England

By when: As soon as possible

Recommendation 4:

A programme to systematise and unify initiatives, such as current awareness bulletins, should be led by the National Library for Health in partnership with SHA library leads, to achieve consistency, efficiency and economies of scale.

Who: The National Library for Health

By when: Develop within six months

Recommendation 5:

The National Library for Health should act as a clearing house for examples of good practice in NHS health library services and facilitate their widespread adoption through the NHS Institute for Innovation and Improvement.

Who: The National Library for Health and the NHS
Institute for Innovation and Improvement

By when: As soon as possible

Recommendation 6:

The term “Library”, even if qualified by additional terms to reflect local circumstances and wishes, should always be used in relation to such services in the NHS; all NHS libraries should be “Part of the National Library for Health”.

Who: All NHS organisations and NHS health libraries

By when: As soon as possible

Recommendation 7:

Library and related knowledge and information services must be regarded as part of the core business of the NHS by the Department of Health and all NHS organisations, all of whom need access to an appropriate service and an appropriately skilled librarian.

Who: The Department of Health and all NHS organisations

By when: Henceforth

Recommendation 8:

The Department of Health should liaise with colleagues in the Ministry of Defence and other relevant Government Departments and organisations, in collaboration with the National Library for Health, to ensure that issues relating to health library and knowledge services, and best evidence into practice initiatives include health professional colleagues, so that they are not disadvantaged.

Who: The Department of Health

By when: By 31 March 2009

Recommendation 9:

Research to measure the impact of the application of best available evidence in decision making should continue to be pursued vigorously and routinely by health librarians, in partnership with researchers.

Who: This research should be commissioned by the National Institute of Health Research; all NHS health library staff

By when: As soon as possible

Recommendation 10:

This research should be overseen by the proposed National Institute of Health Research.

Who: The National Institute of Health Research

By when: Ongoing, starting as soon as possible

Recommendation 11:

In every NHS organisation someone at board level should be entrusted with the role of Chief Knowledge Officer for that organisation, with the broad responsibility as described.

Who: All NHS organisations

By when: By 1 June 2008

Recommendation 12:

The National Library for Health should promulgate a description of the responsibilities required of those assuming the role of Chief Knowledge Officer in NHS organisations.

Who: The National Library for Health

By when: Immediately

Recommendation 13:

Confirmation of implementation of recommendations 11 and 12 in NHS organisations should be sought within one year by Regional Directors of Public Health, who should have the responsibilities of the Chief Knowledge Officer for their Strategic Health Authorities.

Who: Regional Directors of Public Health for their Strategic Health Authorities

By when: 31 March 2009

Recommendation 14:

Every clinical or management team in the NHS should identify someone in the team as "Team Knowledge Officer" (or equivalent). The Team Knowledge Officer will have responsibility for ensuring the effective input of evidence to enable the team to function properly.

Who: All NHS organisations and clinical teams

By when: 1 June 2008

Recommendation 15:

The National Library for Health should draw up a generic description of the responsibilities for the “Team Knowledge Officer” function to be adopted, which should be adapted locally as circumstances dictate.

Who: The National Library for Health

By when: Immediately

Recommendation 16:

The feasibility, cost-benefit and cost-effectiveness of a development programme providing part time clinical librarians for the six or eight key areas of care in acute hospitals should be studied with a view to appropriate policy development.

Who: The National Institute of Health Research

By when: Initiate within six months

Recommendation 17:

NHS health libraries should develop evidence based strategies that focus their limited training resources for maximum effect.

Who: All NHS health library services

By when: within six months and to be in effect from 1 April 2009

Recommendation 18:

NHS health library training strategies should be reviewed by SHA library leads.

Who: SHA library leads

By when: By 31 March 2009

Recommendation 19:

All relevant regulators should seek evidence about the management arrangements and resources supporting the provision of library and knowledge services to enable NHS staff to make decisions based on the best available evidence.

Who: All Health Service Regulators

By when: As soon as possible and within one year

Recommendation 20:

As with other National Service Frameworks, all NHS organisations should have library and knowledge services that meet the standards set out in the NLH National Service Framework.

Who: All NHS organisations

By when: Complete within three years

Recommendation 21:

Quality control of health library and knowledge services locally should be overseen by Chief Knowledge Officers, within local clinical governance arrangements, where appropriate.

Who: Chief Knowledge Officers

By when: By 31 March 2009, and continually thereafter

Recommendation 22:

In developing the new process of quality management through peer review at SHA level, certain features should be adopted. Such reviews should:

- Be overseen nationally by the National Library for Health
- Include training for a pool of visitors and lead visitors
- Adopt, as far as practicable, elements of good practice, including where feasible lay and user perspectives
- Have a complete cycle within three years.

Who: Oversight by the National Library for Health; SHA library leads

By when: By 31 March 2011

Recommendation 23:

Strategic Health Authorities should continue to have a designated lead person (who should be a librarian), to support local health librarians and their services, and to oversee local quality management arrangements. These lead people should invoke managerial action where appropriate to ensure quality and promote the pursuit of excellence. SHA health library leads should also be expected to contribute to national work generally, including leadership, coordination and development, and quality assurance arrangements in particular.

Who: Strategic Health Authorities and SHA library leads

By when: Ongoing

Recommendation 24:

The National Library for Health Co-ordinating Group and Strategic Health Authority library leads should engage with local library schools and their national bodies, to ensure the output of such training is fit for purpose.

Who: National Library for Health Co-ordinating Group

By when: 31 March 2009

Recommendation 25:

The National Library for Health should devise and commission a national development programme for senior and lead librarians.

Who: The National Library for Health

By when: By 31 December 2008

Recommendation 26:

All NHS library staff should have annual appraisals and performance reviews in the same way as other NHS staff. These will lead to Personal Development Plans.

Who: All NHS organisations and NHS health library staff

By when: 31 March 2009

Recommendation 27:

The annual appraisal and performance review of heads of NHS library services by their line managers should include the input of a senior experienced professional librarian: such a perspective could be provided by SHA library leads.

Who: SHA library leads

By when: 31 March 2009

Recommendation 28:

All relevant statutory and professional bodies should develop an element of their curricula that emphasises the need for appropriate attitudes, knowledge and skills in relation to the need to apply the best available evidence in professional practice, and the basic skills required to make appropriate use of library and knowledge services.

Who: Relevant professional bodies with responsibility for curricula for health professional training

By when: 31 March 2009

Recommendation 29:

Relevant regulators, responsible for overseeing curricula, should ensure curricula contain appropriate content relating to attitudes, knowledge and skills for making best use of health library and knowledge services for evidence-based health practice.

Who: Relevant Regulators

By when: 31 March 2009

Recommendation 30:

Using this Report as guidance, Primary Care Trusts must implement the recommendation that health library and knowledge services should be part of core business, but it is for them to decide how best to do this.

Who: Primary Care Trusts
By when: Starting immediately

Recommendation 31:

Primary Care Trusts must ensure that all their health providers allow access by all NHS staff and other appropriate people (e.g. students registered on health profession courses or programmes) to health library and knowledge services.

Who: Primary Care Trusts
By when: 31 March 2009

Recommendation 32:

There are groups of health professionals who may not be currently employed in the NHS but have perhaps been trained by or at its expense, and therefore it could be argued that the NHS has a responsibility for them, and who are a potential resource for it, also need health library and knowledge service access; this issue should be explored, solutions identified and applied.

Who: The National Library for Health; Primary Care Trusts
By when: 31 March 2009

Recommendation 33:

Primary Care Trusts will ensure that all their contracts, Local Development Agreements and SLAs refer to the use and application of best available evidence by their commissioned providers.

Who: Primary Care Trusts
By when: 31 March 2009

Recommendation 34:

Strategic Health Authorities will monitor implementation of Recommendations 31, 32 and 33 by PCTs and report annually.

Who: Strategic Health Authorities
By when: 31 March 2009

Recommendation 35:

The principles set out in this Report must apply equally for social care and social care staff. Consideration centrally and locally, as appropriate, needs to be given as to how best to support evidence based practice in social care and other non-NHS bodies, for example through Local Strategic Partnerships.

Who: Primary Care Trusts with SHA library leads
By when: 31 March 2009

Recommendation 36:

NHS health libraries should see the support of lifelong learning in NHS health professionals as part of their core business and reflect this in health library strategies, business plans etc.

Who: Led by the National Library for Health, with NHS health libraries and librarians
By when: Starting immediately

Recommendation 37:

Strategic Health Authorities should assess the extent of implementation of Recommendation 36.

Who: Strategic Health Authorities
By when: 31 March 2009

Recommendation 38:

Existing partnerships, such as that with JISC and the NHS-HE Forum, should be fully supported by the NHS to ensure development and maximum benefit to all parties. The National Library for Health Board should review existing arrangements within one year and identify ways in which these partnerships can be strengthened and developed e.g. stronger NHS manager representation on the NHS-HE Forum.

Who: The National Library for Health Board
By when: 31 March 2009

Recommendation 39:

The National Library for Health, in conjunction with Department of Health Research and Development colleagues, should explore ways in which the knowledge and evidence aspects (related to inputs, outputs and outcomes) of research can best be handled and managed to the advantage of the NHS and the public purse. An approach should be defined within one year.

Who: The National Library for Health with Department of Health Research & Development colleagues
By when: 31 March 2009

Recommendation 40:

All NHS health library staff should have an explicit statement in their job descriptions that they are expected to contribute to local and national evaluations of the impact of their health library services.

Who: All NHS organisations and health library staff
By when: 31 March 2009

Recommendation 41:

There must be appropriate interaction and input from the National Library for Health to information technology development colleagues in the Department of Health, to ensure appropriate recognition and embracing of health technology and evidence. This is part of ensuring that NHS staff are supported in applying best evidence to decision making. This should be overseen by the Department of Health Chief Information Officer in partnership with the NHS Chief Knowledge Officer.

Who: Department of Health Chief Information Officer and the NHS Chief Knowledge Officer
By when: 31 March 2009

Recommendation 42:

The National library for Health, working with The National Archive (TNA) and the National Research Reserve (NRR), should develop a strategy on the need to archive information older than 10 years, and explore the potential for archiving solutions.

Who: The National Library for Health
By when: Within six months

Recommendation 43:

The National Library for Health, through its working group, should consult on and gain consensus on “core content”, covering approximately 80% of NHS health library journal needs. This core content should form the basis of the national process for journal (paper and electronic) procurement.

Who: The National Library for Health
By when: Within six months

Recommendation 44:

Existing arrangements for collaboration and partnership working with Higher Education should be supported and strengthened. In particular a joint approach to procurement of both paper and e-resources should be developed (through

collaboration between NLH and the NHS-HE Forum) to the benefit of both sectors and the public purse but without sacrifice in quality.

Who: The National Library for Health
By when: 31 March 2009

Recommendation 45:

The Department of Health should consider approaching the other three UK countries to develop an appropriate four country high level advisory arrangement to promote joined up approaches regarding health library and knowledge services (and related issues such as procurement and appropriate technology inter-connectivity).

Who: The Department of Health
By when: 31 March 2009

Recommendation 46:

The National Library for Health, with the Department of Health and through partnership working e.g. with the higher education sector, should resolve issues related to copyright and licensing.

Who: The National Library for Health with the Department of Health
By when: 31 March 2009

Recommendation 47:

The National Library for Health should undertake an exercise to identify repositories that exist or will be needed, and propose arrangements for managing and publicising.

Who: The National Library for Health
By when: 31 March 2009

Recommendation 48:

The National Library for Health should explore and establish a single bi-directional portal arrangement for NHS library staff to share questions, problems and solutions, to avoid duplication of effort and expenditure, and in the interests of efficiency.

Who: The National Library for Health
By when: 31 March 2009

Recommendation 49:

As part of the development of the “NHS Choices” agenda, the Department of Health should lead on developing a programme of further work to continue the engagement with the public library sector.

Who: The Department of Health
By when: Within 6 months

Recommendation 50:

Unless otherwise specified, the National Library for Health and its Board should oversee the implementation of Recommendations made in this Report. Progress should be demonstrated in its Annual Report for the financial year 2008/9.

Who: The National Library for Health
By when: As specified in individual Recommendations, and no later than 31 March 2009

Chapter 20

Summary of recommendations by target audience

In this Chapter the previously listed Recommendations are grouped according to the organisation or post holder with direct responsibility, and by organisations with a particular interest.

The Department of Health

Recommendation 1:

The Department of Health should issue formal guidance to the service indicating that NHS library, knowledge and information services are essential for supporting:

- clinical decision making
- commissioning decision and policy making
- life-long learning by all NHS staff, and
- research.

Who: The Department of Health

By when: As soon as possible

Recommendation 2:

The Department of Health should ask the appropriate Government authority to look at the anomalous issue of VAT on electronic versus paper journal procurement by the NHS.

Who: The Department of Health

By when: As soon as possible

Recommendation 7:

Library and related knowledge and information services must be regarded as part of the core business of the NHS by the Department of Health and all NHS organisations, all of whom need access to an appropriate service and an appropriately skilled librarian.

Who: The Department of Health and all NHS organisations

By when: Henceforth

Recommendation 8:

The Department of Health should liaise with colleagues in the Ministry of Defence and other relevant Government Departments and organisations, in collaboration with the National Library for Health, to ensure that issues relating to health library and knowledge services, and best evidence into practice initiatives include health professional colleagues, so that they are not disadvantaged.

Who: The Department of Health

By when: By 31 March 2009

Recommendation 39:

The National Library for Health, in conjunction with Department of Health Research and Development colleagues, should explore ways in which the knowledge and evidence aspects (related to inputs, outputs and outcomes) of research can best be handled and managed to the advantage of the NHS and the public purse. An approach should be defined within one year.

Who: The National Library for Health with
Department of Health Research & Development colleagues

By when: 31 March 2009

Recommendation 41:

There must be appropriate interaction, and input from the National Library for Health to information technology development colleagues in the Department of Health, to ensure appropriate recognition and embracing of health technology and evidence. This is part of ensuring that NHS staff are supported in applying best evidence to decision making. This should be overseen by the Department of Health Chief Information Officer in partnership with the NHS Chief Knowledge Officer.

Who: Department of Health Chief Information Officer and the NHS Chief Knowledge Officer

By when: 31 March 2009

Recommendation 45:

The Department of Health should consider approaching the other three UK countries to develop an appropriate four country high level advisory arrangement to promote joined up approaches regarding health library and knowledge services (and related issues such as procurement and appropriate technology inter-connectivity).

Who: The Department of Health

By when: 31 March 2009

Recommendation 46:

The National Library for Health, with the Department of Health and through partnership working e.g. with the higher education sector, should resolve issues related to copyright and licensing.

Who: The National Library for Health with the Department of Health

By when: 31 March 2009

Recommendation 49:

As part of the development of the “NHS Choices” agenda, the Department of Health should lead on developing a programme of further work to continue the engagement with the public library sector.

Who: The Department of Health

By when: Within 6 months

The Department of Health Chief Information Officer

Recommendation 1:

The Department of Health should issue formal guidance to the service indicating that NHS library, knowledge and information services are essential for supporting:

- clinical decision making
- commissioning decision and policy making
- life-long learning by all NHS staff, and
- research.

Who: The Department of Health

By when: As soon as possible

Recommendation 41:

There must be appropriate interaction, and input from the National Library for Health to information technology development colleagues in the Department of Health, to ensure appropriate recognition and embracing of health technology and evidence. This is part of ensuring that NHS staff are supported in applying best evidence to decision making. This should be overseen by the Department of Health Chief Information Officer in partnership with the NHS Chief Knowledge Officer.

Who: Department of Health Chief Information Officer and the
NHS Chief Knowledge Officer
By when: 31 March 2009

Recommendation 49:

As part of the development of the “NHS Choices” agenda, the Department of Health should lead on developing a programme of further work to continue the engagement with the public library sector.

Who: The Department of Health
By when: Within 6 months

The NHS Chief Knowledge Officer

Recommendation 1:

The Department of Health should issue formal guidance to the service indicating that NHS library, knowledge and information services are essential for supporting:

- clinical decision making
- commissioning decision and policy making
- life-long learning by all NHS staff, and
- research.

Who: The Department of Health
By when: As soon as possible

Recommendation 11:

In every NHS organisation someone at board level should be entrusted with the role of Chief Knowledge Officer for that organisation, with the broad responsibility as described.

Who: All NHS organisations
By when: By 1 June 2008

Recommendation 14:

Every clinical or management team in the NHS should identify someone in the team as “Team Knowledge Officer” (or equivalent). The Team Knowledge Officer will have responsibility for ensuring the effective input of evidence to enable the team to function properly.

Who: All NHS organisations and clinical teams
By when: 1 June 2008

Recommendation 41:

There must be appropriate interaction, and input from the National Knowledge Service and the National Library for Health to information technology development colleagues in the Department of Health, to ensure appropriate recognition and embracing of health technology and evidence. This is part of ensuring that NHS staff are supported in applying best evidence to decision making. This should be overseen by the Department of Health Chief Information Officer in partnership with the NHS Chief Knowledge Officer.

Who: Department of Health Chief Information Officer and the
NHS Chief Knowledge Officer
By when: 31 March 2009

The National Institute of Health Research

Recommendation 9:

Research to measure the impact of the application of best available evidence in decision making should continue to be pursued vigorously and routinely by health librarians, in partnership with researchers.

Who: This research should be commissioned by the National Institute of Health Research; all NHS library staff

By when: As soon as possible

Recommendation 10:

This research should be overseen by the proposed National Institute of Health Research.

Who: The National Institute of Health Research

By when: Ongoing, starting as soon as possible

Recommendation 16:

The feasibility, cost-benefit and cost-effectiveness of a development programme providing part time clinical librarians for the six or eight key areas of care in acute hospitals should be studied with a view to appropriate policy development.

Who: The National Institute of Health Research

By when: Initiate within six months

Recommendation 39:

The National Library for Health, in conjunction with Department of Health Research and Development colleagues, should explore ways in which the knowledge and evidence aspects (related to inputs, outputs and outcomes) of research can best be handled and managed to the advantage of the NHS and the public purse. An approach should be defined within one year.

Who: The National Library for Health with Department of Health Research & Development colleagues

By when: 31 March 2009

The National Library for Health

Recommendation 4

A programme to systematise and unify initiatives, such as current awareness bulletins, should be led by the National Library for Health in partnership, with SHA library leads, to achieve consistency, efficiency and economies of scale.

Who: The National Library for Health

By when: Develop within six months

Recommendation 5:

The National Library for Health should act as a clearing house for examples of good practice in NHS health library services and facilitate their widespread adoption through the NHS Institute for Innovation and Improvement.

Who: The National Library for Health and the NHS Institute for Innovation and Improvement

By when: As soon as possible

Recommendation 6:

The term "Library", even if qualified by additional terms to reflect local circumstances and wishes, should always be used in relation to such services in the NHS; all NHS libraries should be "Part of the National Library for Health".

Who: All NHS organisations and NHS health libraries

By when: As soon as possible

Recommendation 9:

Research to measure the impact of the application of best available evidence in decision making should continue to be pursued vigorously and routinely by health librarians, in partnership with researchers.

Who: This research should be commissioned by the National Institute of Health Research; all NHS library staff

By when: As soon as possible

Recommendation 11:

In every NHS organisation someone at board level should be entrusted with the role of Chief Knowledge Officer for that organisation, with the broad responsibility as described.

Who: All NHS organisations

By when: By 1 June 2008

Recommendation 12:

The National Library for Health should promulgate a description of the responsibilities required of those assuming the role of Chief Knowledge Officer in NHS organisations.

Who: The National Library for Health

By when: Immediately

Recommendation 14:

Every clinical or management team in the NHS should identify someone in the team as “Team Knowledge Officer” (or equivalent). The Team Knowledge Officer will have responsibility for ensuring the effective input of evidence to enable the team to function properly.

Who: All NHS organisations and clinical teams

By when: 1 June 2008

Recommendation 15:

The National Library for Health should draw up a generic description of the responsibilities for the “Team Knowledge Officer” function to be adopted, which should be adapted locally as circumstances dictate.

Who: The National Library for Health

By when: Immediately

Recommendation 22:

In developing the new process of quality management through peer review at SHA level, certain features should be adopted. Such reviews should:

- Be overseen nationally by the National Library for Health
- Include training for a pool of visitors and lead visitors
- Adopt, as far as practicable, elements of good practice, including where feasible lay and user perspectives
- Have a complete cycle within three years.

Who: Oversight by the National Library for Health; SHA library leads

By when: By 31 March 2011

Recommendation 24:

The National Library for Health Co-ordinating Group and Strategic Health Authority library leads should engage with local library schools and their national bodies, to ensure the output of such training is fit for purpose.

Who: National Library for Health Co-ordinating Group

By when: 31 March 2009

Recommendation 25:

The National Library for Health should devise and commission a national development programme for senior and lead librarians.

Who: The National Library for Health

By when: By 31 December 2008

Recommendation 32:

There are groups of health professionals who may not be currently employed in the NHS but have perhaps been trained by or at its expense, and therefore it could be argued that the NHS has a responsibility for them, and who are a potential resource for it, also need health library and knowledge service access; this issue should be explored, solutions identified and applied.

Who: The National Library for Health; Primary Care Trusts

By when: 31 March 2009

Recommendation 36:

NHS health libraries should see the support of lifelong learning in NHS health professionals as part of their core business and reflect this in health library strategies, business plans etc.

Who: Led by the National Library for Health,
with NHS health libraries and librarians

By when: Starting immediately

Recommendation 38:

Existing partnerships, such as that with JISC and the NHS-HE Forum, should be fully supported by the NHS to ensure development and maximum benefit to all parties. The National Library for Health Board should review existing arrangements within one year and identify ways in which these partnerships can be strengthened and developed e.g. stronger NHS manager representation on the NHS-HE Forum.

Who: The National Library for Health Board

By when: 31 March 2009

Recommendation 39:

The National Library for Health, in conjunction with Department of Health Research and Development colleagues, should explore ways in which the knowledge and evidence aspects (related to inputs, outputs and outcomes) of research can best be handled and managed to the advantage of the NHS and the public purse. An approach should be defined within one year.

Who: The National Library for Health with
Department of Health Research & Development colleagues

By when: 31 March 2009

Recommendation 42:

The National library for Health, working with The National Archive (TNA) and the National Research Reserve (NRR), should develop a strategy on the need to archive information older than 10 years, and explore the potential for archiving solutions.

Who: The National Library for Health

By when: Within six months

Recommendation 43:

The National Library for Health, through its working group, should consult on and gain consensus on “core content”, covering approximately 80% of NHS health library journal needs. This core content should form the basis of the national process for journal (paper and electronic) procurement.

Who: The National Library for Health

By when: Within six months

Recommendation 44:

Existing arrangements for collaboration and partnership working with Higher Education should be supported and strengthened. In particular a joint approach to procurement of both paper and e-resources should be developed (through collaboration between NLH and the NHS-HE Forum) to the benefit of both sectors and the public purse but without sacrifice in quality.

Who: The National Library for Health

By when: 31 March 2009

Recommendation 46:

The National Library for Health, with the Department of Health and through partnership working e.g. with the higher education sector, should resolve issues related to copyright and licensing.

Who: The National Library for Health with the
Department of health

By when: 31 March 2009

Recommendation 47:

The National Library for Health should undertake an exercise to identify repositories that exist or will be needed, and propose arrangements for managing and publicising.

Who: The National Library for Health

By when: 31 March 2009

Recommendation 48:

The National Library for Health should explore and establish a single bi-directional portal arrangement for NHS library staff to share questions, problems and solutions, to avoid duplication of effort and expenditure, and in the interests of efficiency.

Who: The National Library for Health

By when: 31 March 2009

Recommendation 50:

Unless otherwise specified, the National Library for Health and its Board should oversee the implementation of Recommendations made in this Report. Progress should be demonstrated in its Annual Report for the financial year 2008/9.

Who: The National Library for Health

By when: As specified in individual Recommendations,
and no later than 31 March 2009

All NHS Organisations

Recommendation 3:

All NHS health professional staff should be registered automatically as ATHENS users.

Who: The National Health Service in England

By when: As soon as possible

Recommendation 6:

The term "Library", even if qualified by additional terms to reflect local circumstances and wishes, should always be used in relation to such services in the NHS; all NHS libraries should be "Part of the National Library for Health".

Who: All NHS organisations and NHS health libraries

By when: As soon as possible

Recommendation 7:

Library and related knowledge and information services must be regarded as part of the core business of the NHS by the Department of Health and all NHS organisations, all of whom need access to an appropriate service and an appropriately skilled librarian.

Who: The Department of Health and all NHS organisations

By when: Henceforth

Recommendation 11:

In every NHS organisation someone at board level should be entrusted with the role of Chief Knowledge Officer for that organisation, with the broad responsibility as described.

Who: All NHS organisations

By when: By 1 June 2008

Recommendation 14:

Every clinical or management team in the NHS should identify someone in the team as “Team Knowledge Officer” (or equivalent). The Team Knowledge Officer will have responsibility for ensuring the effective input of evidence to enable the team to function properly.

Who: All NHS organisations and clinical teams

By when: 1 June 2008

Recommendation 20:

As with other National Service Frameworks, all NHS organisations should have library and knowledge services that meet the standards set out in the NLH National Service Framework.

Who: All NHS organisations

By when: Complete within three years

Recommendation 26:

All NHS library staff should have annual appraisals and performance reviews in the same way as other NHS staff. These will lead to Personal Development Plans.

Who: All NHS organisations and NHS health library staff

By when: 31 March 2009

Recommendation 40:

All NHS health library staff should have an explicit statement in their job descriptions that they are expected to contribute to local and national evaluations of the impact of their health library services.

Who: All NHS organisations and health library staff

By when: 31 March 2009

Chief Knowledge Officers in NHS organisations**Recommendation 6:**

The term “Library”, even if qualified by additional terms to reflect local circumstances and wishes, should always be used in relation to such services in the NHS; all NHS libraries should be “Part of the National Library for Health”.

Who: All NHS organisations and NHS health libraries

By when: As soon as possible

Recommendation 7:

Library and related knowledge and information services must be regarded as part of the core business of the NHS by the Department of Health and all NHS

organisations, all of whom need access to an appropriate service and an appropriately skilled librarian.

Who: The Department of Health and all NHS organisations

By when: Henceforth

Recommendation 11:

In every NHS organisation someone at board level should be entrusted with the role of Chief Knowledge Officer for that organisation, with the broad responsibility as described.

Who: All NHS organisations

By when: By 1 June 2008

Recommendation 13:

Confirmation of implementation of recommendations 11 and 12 in NHS organisations should be sought within one year by Regional Directors of Public Health, who should have the responsibilities of the Chief Knowledge Officer for their Strategic Health Authorities.

Who: Regional Directors of Public Health
for their Strategic Health Authorities

By when: 31 March 2009

Recommendation 14:

Every clinical or management team in the NHS should identify someone in the team as “Team Knowledge Officer” (or equivalent). The Team Knowledge Officer will have responsibility for ensuring the effective input of evidence to enable the team to function properly.

Who: All NHS organisations and clinical teams

By when: 1 June 2008

Recommendation 20:

As with other National Service Frameworks, all NHS organisations should have library and knowledge services that meet the standards set out in the NLH National Service Framework.

Who: All NHS organisations

By when: Complete within three years

Recommendation 21:

Quality control of health library and knowledge services locally should be overseen by Chief Knowledge Officers, within local clinical governance arrangements, where appropriate.

Who: Chief Knowledge Officers

By when: By 31 March 2009, and continually thereafter

Recommendation 26:

All NHS library staff should have annual appraisals and performance reviews in the same way as other NHS staff. These will lead to Personal Development Plans.

Who: All NHS organisations and NHS health library staff

By when: 31 March 2009

Recommendation 27:

The annual appraisal and performance review of heads of NHS library services by their line managers should include the input of a senior experienced professional librarian: such a perspective could be provided by SHA regional librarians.

Who: SHA library leads

By when: 31 March 2009

Strategic Health Authorities

Recommendation 6:

The term “Library”, even if qualified by additional terms to reflect local circumstances and wishes, should always be used in relation to such services in the NHS; all NHS libraries should be “Part of the National Library for Health”.

Who: All NHS organisations and NHS health libraries

By when: As soon as possible

Recommendation 7:

Library and related knowledge and information services must be regarded as part of the core business of the NHS by the Department of Health and all NHS organisations, all of whom need access to an appropriate service and an appropriately skilled librarian.

Who: The Department of Health and all NHS organisations

By when: Henceforth

Recommendation 11:

In every NHS organisation someone at board level should be entrusted with the role of Chief Knowledge Officer for that organisation, with the broad responsibility as described.

Who: All NHS organisations

By when: By 1 June 2008

Recommendation 13:

Confirmation of implementation of recommendations 11 and 12 in NHS organisations should be sought within one year by Regional Directors of Public Health, who should have the responsibilities of the Chief Knowledge Officer for their Strategic Health Authorities.

Who: Regional Directors of Public Health for their Strategic Health Authorities

By when: 31 March 2009

Recommendation 14:

Every clinical or management team in the NHS should identify someone in the team as “Team Knowledge Officer” (or equivalent). The Team Knowledge Officer will have responsibility for ensuring the effective input of evidence to enable the team to function properly.

Who: All NHS organisations and clinical teams

By when: 1 June 2008

Recommendation 20:

As with other National Service Frameworks, all NHS organisations should have library and knowledge services that meet the standards set out in the NLH National Service Framework.

Who: All NHS organisations

By when: Complete within three years

Recommendation 23:

Strategic Health Authorities should continue to have a designated lead person (who should be a librarian), to support local health librarians and their services, and to oversee local quality management arrangements. These lead people should invoke managerial action where appropriate to ensure quality and promote the pursuit of excellence. SHA health library leads should also be expected to contribute to national work generally, including leadership, coordination and development, and quality assurance arrangements in particular.

Who: Strategic Health Authorities and SHA library leads

By when: Ongoing

Recommendation 37:

Strategic Health Authorities should assess the extent of implementation of Recommendation 36.

Who: Strategic Health Authorities

By when: 31 March 2009

Regional Directors of Public Health

Recommendation 13:

Confirmation of implementation of recommendations 11 and 12 in NHS organisations should be sought within one year by Regional Directors of Public Health, who should have the responsibilities of the Chief Knowledge Officer for their Strategic Health Authorities.

Who: Regional Directors of Public Health
for their Strategic Health Authorities

By when: 31 March 2009

Strategic Health Authority library leads

Recommendation 6:

The term “Library”, even if qualified by additional terms to reflect local circumstances and wishes, should always be used in relation to such services in the NHS; all NHS libraries should be “Part of the National Library for Health”.

Who: All NHS organisations and NHS health libraries

By when: As soon as possible

Recommendation 7:

Library and related knowledge and information services must be regarded as part of the core business of the NHS by the Department of Health and all NHS organisations, all of whom need access to an appropriate service and an appropriately skilled librarian.

Who: The Department of Health and all NHS organisations

By when: Henceforth

Recommendation 14:

Every clinical or management team in the NHS should identify someone in the team as “Team Knowledge Officer” (or equivalent). The Team Knowledge Officer will have responsibility for ensuring the effective input of evidence to enable the team to function properly.

Who: All NHS organisations and clinical teams

By when: 1 June 2008

Recommendation 18:

NHS health library training strategies should be reviewed by SHA library leads.

Who: SHA library leads

By when: By 31 March 2009

Recommendation 22:

In developing the new process of quality management through peer review at SHA level, certain features should be adopted. Such reviews should:

- Be overseen nationally by the National Library for Health
- Include training for a pool of visitors and lead visitors

- Adopt, as far as practicable, elements of good practice, including where feasible lay and user perspectives
- Have a complete cycle within three years.

Who: Oversight by the National Library for Health; SHA library leads

By when: By 31 March 2011

Recommendation 23:

Strategic Health Authorities should continue to have a designated lead person (who should be a librarian), to support local health librarians and their services, and to oversee local quality management arrangements. These lead people should invoke managerial action where appropriate to ensure quality and promote the pursuit of excellence. SHA health library leads should also be expected to contribute to national work generally, including leadership, coordination and development, and quality assurance arrangements in particular.

Who: Strategic Health Authorities and SHA library leads

By when: Ongoing

Recommendation 24:

The National Library for Health Co-ordinating Group and Strategic Health Authority library leads should engage with local library schools and their national bodies, to ensure the output of such training is fit for purpose.

Who: National Library for Health Co-ordinating Group

By when: 31 March 2009

Recommendation 27:

The annual appraisal and performance review of heads of NHS library services by their line managers should include the input of a senior experienced professional librarian: such a perspective could be provided by SHA regional librarians.

Who: SHA library leads

By when: 31 March 2009

Recommendation 34:

Strategic Health Authorities will monitor implementation of Recommendations 31, 32 and 33 by PCTs and report annually.

Who: SHA library leads

By when: 31 March 2009

Recommendation 35:

The principles set out in this Report must apply equally for social care and social care staff. Consideration centrally and locally, as appropriate, needs to be given as to how best to support evidence based practice in social care and other non-NHS bodies, for example through Local Strategic Partnerships.

Who: Primary Care Trusts with SHA library leads

By when: 31 March 2009

Primary Care Trusts/Commissioning organisations

Recommendation 6:

The term “Library”, even if qualified by additional terms to reflect local circumstances and wishes, should always be used in relation to such services in the NHS; all NHS libraries should be “Part of the National Library for Health”.

Who: All NHS organisations and NHS health libraries

By when: As soon as possible

Recommendation 7:

Library and related knowledge and information services must be regarded as part of the core business of the NHS by the Department of Health and all NHS

organisations, all of whom need access to an appropriate service and an appropriately skilled librarian.

Who: The Department of Health and all NHS organisations

By when: Henceforth

Recommendation 11:

In every NHS organisation someone at board level should be entrusted with the role of Chief Knowledge Officer for that organisation, with the broad responsibility as described.

Who: All NHS organisations

By when: By 1 June 2008

Recommendation 14:

Every clinical or management team in the NHS should identify someone in the team as “Team Knowledge Officer” (or equivalent). The Team Knowledge Officer will have responsibility for ensuring the effective input of evidence to enable the team to function properly.

Who: All NHS organisations and clinical teams

By when: 1 June 2008

Recommendation 20:

As with other National Service Frameworks, all NHS organisations should have library and knowledge services that meet the standards set out in the NLH National Service Framework.

Who: All NHS organisations

By when: Complete within three years

Recommendation 26:

All NHS library staff should have annual appraisals and performance reviews in the same way as other NHS staff. These will lead to Personal Development Plans.

Who: All NHS organisations and NHS health library staff

By when: 31 March 2009

Recommendation 27:

The annual appraisal and performance review of heads of NHS library services by their line managers should include the input of a senior experienced professional librarian: such a perspective could be provided by SHA regional librarians.

Who: SHA library leads

By when: 31 March 2009

Recommendation 30:

Using this Report as guidance, Primary Care Trusts must implement the recommendation that health library and knowledge services should be part of core business, but it is for them to decide how best to do this.

Who: Primary Care Trusts

By when: Starting immediately

Recommendation 31:

Primary Care Trusts must ensure that all their health providers allow access by all NHS staff and other appropriate people (e.g. students registered on health profession courses or programmes) to health library and knowledge services.

Who: Primary Care Trusts

By when: 31 March 2009

Recommendation 33:

Primary Care Trusts will ensure that all their contracts, Local Development Agreements and SLAs refer to the use and application of best available evidence by their commissioned providers.

Who: Primary Care Trusts

By when: 31 March 2009

Recommendation 35:

The principles set out in this Report must apply equally for social care and social care staff. Consideration centrally and locally, as appropriate, needs to be given as to how best to support evidence based practice in social care and other non-NHS bodies, for example through Local Strategic Partnerships.

Who: Primary Care Trusts with SHA library leads

By when: 31 March 2009

Recommendation 40:

All NHS health library staff should have an explicit statement in their job descriptions that they are expected to contribute to local and national evaluations of the impact of their health library services.

Who: All NHS organisations and health library staff

By when: 31 March 2009

NHS health libraries

Recommendation 6:

The term “Library”, even if qualified by additional terms to reflect local circumstances and wishes, should always be used in relation to such services in the NHS; all NHS libraries should be “Part of the National Library for Health”.

Who: All NHS organisations and NHS health libraries

By when: As soon as possible

Recommendation 7:

Library and related knowledge and information services must be regarded as part of the core business of the NHS by the Department of Health and all NHS organisations, all of whom need access to an appropriate service and an appropriately skilled librarian.

Who: The Department of Health and all NHS organisations

By when: Henceforth

Recommendation 17:

NHS health libraries should develop evidence based strategies that focus their limited training resources for maximum effect.

Who: All NHS health library services

By when: within six months and to be in effect from 1 April 2009

Recommendation 20:

As with other National Service Frameworks, all NHS organisations should have library and knowledge services that meet the standards set out in the NLH National Service Framework.

Who: All NHS organisations

By when: Complete within three years

Recommendation 26:

All NHS library staff should have annual appraisals and performance reviews in the same way as other NHS staff. These will lead to Personal Development Plans.

Who: All NHS organisations and NHS health library staff

By when: 31 March 2009

Recommendation 27:

The annual appraisal and performance review of heads of NHS library services by their line managers should include the input of a senior experienced professional librarian: such a perspective could be provided by SHA regional librarians.

Who: SHA library leads

By when: 31 March 2009

Recommendation 36:

NHS health libraries should see the support of lifelong learning in NHS health professionals as part of their core business and reflect this in health library strategies, business plans etc.

Who: Led by the National Library for Health, with NHS health libraries and librarians

By when: Starting immediately

Recommendation 40:

All NHS health library staff should have an explicit statement in their job descriptions that they are expected to contribute to local and national evaluations of the impact of their health library services.

Who: All NHS organisations and health library staff

By when: 31 March 2009

NHS health library staff

Recommendation 6:

The term “Library”, even if qualified by additional terms to reflect local circumstances and wishes, should always be used in relation to such services in the NHS; all NHS libraries should be “Part of the National Library for Health”.

Who: All NHS organisations and NHS health libraries

By when: As soon as possible

Recommendation 7:

Library and related knowledge and information services must be regarded as part of the core business of the NHS by the Department of Health and all NHS organisations, all of whom need access to an appropriate service and an appropriately skilled librarian.

Who: The Department of Health and all NHS organisations

By when: Henceforth

Recommendation 9:

Research to measure the impact of the application of best available evidence in decision making should continue to be pursued vigorously and routinely by health librarians, in partnership with researchers.

Who: This research should be commissioned by the National Institute of Health Research; all NHS library staff

By when: As soon as possible

Recommendation 20:

As with other National Service Frameworks, all NHS organisations should have library and knowledge services that meet the standards set out in the NLH National Service Framework.

Who: All NHS organisations

By when: Complete within three years

Recommendation 26:

All NHS library staff should have annual appraisals and performance reviews in the same way as other NHS staff. These will lead to Personal Development Plans.

Who: All NHS organisations and NHS health library staff

By when: 31 March 2009

Recommendation 36:

NHS health libraries should see the support of lifelong learning in NHS health professionals as part of their core business and reflect this in health library strategies, business plans etc.

Who: Led by the National Library for Health,
with NHS health libraries and librarians

By when: Starting immediately

Recommendation 40:

All NHS health library staff should have an explicit statement in their job descriptions that they are expected to contribute to local and national evaluations of the impact of their health library services.

Who: All NHS organisations and health library staff

By when: 31 March 2009

Health Service Regulators

Recommendation 7:

Library and related knowledge and information services must be regarded as part of the core business of the NHS by the Department of Health and all NHS organisations, all of whom need access to an appropriate service and an appropriately skilled librarian.

Who: The Department of Health and all NHS organisations

By when: Henceforth

Recommendation 11:

In every NHS organisation someone at board level should be entrusted with the role of Chief Knowledge Officer for that organisation, with the broad responsibility as described.

Who: All NHS organisations

By when: By 1 June 2008

Recommendation 14:

Every clinical or management team in the NHS should identify someone in the team as “Team Knowledge Officer” (or equivalent). The Team Knowledge Officer will have responsibility for ensuring the effective input of evidence to enable the team to function properly.

Who: All NHS organisations and clinical teams

By when: 1 June 2008

Recommendation 19:

All relevant regulators should seek evidence about the management arrangements and resources supporting the provision of library and knowledge services to enable NHS staff to make decisions based on the best available evidence.

Who: All Health Service Regulators

By when: As soon as possible and within one year

Recommendation 20:

As with other National Service Frameworks, all NHS organisations should have library and knowledge services that meet the standards set out in the NLH National Service Framework.

Who: All NHS organisations

By when: Complete within three years

Recommendation 29:

Relevant regulators, responsible for overseeing curricula, should ensure curricula contain appropriate content relating to attitudes, knowledge and skills for making best use of health library and knowledge services for evidence-based health practice.

Who: Relevant Regulators

By when: 31 March 2009

Professional bodies responsible for health professional curricula e.g. Colleges

Recommendation 7:

Library and related knowledge and information services must be regarded as part of the core business of the NHS by the Department of Health and all NHS organisations, all of whom need access to an appropriate service and an appropriately skilled librarian.

Who: The Department of Health and all NHS organisations

By when: Henceforth

Recommendation 28:

All relevant statutory and professional bodies should develop an element of their curricula that emphasises the need for appropriate attitudes, knowledge and skills in relation to the need to apply the best available evidence in professional practice, and the basic skills required to make appropriate use of library and knowledge services.

Who: Relevant professional bodies with responsibility
for curricula for health professional training

By when: 31 March 2009

Recommendation 29:

Relevant regulators, responsible for overseeing curricula, should ensure curricula contain appropriate content relating to attitudes, knowledge and skills for making best use of health library and knowledge services for evidence-based health practice.

Who: Relevant Regulators

By when: 31 March 2009

Chapter 21

Summary of recommendations: Strategic and operational

In this chapter, the Recommendations are summarized as to whether they are strategic (i.e. setting the direction of travel), or operational (enabling). A few of the Recommendations fall into both categories.

Recommendations that are strategic

Recommendation 1:

The Department of Health should issue formal guidance to the service indicating that NHS library, knowledge and information services are essential for supporting:

- clinical decision making
- commissioning decision and policy making
- life-long learning by all NHS staff, and
- research.

Who: The Department of Health

By when: As soon as possible

Recommendation 7:

Library and related knowledge and information services must be regarded as part of the core business of the NHS by the Department of Health and all NHS organisations, all of whom need access to an appropriate service and an appropriately skilled librarian.

Who: The Department of Health and all NHS organisations

By when: Henceforth

Recommendation 8:

The Department of Health should liaise with colleagues in the Ministry of Defence and other relevant Government Departments and organisations, in collaboration with the National Library for Health, to ensure that issues relating to health library and knowledge services, and best evidence into practice initiatives include health professional colleagues, so that they are not disadvantaged.

Who: The Department of Health

By when: By 31 March 2009

Recommendation 9:

Research to measure the impact of the application of best available evidence in decision making should continue to be pursued vigorously and routinely by health librarians, in partnership with researchers.

Who: This research should be commissioned by the National Institute of Health Research; all NHS health library staff

By when: As soon as possible

Recommendation 11:

In every NHS organisation someone at board level should be entrusted with the role of Chief Knowledge Officer for that organisation, with the broad responsibility as described.

Who: All NHS organisations

By when: By 1 June 2008

Recommendation 14:

Every clinical or management team in the NHS should identify someone in the team as “Team Knowledge Officer” (or equivalent). The Team Knowledge Officer will have responsibility for ensuring the effective input of evidence to enable the team to function properly.

Who: All NHS organisations and clinical teams

By when: 1 June 2008

Recommendation 16:

The feasibility, cost-benefit and cost-effectiveness of a development programme providing part time clinical librarians for the six or eight key areas of care in acute hospitals should be studied with a view to appropriate policy development.

Who: The National Institute of Health Research

By when: Initiate within six months

Recommendation 17:

NHS health libraries should develop evidence based strategies that focus their limited training resources for maximum effect.

Who: All NHS health library services

By when: within six months and to be in effect from 1 April 2009

Recommendation 19:

All relevant regulators should seek evidence about the management arrangements and resources supporting the provision of library and knowledge services to enable NHS staff to make decisions based on the best available evidence.

Who: All Health Service Regulators

By when: As soon as possible and within one year

Recommendation 20:

As with other National Service Frameworks, all NHS organisations should have library and knowledge services that meet the standards set out in the NLH National Service Framework.

Who: All NHS organisations

By when: Complete within three years

Recommendation 21:

Quality control of health library and knowledge services locally should be overseen by Chief Knowledge Officers, within local clinical governance arrangements, where appropriate.

Who: Chief Knowledge Officers

By when: By 31 March 2009, and continually thereafter

Recommendation 24:

The National Library for Health Co-ordinating Group and Strategic Health Authority library leads should engage with local library schools and their national bodies, to ensure the output of such training is fit for purpose.

Who: National Library for Health Co-ordinating Group

By when: 31 March 2009

Recommendation 25:

The National Library for Health should devise and commission a national development programme for senior and lead librarians.

Who: The National Library for Health

By when: By 31 December 2008

Recommendation 26:

All NHS library staff should have annual appraisals and performance reviews in the same way as other NHS staff. These will lead to Personal Development Plans.

Who: All NHS organisations and NHS health library staff

By when: 31 March 2009

Recommendation 28:

All relevant statutory and professional bodies should develop an element of their curricula that emphasises the need for appropriate attitudes, knowledge and skills in relation to the need to apply the best available evidence in professional practice, and the basic skills required to make appropriate use of library and knowledge services.

Who: Relevant professional bodies with responsibility for curricula for health professional training

By when: 31 March 2009

Recommendation 29:

Relevant regulators, responsible for overseeing curricula, should ensure curricula contain appropriate content relating to attitudes, knowledge and skills for making best use of health library and knowledge services for evidence-based health practice.

Who: Relevant Regulators

By when: 31 March 2009

Recommendation 30:

Using this Report as guidance, Primary Care Trusts must implement the recommendation that health library and knowledge services should be part of core business, but it is for them to decide how best to do this.

Who: Primary Care Trusts

By when: Starting immediately

Recommendation 32:

There are groups of health professionals who may not be currently employed in the NHS but have perhaps been trained by or at its expense, and therefore it could be argued that the NHS has a responsibility for them, and who are a potential resource for it, also need health library and knowledge service access; this issue should be explored, solutions identified and applied.

Who: The National Library for Health; Primary Care Trusts

By when: 31 March 2009

Recommendation 33:

Primary Care Trusts will ensure that all their contracts, Local Development Agreements and SLAs refer to the use and application of best available evidence by their commissioned providers.

Who: Primary Care Trusts

By when: 31 March 2009

Recommendation 35:

The principles set out in this Report must apply equally for social care and social care staff. Consideration centrally and locally, as appropriate, needs to be given as to how best to support evidence based practice in social care and other non-NHS bodies, for example through Local Strategic Partnerships.

Who: Primary Care Trusts with SHA library leads

By when: 31 March 2009

Recommendation 36:

NHS health libraries should see the support of lifelong learning in NHS health professionals as part of their core business and reflect this in health library strategies, business plans etc.

Who: Led by the National Library for Health,
with NHS health libraries and librarians

By when: Starting immediately

Recommendation 38:

Existing partnerships, such as that with JISC and the NHS-HE Forum, should be fully supported by the NHS to ensure development and maximum benefit to all parties. The National Library for Health Board should review existing arrangements within one year and identify ways in which these partnerships can be strengthened and developed e.g. stronger NHS manager representation on the NHS-HE Forum.

Who: The National Library for Health Board

By when: 31 March 2009

Recommendation 39:

The National Library for Health, in conjunction with Department of Health Research and Development colleagues, should explore ways in which the knowledge and evidence aspects (related to inputs, outputs and outcomes) of research can best be handled and managed to the advantage of the NHS and the public purse. An approach should be defined within one year.

Who: The National Library for Health with
Department of Health Research & Development colleagues

By when: 31 March 2009

Recommendation 40:

All NHS health library staff should have an explicit statement in their job descriptions that they are expected to contribute to local and national evaluations of the impact of their health library services.

Who: All NHS organisations and health library staff

By when: 31 March 2009

Recommendation 41:

There must be appropriate interaction and input from the National Library for Health to information technology development colleagues in the Department of Health, to ensure appropriate recognition and embracing of health technology and evidence. This is part of ensuring that NHS staff are supported in applying best evidence to decision making. This should be overseen by the Department of Health Chief Information Officer in partnership with the NHS Chief Knowledge Officer.

Who: Department of Health Chief Information Officer and the
NHS Chief Knowledge Officer

By when: 31 March 2009

Recommendation 42:

The National library for Health, working with The National Archive (TNA) and the National Research Reserve (NRR), should develop a strategy on the need to archive information older than 10 years, and explore the potential for archiving solutions.

Who: The National Library for Health

By when: Within six months

Recommendation 43:

The National Library for Health, through its working group, should consult on and gain consensus on “core content”, covering approximately 80% of NHS health library journal needs. This core content should form the basis of the national process for journal (paper and electronic) procurement.

Who: The National Library for Health
By when: Within six months

Recommendation 44:

Existing arrangements for collaboration and partnership working with Higher Education should be supported and strengthened. In particular a joint approach to procurement of both paper and e-resources should be developed (through collaboration between NLH and the NHS-HE Forum) to the benefit of both sectors and the public purse but without sacrifice in quality.

Who: The National Library for Health
By when: 31 March 2009

Recommendation 45:

The Department of Health should consider approaching the other three UK countries to develop an appropriate four country high level advisory arrangement to promote joined up approaches regarding health library and knowledge services (and related issues such as procurement and appropriate technology inter-connectivity).

Who: The Department of Health
By when: 31 March 2009

Recommendation 46:

The National Library for Health, with the Department of Health and through partnership working e.g. with the higher education sector, should resolve issues related to copyright and licensing.

Who: The National Library for Health with the Department of Health
By when: 31 March 2009

Recommendation 47:

The National Library for Health should undertake an exercise to identify repositories that exist or will be needed, and propose arrangements for managing and publicising.

Who: The National Library for Health
By when: 31 March 2009

Recommendation 48:

The National Library for Health should explore and establish a single bi-directional portal arrangement for NHS library staff to share questions, problems and solutions, to avoid duplication of effort and expenditure, and in the interests of efficiency.

Who: The National Library for Health
By when: 31 March 2009

Recommendation 49:

As part of the development of the “NHS Choices” agenda, the Department of Health should lead on developing a programme of further work to continue the engagement with the public library sector.

Who: The Department of Health
By when: Within 6 months

Recommendations that are operational

Recommendation 2:

As part of the regulatory process, the Department of Health should ask the appropriate Government authority to look at the anomalous issue of VAT on electronic versus paper journal procurement by the NHS.

Who: The Department of Health
By when: As soon as possible

Recommendation 3:

All NHS health professional staff should be registered automatically as ATHENS users.

Who: The National Health Service in England

By when: As soon as possible

Recommendation 4:

A programme to systematise and unify initiatives, such as current awareness bulletins, should be led by the National Library for Health in partnership with SHA library leads, to achieve consistency, efficiency and economies of scale.

Who: The National Library for Health

By when: Develop within six months

Recommendation 5:

The National Library for Health should act as a clearing house for examples of good practice in NHS health library services and facilitate their widespread adoption through the NHS Institute for Innovation and Improvement.

Who: The National Library for Health and the NHS Institute for Innovation and Improvement

By when: As soon as possible

Recommendation 6:

The term "Library", even if qualified by additional terms to reflect local circumstances and wishes, should always be used in relation to such services in the NHS; all NHS libraries should be "Part of the National Library for Health".

Who: All NHS organisations and NHS health libraries

By when: As soon as possible

Recommendation 10:

This research should be overseen by the proposed National Institute of Health Research.

Who: The National Institute of Health Research

By when: Ongoing, starting as soon as possible

Recommendation 11:

In every NHS organisation someone at board level should be entrusted with the role of Chief Knowledge Officer for that organisation, with the broad responsibility as described.

Who: All NHS organisations

By when: By 1 June 2008

Recommendation 12:

The National Library for Health should promulgate a description of the responsibilities required of those assuming the role of Chief Knowledge Officer in NHS organisations.

Who: The National Library for Health

By when: Immediately

Recommendation 13:

Confirmation of implementation of recommendations 11 and 12 in NHS organisations should be sought within one year by Regional Directors of Public Health, who should have the responsibilities of the Chief Knowledge Officer for their Strategic Health Authorities.

Who: Regional Directors of Public Health for their Strategic Health Authorities

By when: 31 March 2009

Recommendation 14:

Every clinical or management team in the NHS should identify someone in the team as “Team Knowledge Officer” (or equivalent). The Team Knowledge Officer will have responsibility for ensuring the effective input of evidence to enable the team to function properly.

Who: All NHS organisations and clinical teams

By when: 1 June 2008

Recommendation 15:

The National Library for Health should draw up a generic description of the responsibilities for the “Team Knowledge Officer” function to be adopted, which should be adapted locally as circumstances dictate.

Who: The National Library for Health

By when: Immediately

Recommendation 17:

NHS health libraries should develop evidence based strategies that focus their limited training resources for maximum effect.

Who: All NHS health library services

By when: within six months and to be in effect from 1 April 2009

Recommendation 18:

NHS health library training strategies should be reviewed by SHA library leads.

Who: SHA library leads

By when: By 31 March 2009

Recommendation 20:

As with other National Service Frameworks, all NHS organisations should have library and knowledge services that meet the standards set out in the NLH National Service Framework.

Who: All NHS organisations

By when: Complete within three years

Recommendation 21:

Quality control of health library and knowledge services locally should be overseen by Chief Knowledge Officers, within local clinical governance arrangements, where appropriate.

Who: Chief Knowledge Officers

By when: By 31 March 2009, and continually thereafter

Recommendation 22:

In developing the new process of quality management through peer review at SHA level, certain features should be adopted. Such reviews should:

- Be overseen nationally by the National Library for Health
- Include training for a pool of visitors and lead visitors
- Adopt, as far as practicable, elements of good practice, including where feasible lay and user perspectives
- Have a complete cycle within three years.

Who: Oversight by the National Library for Health; SHA library leads

By when: By 31 March 2011

Recommendation 23:

Strategic Health Authorities should continue to have a designated lead person (who should be a librarian), to support local health librarians and their services, and to oversee local quality management arrangements. These lead people should invoke managerial action where appropriate to ensure quality and promote the pursuit of

excellence. SHA health library leads should also be expected to contribute to national work generally, including leadership, coordination and development, and quality assurance arrangements in particular.

Who: Strategic Health Authorities and SHA library leads

By when: Ongoing

Recommendation 27:

The annual appraisal and performance review of heads of NHS library services by their line managers should include the input of a senior experienced professional librarian: such a perspective could be provided by SHA library leads.

Who: SHA library leads

By when: 31 March 2009

Recommendation 31:

Primary Care Trusts must ensure that all their health providers allow access by all NHS staff and other appropriate people (e.g. students registered on health profession courses or programmes) to health library and knowledge services.

Who: Primary Care Trusts

By when: 31 March 2009

Recommendation 32:

There are groups of health professionals who may not be currently employed in the NHS but have perhaps been trained by or at its expense, and therefore it could be argued that the NHS has a responsibility for them, and who are a potential resource for it, also need health library and knowledge service access; this issue should be explored, solutions identified and applied.

Who: The National Library for Health; Primary Care Trusts

By when: 31 March 2009

Recommendation 34:

Strategic Health Authorities will monitor implementation of Recommendations 31, 32 and 33 by PCTs and report annually.

Who: Strategic Health Authorities

By when: 31 March 2009

Recommendation 37:

Strategic Health Authorities should assess the extent of implementation of Recommendation 36.

Who: Strategic Health Authorities

By when: 31 March 2009

Recommendation 46:

The National Library for Health, with the Department of Health and through partnership working e.g. with the higher education sector, should resolve issues related to copyright and licensing.

Who: The National Library for Health with the Department of Health

By when: 31 March 2009

Recommendation 50:

Unless otherwise specified, the National Library for Health and its Board should oversee the implementation of Recommendations made in this Report. Progress should be demonstrated in its Annual Report for the financial year 2008/9.

Who: The National Library for Health

By when: As specified in individual Recommendations, and no later than 31 March 2009

Chapter 22

Looking to the future: suggestions for implementation

- 20.1 Too many Reports from Reviews such as this gather dust and remain unread or unimplemented. In order to achieve an impact some suggestions are made for an implementation strategy.
- 20.2 Given that the main thrust of the Report is that health library and knowledge services are an essential ingredient for the lofty aspirations for the future NHS, dissemination of this Report and actions on its Recommendations need to penetrate every part of the Service.
- 20.3 The first step in implementation therefore needs to be a wide dissemination using multiple formats: hard copy; placing on a number of websites, with associated circulation of the URLs; presentations and seminars; individual and group interactions; and free access on request.
- 20.4 Such a dissemination needs to include:
- The Department of Health (and widely within it)
 - Those leading “active” Reviews e.g. Lord Darzi; Sir John Tooke
 - Associated and “arms length” bodies
 - Strategic Health Authorities
 - Primary Care Trusts and commissioning organisations
 - NHS hospital Trusts (acute; mental health; community service; care; and Foundation)
 - Health Service Regulators
 - Universities
 - A range of organisations, including:
 - NHS Institute for Innovation and Improvement
 - NHS Information Centre
 - Universities UK
 - SCONUL
 - CILIP
 - CHILL
 - JISC
 - The NHS-HE Forum
 - The Museum, Libraries and Archives Council
 - Widely within the health library community, including:
 - The NLH Co-ordinating Group
 - Other NLH working groups
 - NHS health libraries
 - Other external organisations, including:

- The British Library
- The Kings Fund Library

20.5 A key element of any implementation strategy will be the extent to which organisations commit to the principles and processes recommended in the report. To some extent, follow up action will stimulate activity. For instance, organisations to whom the report is sent, should be asked to submit a report within a given timescale, on plans for implementing the recommendations (say, within three months) and progress reports at six and twelve month intervals.

20.6 All the recommendations specify a responsible organisation or individual, with the National Library for Health overseeing implementation.

Appendix

An outline biography

Professor Peter Hill graduated in Medicine at Leeds University Medical School in 1968. After pre-registration house officer posts at St James Hospital, and post-registration posts in North Devon, he entered general practice. After about 18 years, in practices in Harlow, Weardale and Newcastle, he took up Public Health, and held posts mainly at regional level, including a short secondment at the Department of Health. In 1998 he became Postgraduate Medical Dean for the Northern Deanery. He now holds an Honorary Chair in the Institute of Health and Society, part of the Faculty of Medical Sciences at the University of Newcastle upon Tyne.

As well as these careers, Professor Hill has contributed nationally in a wide range of ways spanning much of his career. These contributions have included the Royal College of General Practitioners, the Faculty of Public Health, the Department of Health, chairmanship of the UK Conference of Postgraduate Deans (COPMeD), the Education Committee of the General Medical Council, and the Postgraduate Medical Education and Training Board (PMETB).

Professor Hill is currently a medical member of the Postgraduate Medical Education and Training Board.

There are no conflicts of interest declared, although Professor Hill is a library user.

References

- 1 Gray JAM. National Library for Health Review: Programme Initiation Document. May 2007. At: http://nlhcms.library.nhs.uk/nlhdocs/NLH_Review_PID_June_2007.pdf (Accessed 19 November 2007).
- 2 Speech in the House of Commons by Rt Hon Alan Johnson MP, Secretary of State for Health, 10 October 2007: NHS Interim Review At: http://www.dh.gov.uk/en/News/Speeches/DH_079340 (accessed 8 November 2007).
- 3 Department of Health. The NHS Plan: A plan for investment; A plan for reform. Cm 4818-I. HMSO, July 2000. At: http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4002960 (Accessed 19 November 2007).
- 4 Department of Health. Choosing Health: Making healthier choices easier. Cm 6374. HMSO, 16 November 2004. At: http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4094550 (Accessed 19 November 2007).
- 5 Department of Health. Shifting the balance of power within the NHS: Securing delivery. Department of Health 27 July 2001. At: http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4009844 (Accessed 19 November 2007).
- 6 Creating a patient-led NHS: Delivering the NHS Improvement Plan. Department of Health 17 March 2005. At: http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4106506 (Accessed 19 November 2007).
- 7 Wanless D. Final Report – Securing good health for the whole population. HM Treasury, 25 February 2004. At: http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4074426 (Accessed 19 November 2007).
- 8 Gershon P. Releasing resources to the frontline: Independent Review of public sector efficiency. HM Treasury, 2004. At: http://www.hm-treasury.gov.uk/spending_review/spend_sr04/associated_documents/spending_sr04_efficiency.cfm (Accessed 19 November 2007).
- 9 Darzi A. Health Care for London: A framework for Action. At: http://www.healthcareforlondon.nhs.uk/framework_for_action.asp (Accessed 19 November 2007).
- 10 Darzi A. Our NHS our future – NHS Next Stage Review Interim Report. Department of Health 4 October 2007. At: http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_079078 (Accessed 19 November 2007).
- 11 National Institute for Health and Clinical Excellence At: <http://www.nice.org.uk/> (Accessed 29 November 2007).
- 12 Department of Health. Working Together Learning Together: a framework for lifelong learning for the NHS. Department of Health, 2001. At: http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4009558 (Accessed 19 November 2007).
- 13 Department of Health. The NHS Knowledge and Skills Framework (NHS KSF) and the Development Review Process. Department of Health 11 October 2004. At:

-
- http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4090843 (Accessed 19 November 2007).
- 14 Donaldson, Professor Sir Liam (Chief Medical Officer). Unfinished Business: proposals for reform of the senior house officer grade – a paper for consultation. Department of Health 21 August 2002. At: http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4007842 (Accessed 19 November 2007).
- 15 Department of Health. Modernising medical careers: the response of the four UK Health Ministers to the consultation on “Unfinished business – proposals for reform of the senior house officer grade”. Department of Health 26 February 2003. At: http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4010460 (Accessed 19 November 2007).
- 16 Tooke, Professor Sir John. Aspiring to excellence. Findings and recommendations of the independent inquiry into Modernising Medical Careers. Universities UK. At: http://www.mmcinquiry.org.uk/MMC_InquiryReport.pdf (Accessed 19 November 2007).
- 17 Chalmers I. The lethal consequences of failing to make use of all relevant evidence about the effects of medical treatments: the need for systematic reviews. In: Rothwell P, ed. Treating individuals. London: Lancet, 2007, pp 37-58.
- 18 Antman EM, Lau j, Kupelnick B, Mosteller F, Chalmers TC. A Comparison of Results of Meta-analyses of Randomized Control Trials and Recommendations of Clinical Experts: Treatments for Myocardial Infarction. JAMA 1992; 268:240-48. At: www.jameslindlibrary.org/trial_records/20th_Century/1990s/antman_kp.html (accessed 16 November 2007).
- 19 Davies HTO, Crombie IK. Bandolier 1;5:1-6. At: www.jr2.ox.ac.uk/bandolier/painres/download/whatis/Syst-review.pdf (Accessed 16 November 2007).
- 20 Department of Health. On the state of the public health: Annual report of the Chief Medical Officer 2005. Department of Health 21 July 2006. At: www.dh.gov.uk/en/Publicationsandstatistics/Publications/AnnualReports/DH_4137366 (Accessed 15 November 2007).
- 21 Department of Health. Report of the High Level Group on Clinical Effectiveness. 23 October 2007. At: www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_079799 (Accessed 15 November 2007).
- 22 Hill T. Fear, concern, fate, and hope: survival of healthcare libraries. J Med Libr Assoc; 2007 October; 95(4):372-3. At: <http://ukpmc.ac.uk/articlerender.cgi?artid=1116448> (Accessed 15 November 2007).
- 23 Building Futures. 21st Century Libraries: Changing Forms, Changing Futures. London 2004. At: <http://www.buildingfutures.org.uk/pdfs/pdf/31.pdf> (Accessed 23 November 2007).
- 24 British Library. Redefining the Library: The British Library’s strategy 2005-2008. OUP 2004. At: <http://www.bl.uk/aboutus/stratpolprog/redeflib/redefining/blstrategy20052008.pdf> (Accessed 19 November 2007).
- 25 Frenk J, Gómez-Dantés O. Globalisation and the challenges to health systems. BMJ 2002;325:95-7.
- 26 Feachem RGA. Globalisation is good for your health, mostly. BMJ 2001; 323:504-6.

-
- 27 Macintyre B. The biggest library ever built. The Times Friday 16 November 2007. At: www.timesonline.co.uk/tol/comment/columnists/ben_macintyre/article2879538.e (Accessed 16 November 2007).
- 28 The Oxford English Reference Dictionary; Second edition. Oxford, OUP 1996. P1051.
- 29 Croft L. Tomb Raider: The Cradle of Life. Paramount Pictures Corporation and Core Design Limited, 2003.
- 30 Cotterell A. A Dictionary of World Mythology. Oxford, OUP 2006. P180.
- 31 Chief Knowledge Officers. The Knowledge Proposition: CKO Summit 5-7 October 2003. tfpl and factiva. At: www.ftpl.com/thought_leadership.cko_summits.cfm#report (Accessed 16 November 2007).
- 32 Payne J, Child F. Collaboration, Knowledge and Social Software. Henley KM Forum June 2007.
- 33 Library and Information Science Abstracts. At: <http://www.csa.com/factsheets/lisa-set-c.php> (Accessed 27 November 2007).
- 34 Mediaplanet. Paperless office? Maybe one day. Independent supplement about Business Information Management with The Times 17 October 2007:6.
- 35 Department of Health. HSG(97)47: Library and information services. 6 November 1997. At: http://www.dh.gov.uk/en/Publicationsandstatistics/Lettersandcirculars/Healthserviceguidelines/DH_4018488 (Accessed 29 November 2007).
- 36 Robert Huggins Associates. Financing NHS Libraries and Information Resources, Final Report. May 2005.
- 37 Winning MA, Beverley CA. Clinical librarianship: a systematic review of the literature. Health Infor Libr J, 2003 Jun; Suppl 1:10-21. At: <http://www.blackwell-synergy.com/doi/abs/10.1046/j.1365-2532.20.s1.2.x> (Accessed 23 November 2007).
- 38 Ward L. A survey of UK clinical librarianship: February 2004. Health Info Libr J. 2005 March; 22 Issue 1:26-34. At: <http://www.blackwell-synergy.com/doi/abs/10.1111/j.1471-1842.2005.00556.x> (Accessed 24 November 2007).
- 39 Wagner KC, Byrd GD. Evaluating the effectiveness of clinical medical librarian programs: a systematic review of the literature. J Med Libr Assoc. 2004 Jan;92(1):14-33 At: http://www.ncbi.nlm.nih.gov/sites/entrez?db=PubMed&cmd=Retrieve&list_uids=12757432 (Accessed 23 November 2007).
- 40 Robinson L, Bawden D. Evaluation of the impact of primary care and mental health outreach services: Report produced for London Health Libraries. April 2006. At: http://www.londonlinks.ac.uk/key_documents/evaluation_of_the_impact_of_primary_care_and_mental_health_outreach_services.doc (Accessed 24 November 2007).
- 41 Zipperer L. Facilitating Patient Centeredness Through Information Work: Seeing Librarians as Guests in the Lives of Patients. Journal of Hospital Librarianship 2005;5(3):1-15. At: <https://www.haworthpress.com/store/ArticleAbstract.asp?sid=DMXVC2GJ8R6R9MG SJAX749A9UTF3C97C&ID=58668> (Accessed 23 November 2007).
- 42 Rockliff S, Peterson M, Martin K, Curtis D. Chasing the Sun: a virtual reference service between SAHSLC (SA) and SWICE (UK). Health Information and Libraries Journal 2005;22:117-23.

-
- 43 Tu F. Knowledge and skills required to provide health information-related virtual reference services: evidence from a survey. *J Med Libr Assoc* 2007;95(4):458-61. DOI: 10.3163/1536-5050.95.4.458
- 44 Weightman AL, Williamson J. The value and impact of information provided through library services for patient care: a systematic review. *Health Information and Libraries Journal* 2005;22:4-25.
- 45 O'Connor P. Determining the impact of health library services on patient care: a review of the literature. *Health Information and Libraries Journal* 2002;19:1-13. At: <http://www.blackwell-synergy.com/doi/pdf/10.1046/j.0265-6647.2002.00365.x?cookieSet=1> (Accessed 23 November 2007).
- 46 Bryant SL, Gray A. Demonstrating the positive impact of information support on patient care in primary care: a rapid literature review. *Health Information and Libraries Journal* 2006;23:118-25.
- 47 Muir Gray JA. Evidence-based healthcare: how to make health policy and management decisions. London: Churchill Livingstone 2007.
- 48 Definitions of Evidence Based Practice. At: <http://www.shef.ac.uk/scharr/ir/def.html> (Accessed 26 November 2007).
- 49 McKibbin KA. Evidence-based practice. *Bull Med Libr Assoc* 1998;86(3):396-401. At: <http://www.pubmedcentral.nih.gov/picrender.fcgi?artid=226388&blobtype=pdf> (Accessed 26 November 2007).
- 50 Booth A. Using evidence in practice: In search of the information literacy training 'half life'. *Health information and Libraries Journal* 2007;24:145-9.
- 51 Cullen R. Setting standards for library and information service outcomes, and service quality. At: <http://www.libqual.org/documents/admin/cullen1.pdf> (Accessed 26 November 2007).
- 52 Brophy P. Measuring Library Performance: principles and techniques. London: Facet Publishing 2006.
- 53 Booth A, Brice A. Evidence Based Library and Information Practice - Prediction is Difficult, Especially the Future: A Progress Report. *Evidence Based Library and Information Practice* 2007;2(1):89-106.
- 54 Eldredge JD. Evidence-based librarianship: searching for the needed EBL evidence. *Med Ref Serv Q* 2000;19(3):1-18. At: http://www.ncbi.nlm.nih.gov/sites/entrez?cmd=Retrieve&db=PubMed&list_uids=11299606&dopt=AbstractPlus (Accessed 16 November 2007).
- 55 Booth A. Where systems meet services: towards evidence-based information practice. *Journal of Information and Knowledge Management Systems* 2003;33(2):65-71. DOI 10.1108/03055720310509037
- 56 Booth A. Counting what counts: performance measurement and evidence-based practice. *Performance Measurement and Metrics* 2006;7(2):63-74.
- 57 Donabedian A. Evaluating the quality of medical care. *Milbank Memorial Fund Quarterly* 1966;4:166-206. At: <http://www.milbank.org/quarterly/830416donabedian.pdf> (Accessed 26 November 2007).
- 58 Information literacy At: <http://www.informationliteracy.org.uk/> (Accessed 29 November 2007)
- 59 Information literacy At: <http://www.ilit.org/> (Accessed 29 November 2007).
- 60 Sullivan L. The Tall Office Building Artistically Considered. *Lippincott's Magazine* March 1896. At: http://en.wikipedia.org/wiki/Form_follows_function (Accessed 26 November 2007).

-
- 61 Chandler A. Strategy and Structure: Chapters in the History of American Industrial Enterprise. MIT Press, Cambridge (Mass) 1962.
- 62 CRASH trial collaborators. Final results of MRC CRASH, a randomised placebo-controlled trial of intravenous corticosteroid in adults with head injury – outcomes at 6 months. Lancet online May 26 2005. DOI: 10.1016/S0140-6736(05)66552-X
- 63 Sauerland S, Maegele M. A CRASH landing in severe head injury. Lancet 2004;364:1291-2.
- 64 CRASH trial collaborators. Effect of intravenous corticosteroids on death within 14 days in 10008 adults with clinically significant head injury (MTC CRASH trial): randomised placebo-controlled trial. Lancet 2004;364:1321-8.
- 65 Healthcare Commission. Investigation into outbreaks of *Clostridium difficile* at Maidstone and Tunbridge Wells NHS Trust. October 2007. At: http://healthcarecommission.org.uk/db/documents/Maidstone_and_Tunbridge_Wells_investigation_report_Oct_2007.pdf (Accessed 26 November 2007).
- 66 Chalmers I. Addressing uncertainties about the effect of treatments offered to NHS patients: whose responsibility? Journal of the Royal Society of Medicine 2007;100:1-2.
- 67 www.duets.nhs.uk (Accessed 26 November 2007).
- 68 General Medical Council. Good medical Practice. London, GMC 2006. At: http://gmc-uk.org/guidance/good_medical_practice/GMC_GMP.pdf (Accessed 26 November 2007).
- 69 NHS Choices website at: <http://www.nhs.uk/aboutnhs/howthenhsworks/authoritiesandtrusts/Pages/Authoritiesandtrusts.aspx> and at <http://www.nhs.uk/ServiceDirectories/Pages/AcuteTrustListing.aspx> . (Accessed 26 November 2007).
- 70 Department of Health. The DH Response to the Report of the Public Inquiry into children’s heart surgery at the Bristol Royal Infirmary 1984-1995. Point 13. At: http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4002859 (accessed 27 November 2007).
- 71 Kennedy I. Learning from Bristol: the report of the public inquiry into children’s heart surgery at the Bristol Royal Infirmary 1984-1995. CM 5207 July 2001. At: <http://www.bristol-inquiry.org.uk/> (Accessed 27 November 2007).
- 72 Department of Health. The report of the public inquiry into children’s heart surgery at the Bristol Royal Infirmary 1984-1995: learning from Bristol (Cm 5207(1)) 18 July 2001. At: http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4009387 (Accessed 27 November 2007).
- 73 Commons Hansard, Column 578W, 23 June 2003. At: <http://www.publications.parliament.uk/pa/cm200203/cmhansrd/vo030623/text/30623w12.htm> (accessed 22 October 2007).
- 74 <http://www.nks.nhs.uk/nlh.ASP> (accessed 22 October 2007).
- 75 National Knowledge Service. AT: <http://www.nks.nhs.uk/default.asp> (Accessed 29 November 2007).
- 76 Muir Gray JA, Brice A. Knowledge is the enemy of disease. CILIP Update March 2003. At: <http://www.cilip.org.uk/publications/updatemagazine/archive/archive2003/march/update0303b.htm> (Accessed 29 November 2007).
- 77 Labour brought to book over library rebranding. The Sunday Times, 11 November 2007, p21.

-
- 78 Chambers English Dictionary. Cambridge, Chambers 1988.
- 79 The Oxford English Reference Dictionary. Oxford, OUP 1996.
- 80 The Shorter Oxford English Dictionary. Oxford, OUP 1992.
- 81 National Library for Health Board Meeting Wednesday 25 July 2007 Minutes (Personal communication)..
- 82 Chalmers I. Managers should help to address important uncertainties about the effects of treatment. BAMB (British Association of Medical Managers) News, June 2004:3-4.
- 83 Muir Gray JA. Where's the chief knowledge officer? BMJ 1998;317:832. At: <http://www.bmj.com/cgi/content/full/317/7162/832> (Accessed 27 November 2007).
- 84 Toth B, Muir Gray JA, Fraser V, Ward R. National electronic Library for Health: progress and prospects. Health Libraries Review 2000;17:46-50. At: <http://www.blackwell-synergy.com/doi/pdf/10.1046/j.1365-2532.2000.00261.x?cookieSet=1> (Accessed 27 November 2007).
- 85 Wilhelm W. On Being a Chief Learning Officer. CLO Magazine November 2004. At: http://www.clomedia.com/content/templates/clo_webonly.asp?articleid=691&zoneid=78 (Accessed 27 November 2007).
- 86 Lomas J. The in-between world of knowledge brokering. BMJ 2007;334:129-32. DOI:10.1136/bmj.39038.593380.AE At: <http://www.bmj.com/cgi/content/full/334/7585/129> (Accessed 24 November 2007).
- 87 Wright J, Hill P. Clinical Governance. Edinburgh, Churchill Livingstone; 2003.
- 88 Schwing L, Coldsmith EE. Librarians as Hidden Gems in a Clinical Team. Medical Reference Services Quarterly 2005;24(1):29-39.
- 89 Better Regulation Task Force. Principles of Good Regulation. 2003. At: <http://www.brc.gov.uk/upload/assets/www.brc.gov.uk/principlesleaflet.pdf> (Accessed 27 November 2007).
- 90 NHS Institute for Innovation and Improvement. National Service Framework For NHS Funded Knowledge Services in England (Draft). At: http://nlhcms.library.nhs.uk/nlhdocs/NSF_April_2007b.pdf (Accessed 19 November 2007).
- 91 NHS Library and Knowledge Development Network. Health Library Accreditation Scheme. At: <http://www.lkdn.nhs.uk/accreditation.htm> (Accessed 27 November 2007).
- 92 Montacute K, Bryant SL. What a good library looks like. Personal communication 22 November 2007.
- 93 Medical Library Association. Competencies for Health Sciences Librarians. 13 September 2007. At: <http://www.mlanet.org/education/policy/> (Accessed 24 November 2007).
- 94 Chartered Institute of Library and Information Professionals. At: <http://www.cilip.org.uk/default.cilip> (Accessed 29 November 2007).
- 95 Chartered Institute of Library and Information Professionals. At: <http://www.cilip.org.uk/specialinterestgroups/bysubject/health/publications/workguide/> (Accessed 6 December 2007).
- 96 Postgraduate Medical Education and Training Board. New curricula for postgraduate medical education. At: <http://www.pmetb.org.uk/index.php?id=831> (Accessed 27 November 2007).

-
- 97 Department of Health. World class commissioning. At: <http://dh.gov.uk/en/Policyandguidance/Organisationpolicy/CommissioningWorldClasscommissioning/index.htm> (Accessed 6 December 2007).
- 98 Oliver S, Gray J. A bibliography of research reports about patients', clinicians' and researchers' priorities for new research. London: James Lind Alliance, December 2006.
- 99 Department of Health Press Release. Government set to deliver integrated health and social care systems. 21 July 2005. At: http://www.dh.gov.uk/en/Publicationsandstatistics/Pressreleases/DH_4116486 (Accessed 29 November 2007).
- 100 Department of Health. Our health, our care our say: a new direction for community services. Cm 6737 January 2006. At: http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4127453 (Accessed 29 November 2007).
- 101 Social Care Institute for Excellence (SCIE). At: <http://www.scie.org.uk/> (Accessed 29 November 2007).
- 102 The British Library The world's knowledge. At: <http://www.bl.uk/news/2006/pressrelease20060731a.html> (Accessed 27 November 2007)
- 103 Joint Information Systems Committee At: www.jisc.ac.uk/aboutus.aspx (Accessed 19 November 2007).
- 104 www.nhs-he.org.uk/forum.html (Accessed 19 November 2007).
- 105 Cooksey, David. A review of UK health research funding. HMSO December 2006. At: www.hm-treasury.gov.uk/media/4/A/pbr06_cooksey_final_report_636.pdf (Accessed 19 November 2007).
- 106 Scottish Executive Health Department. UK Clinical Research Collaboration: Uk Health Research Analysis. 22 August 2006. At: www.sehd.scot.nhs.uk/cso/Publications/Research%20analysis%202004-5%20-%20Scotland.pdf (Accessed 19 November 2007).
- 107 Cockerill M. How accessible is NHS-funded research to the general public and to the NHS's own researchers? 2 February 2004. (Submission to the House of Commons Science and Technology Committee's Inquiry into Scientific Publications). At: <http://www.biomedcentral.com/openaccess/inquiry/refersubmission.PDF> (Accessed 22 November 2007).
- 108 www.connectingforhealth.nhs.uk/ (Accessed 19 November 2007).
- 109 McKinnell I. An Enterprise Architecture for the National Library for Health: Direction of Travel and deliverables. National Library for Health 24 November 2006. At: www.library.nhs.uk/nlhdocs/entarch.doc (Accessed 19 November 2007).
- 110 House of Commons. Select Committee on Science and Technology Tenth Report: July 2004. At: <http://www.publications.parliament.uk/pa/cm200304/cmselect/cmsctech/399/39903.htm> (Accessed 23 July 2007).
- 111 CHEMS Consulting. Optimising Storage and Access In UK Research Libraries: A study for CURL and the British Library. September 2005. At: http://www.curl.ac.uk/about/documents/CURL_BLStorageReptExecSummary.pdf (Accessed 6 December 2007).
- 112 Collaborative storage. At: <http://www.rin.ac.uk/collaborative-storage> (Accessed 6 December 2007).
- 113 National Library for Health. Core Content. At: <http://www.library.nhs.uk/corecontent> (Accessed 23 November 2007).

-
- 114 National Library for Health. Core Content Resources. At: <http://www.library.nhs.uk/corecontent/resources> (Accessed 23 November 2007).
- 115 National Library for Health Groups. At: <http://www.library.nhs.uk/forlibrarians/groups/content> (Accessed 23 November 2007).
- 116 The Pareto principle – the 80/20 rule. At http://www.businessballs.com/quotes.htm#pareto_principle_pareto's_law (Accessed 23 November 2007).
- 117 Spink S, Urquhart C, Cox A. Procurement of electronic content across the UK National Health Service and Higher Education. University of Wales Aberystwyth November 2006. At: <http://www.nhs-he.org.uk/Procurement%20of%20NHS%20and%20HE%20e%20content%20Report.pdf> (Accessed 23 November 2007).
- 118 The Cochrane Library At: <http://www3.interscience.wiley.com/cgi-bin/mrwhome/106568753/HOME?CRETRY=1&SRETRY=0> (Accessed 29 November 2007).
- 119 BMJ Clinical Evidence. At: <http://clinical.evidence.bmj.com/ceweb/index.jsp> (Accessed 6 December 2007).
- 120 BMJ Best Treatment. At: <http://besttreatments.bmj.com/btuk/home.jsp> (Accessed 6 December 2007).
- 121 Society of College, National and University Libraries. At: <http://www.sconul.ac.uk/> (Accessed 29 November 2007).
- 122 Consortium of Independent Health Information Libraries in London (CHILL). At: <http://www.chill-london.org.uk/membership.html> (Accessed 29 November 2007).
- 123 Cooper J, Spink S, Thomas R, Urquhart C. Evaluation of the Specialist Libraries/Communities of Practice: Report for the National Library of Health. University of Wales Aberystwyth 2005. At: <http://cadair.aber.ac.uk/dspace/handle/2160/221> (Accessed 29 November 2007).
- 124 Mesut J. NLH SL: Recommendations and directions for the future. London LBi 1 October 2007. At: <http://www.library.nhs.uk/nlhdocs/slRecommendations.ppt> (Accessed 29 November 2007).
- 125 www.sherpa.ac.uk (Accessed 18 December 2007).
- 126 NHS Choices. At: <http://www.nhs.uk/Pages/homepage.aspx> (Accessed 6 December 2007).