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**Assessing training and
professional development needs of library staff**

Undertaken for
National Library for Health
IA-04-0224
NHS Information Authority

By

Department of Information Studies, University of Wales
Aberystwyth

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Executive summary

The **aim** was to provide an overview of current training provision and CPD needs of NHS library staff, professional and paraprofessional. The project was largely conducted through desk research, with two workshops held to elicit views on training priorities and formats of training.

The **objectives** were to:
- Synthesise lessons learned from previous training needs analyses
- Identify what worked, and what best practice might be
- Identify current and future needs.

Key messages

Future training needs analyses

Future training needs analyses for healthcare library staff should:

- Be based on the Knowledge and Skills Framework as a competency framework, but with a vision similar to that of the Special Libraries Association (USA).

- Use a variety of methods – informal focus groups or workshops to encourage interest in training, with more objective methods to identify the type of learning required, and the appropriate level.

Training provision

Formal training provision should:

- Offer variety – e-learning needs to be complemented by national and local provision of face-to-face training.

- Exploit opportunities for cross-sector training within the library and information sector

- Allow the trainee to build on existing skills and competencies – more explicit scaffolding is required, rather than the 'quick fix'.

- Be accredited if possible

Training priorities

The training priorities for health library staff are:

- Research and information retrieval skills for more advanced, specialist practitioners

- Technical and knowledge management skills for those involved in intranets and outreach activities

- Leadership and strategic management skills for the managers

- More specific, specialist training for some paraprofessionals

Getting skills into practice

Getting skills into practice requires:

- Mentoring schemes with trained mentors, with more opportunities for health library staff to team up with those working in patient information services

- Coaching schemes for the leadership skills required, with more opportunities for health librarians to team up with health professionals

- More emphasis on action learning, and reflection on learning, to support organisational learning as well as personal learning

- More emphasis on capability, rather than just demonstration of competence

NLH initiatives

As general awareness of the CILIP framework and UKCHIP activities was limited, the NLH might:

- Provide briefings on the pros and cons of the CILIP framework, and UKCHIP for library staff.

The workshops confirmed considerable interest in knowledge management initiatives in the NHS, but also some confusion about the way library staff could make useful contributions and plan for the future. The NLH might:

- Identify examples of good knowledge management practice

- Disseminate good practice through workshops

There is some concern that higher education is not aware of practitioner concerns, particularly as the health sector has particular requirements. To move forward on accreditation it would be useful to organise:

- Workshop(s) on accreditation of training programmes for health librarians, with HE representation from Library/Information Studies departments, and health informatics programmes.

Acknowledgements

Abbreviations

CILIP Chartered Institute of Library and Information Professionals

CPD Continuing Professional Development

ECDL European Computer Driving Licence

HEI Higher Education Institution

ICT Information and Communications Technology

IM&T Information Management & Technology

IsNTO Information Services National Training Organisation

LA Library Association

LKDN Libraries and Knowledge Development Network

LMS Library Management Systems

KM Knowledge Management

KSF Knowledge and Skills Framework

MLA Museums Libraries and Archives Council (regional offices usually include MLAC in their acronym)

NPfIT: National Programme for IT

NVQ National Vocational Qualification

PALS Patient Advice and Liaison Services

SHA Strategic Health Authority

UKCHIP UK Council for Health Informatics Professionals

WDC Workforce Development Confederation

1 Introduction

1.1 Aims and objectives of the CPD project

The main aim was to provide an overview of current training provision and CPD needs of NHS library staff, professional and paraprofessional. The project was largely conducted through desk research, with two workshops held to elicit views on training priorities and formats of training.

1.1.1 Aims

The intention was to identify any examples of best practice, and any important lessons to be learned, to help underpin a programme of continuing professional development to be provided by the National Library for Health

1.1.2 Objectives

The objectives were to:

- Provide an overview of recent training needs analyses (conducted within the last three years)

- Interview expert informants (opinion leaders)

- Lead a workshop to help inform a final report.

The original proposal specified one workshop, but the proposal was amended by request of the NLH to include two workshops, and costing adjusted accordingly.

1.2 Scope

The scope of the project encompassed all healthcare library staff (professional and para-professional) providing library service support to NHS staff and NHS-funded students, with an emphasis on NHS-funded library services. As library staff are part of the health informatics group within the NHS occupational groups, some interviews were arranged with expert informants in health informatics working outside the library sector.

2 Review of training needs analyses

2.1 Approach

A literature review, using LISA, Library and Information Science Abstracts, identified published articles describing training needs analyses in the health sector (UK and elsewhere). The search terms used were staff development, professional development, medical libraries, health care libraries.

Internet searching, plus personal contacts helped to uncover some studies that were not published in the journal literature. The remit was deliberately broad, to identify scoping proposals, workshop events, as well as more formal needs surveys, or evaluations of training support.

2.2 Review framework

The framework used for each discrete study was:

- **Methods** used to identify training needs

- **Target group** (professional staff, para-professionals, NHS staff only etc)

- **Findings**

  - **Competency framework** used in the study (if any)

  - **Competency framework** mapping

  - **Identified gaps**

  - **Training provided**

  - **Costs of training**

  - **Benefits realisation model**

  - **Evaluation methods**

  - **Link with any accreditation scheme**

  - **Further follow-up**

Most of the studies covered only some of the framework criteria. Although the cut-off date was originally set at 2000, some earlier studies have been included as they are relevant to some of the methods currently being proposed for CPD, such as mentoring. The cut-off date for UK studies is therefore 1995, but for 1995-1999 studies only the published literature has been included. Unpublished and in-house reports were excluded.

2.3 Training needs analyses in UK health libraries 1995-2004

2.3.1 Training needs analysis UK health libraries 1995-1998

During the years 1995-1999 many of the nursing libraries funded directly from the NHS continued to be integrated into higher education. Arrangements varied across the country, and in some places multidisciplinary libraries were established, serving all NHS staff through a service level contract. In other places, smaller nursing libraries were closed, and library services centralised on one site.

The Health Service Guideline (replacing HM (70) 23 Library Services in Hospital) published in 1997 (NHS Executive, 1997) set key principles and actions for improving access to information via the development of multi-professional library and information services. Previously many hospital libraries had been funded under the auspices of postgraduate medical education, and although they may have served other staff groups, and received some funding for doing so, the libraries were not specifically multi-disciplinary.

Around the same time as arrangements were being made to serve the unmet needs of community and primary care staff for library services, the English information strategy, Information for Health(NHS Executive (Frank Burns), 1998) set out plans for the National electronic Library for Health, which would provide 'accredited clinical reference material on NHSnet'. The strategy envisaged that the National electronic Library for Health would be accessible through local intranets in all NHS organisations by March 2002. There was considerable emphasis on providing quality information, good quality evidence on what works and what does not work, to the clinician at the point of need.

	(Cox, 1995)	(Kitch, 1995)	(Palmer, 1997)
Author details			
Method	Questionnaire survey	Questionnaire survey	Based on analysis of strategic needs
Target group	Professional and non-professional, NHS libraries (not HE) SE London, Kent, E Sussex	Professional and non-professional staff in health libraries in the SW England	Health library staff in Anglia and Oxford Region
Competency framework	None	LA CPD framework(Library Association, 1992) Plus learning preferences	Not mentioned
Mapping	None	Professionals needed management skills, non-professionals needed library and information skills. Next (for both) was personal effectiveness	Not mentioned
Identified gaps	IT skills Management skills (professional) Information skills (non-professional	Professionals: IT skills (online searching, LMS), teaching skills, leadership skills, statistics, political awareness, time management Non-professionals: basic IT, reference interview, time management	Marketing, teaching skills, critical appraisal were among the topics of the training events
Training provided	Not mentioned	Identified training events, library visits, personal effectiveness skills courses, mentoring	Development programme on Networking & the Internet, CPD, primary health care
Costs of training	Not mentioned	Employing authority or the PG Medical Dean's training budget	Not mentioned
Benefits realisation model	Examining benefits of centralised (regional) training. Concludes that relevance, cost of course, staff cover, location/travel, management approval affect course attendance	Training co-ordinator visited libraries Examined whether events met personal objectives, ideas implemented into practice	Ongoing programme of CPD
Evaluation methods	Not mentioned.	Evaluation and feedback forms (47% of total staff responded)	Not mentioned, article presents case studies
Links with accreditation scheme	None	None, some respondents doing HE programmes	None
Further follow-up	Notes imminent restructuring. Later involvement of South Thames with ADEPT programme (Hicks, Booth, & Sawers, 1998)	None specified	Ongoing programme

Table 1 Training needs studies 1995-1998

Some of the library training programmes that were developed included the ADEPT (Applying Diagnosis, Etiology, Prognosis and Therapy filters programme) (Hicks et al., 1998), run during 1997.This was based partly on a mapping of the needs of clinical effectiveness programmes to the enhanced skills required by librarians to support such programmes, in the South Thames region. The programme incorporated workshops (for 20 participants) followed up by distance learning units for participants to study, with exercises to be completed and submitted for peer review. Evaluation of the programme found that the differing levels of proficiency with MEDLINE affected the perceived difficulty of the five units involved. Participants found the distance learning aspect lonely and preferred learning that was more social. Overall, participants were either satisfied or very satisfied with the course. A similar programme (PRECEPT) was developed for health librarians in the Trent Region in 1998.

A questionnaire survey (Farmer, Richardson, & Palmer, 1998) conducted by the Library Association Health Libraries Group in 1996 asked about education and research needs of health librarians. Of the 2079 members of the Health Libraries Group surveyed, 583 valid responses were obtained (28% response). Results indicated that practitioners thought

their input important for education of future information professionals by Library and Information Studies departments in universities, suggesting that health librarians acknowledged that specialised skills and knowledge were required, although there was also an emphasis on team-working and other transferable skills.

2.3.2 Training needs analysis UK health libraries 1999-2001

Author details	LISU survey (Maynard, Kinnell, White, & Yu, 2000) (Maynard, 2002)	(Pearson & Urquhart, 2002)	(Whittlestone, Low, & Pope, 1999)
Method	Questionnaire survey, end 1999	Analysis of job advertisements (April-May 2000)	No details given in paper
Target group	Professional and non-professionals, administered via NHS regional librarians Estimated 53% response rate	Health informatics – library, information analysts, information officers	Library staff, West Midlands
Competency framework	KSA (knowledge skills abilities framework (Giuse et al., 1997) Adapted framework of law librarians' tasks	Information management skills (Severs & Pearson,) QAA (Quality Assurance Agency, 2000) IHCD (IHCD, 1999)	No details given
Mapping	Assessed whether training received and required in the various KSA components divided into general, health, IT, finance and management, training/marketing/research and personal characteristics	Demonstrated a spectrum of skills required, compared general and management and technical / specialist	No details given
Identified gaps	ICT skills, web services, evidence-based decision making (and associated quantitative and qualitative analysis skills), teaching skills, strategic management and political awareness	Notes that library staff need to be more numerate to take advantage of new emerging roles, identified 'trainers' as a new role for library staff	Database searching, critical appraisal, clinical questions and training skills were the topics selected for Project Apple
Training provided	Not applicable	Considers implications for HE provision on library and health information management education	As above
Costs of training	Notes that the employer is the main source of training, followed by Regional Library Unit and professional bodies (some regional variations) Financial support important	Not mentioned	Not mentioned
Benefits realisation model	Participants were asked about personal development plans and appraisal. Found that individual decision, discussion with line manager were the most common routes, annual appraisal used by 50% and personal development plan by 22%	Refers to problems with existing QAA subject benchmark statements as applied to the health sector	Professional development and networking

Evaluation of the CPD largely formative, and informal |
Evaluation methods	Not applicable	Not applicable	Few details
Links with accreditation scheme	Not applicable	Refers to emerging occupational standards in health informatics in the NHS	Optional certification through the Open College
Further follow-up	Not mentioned, research commissioned by NHS Executive with Regional Librarians Group	None	WISH group provided additional input into the teaching of literature searching

Table 2 Training needs studies 1999-2001

A national review on training needs (Maynard et al., 2000) (Maynard, 2002) was undertaken in 1999 by LISU, for the NHS Executive and the Regional Librarians Group. The librarian development programme (Fraser, 1999)(LDP) competencies were based partly on work of the Medical Library Association (USA), TFPL, and the Library

Association. The review by LISU was informed by a knowledge, skills and abilities (KSA) analysis, definitions of tasks adapted from a law library framework and a measurement of actual training needs. Participants were asked what training they had received in each of the specified KSA areas, and to choose five areas in which they would most like training. The response rate was 53% (1017/1902).

Priority areas for general training were:

- CD-ROM, online database searching (although 88.4% had already received some training)

- Internet searching (although 76% had already received training)

- Critical appraisal/synthesis of information (42.7% had received training)

- Knowledge management (only 23.1% had received training)

- Nationwide health information provision (26.2% had received training)

On the more specific health information training, the main priorities were

- Evidence based decision making (36.3% had received training)

- Current NHS programmes and policies (25.3% had received training).

On technical training, the main priorities were:

- Intranet/local area networking (17.4% had received training)

- HTML design/programming (21.8% had received training)

- Desktop publishing (16.9% had received training)

- Spreadsheet packages (51.9% had received training)

On management, training, and research methods, the main priorities were:

- Financial management (23.1% had received training)

- Strategic planning (21.0% had received training

- Teaching methods (27.9% had received training).

On personal characteristics and skills, there were few priorities (as stated by respondents). For example, 42.1% had received assertiveness training and only 7.5% required it, 21.4% had received leadership training and only 4.0% required it.

The report contrasts some discrepancies. For example. the lack of perceived need for training in quantitative and qualitative research methods (less than 3.5% required this) did not match the larger numbers wanting training in evidence-based decision making. Respondents were sometimes unable to make the link between the desired activity they wished to pursue, and the underpinning skills and knowledge required. The preferred training method was hands-on practice followed by workshop/seminar, with a clear preference for interactive approaches, within working hours. External local courses were generally the favourite method of receiving training although there were regional variations.

Accreditation of health libraries started around 1998 with the publication of the accreditation checklist (LINC Health Panel Accreditation Working Group, 1998) and toolkit (Trinder, 1998). In the West Midlands an action learning set approach (Giles, 2000)was used to help the librarians prepare for accreditation, encouraging librarians to share experience, exchange procedure manuals and reflect on best practice within their groups.

Action learning sets were also used in the Trent region to evaluate five knowledge management projects, and provide a structure for sharing experience and learning (Booth & Falzon, 2003). A problem-based learning approach was used, and evaluation indicated

that the approach was popular, although the learning that took place seemed very individual. What appealed to one person may not have been useful to another.

The English information strategy was amended to take account of the vision of a redesigned health service in the NHS Plan (Department of Health , 2000). The investment in IT made available for modernisation demanded updates to the original information strategy published in 1998. The updated strategy, *Building the Information Core (Department of Health, 2001a)* envisaged an information system to support seamless care of the individual, from preventive care through self care, primary care, secondary care, hospital care and intermediate care. The plans for information services set out in *Building the Information Core* focused heavily on information services to patients and the public with plans for NHS Direct Online, information points, NHS digital TV services and NeLH providing the research evidence behind news stories as well as the core evidence-based resources and specialist web sites. Education and training of all staff in health informatics was to be a priority, with ECDL to be the basic standard. Health informatics staff were also considered, noting that 'the existing target was that 50% should either have, be studying for, or registered for, appropriate qualifications by March 2001'. (para 5.16)

The framework for lifelong learning (Department of Health, 2001b) set out plans for all NHS staff to have a personal development plan (PDP) which would support their individual learning needs, noted the need set out originally in the NHS Plan for staff without a professional qualification to have access to a NHS Learning Account or to dedicated training to NVQ level 2 or 3. To support this the framework called for learning and development strategies in every NHS organisation, coherent appraisal, links between CPD portfolio development and re-registration/re-validation for professional staff, and support from small staff groups who had received little support in the past. Organisations would also require knowledge management strategies 'to ensure 24 hour access and utilisation of electronic learning resources, including the National electronic Library for Health, research and study facilities, databases and skilled information support.'(para 55). The document also sets out the need from NHS library services to work in partnership with the future NHSU, and with learning networks in further and higher education: 'NHS library services are a vital parts of the current and future NHS learning landscape.' (para 71).

2.3.3 Training needs analysis UK health libraries 2002-2003

A survey in 2002 in NW England (Annis, 2003) on the library workforce in that area found that most library staff (63%) stated they wished to remain within NHS libraries in that area. The response rate to the questionnaire survey was 68% (163/240). There was, however, a problem with career progression, and those indicating they wished to leave cited pay, and a desire for a more interesting career. Barriers to career progression were mainly geography (being unable to move from the area), lack of posts, and then lack of experience, and too few qualifications.

The Facilitated Online Learning Interactive Opportunity (FOLIO) programme was devised by Andrew Booth (ScHARR, University of Sheffield) and Alison Turner (Library Partnerships Co-ordinator for the National electronic Library for Health). The NeLH commissioned Andrew Booth to deliver the course between January and April 2003. Three online professional development courses were delivered, in project management, evidence-based librarianship and 'Evaluating your service'. Evaluations were very positive, with most participants happy that they could integrate the course into their day to day work. The most problematic aspects were the technical problems with firewalls and the 'buddying' (Booth, 2003). Recommendations suggested that future courses should run over 6 weeks rather than 3 weeks, more use to be made of online readings and materials, and courses should be limited to 40 participants.

	(Lacey Bryant, 2003)	(Lacey & Booth, 2003)	(TFPL, 2003)
Author details			
Method	Questionnaire survey, 2003	Desk research	Questionnaire, plus workshop
Target group	Outreach librarians working for primary care, 48 responses	Reviewed training opportunities, training costs, suggestions for e-learning	Health library staff in NHS SW 68 responses to questionnaire survey
Competency framework	None mentioned	Contextual knowledge, Managerial skills, Professional skill, Learning and teaching, Interpersonal, NHS Context, Technical (COMPLIANT)	Assessed training requirements by ICT skills, information management skills, business skills, training and HR skills, communication/presentation skills, awareness of NHS
Mapping	Not applicable	Mapped training opportunities to COMPLIANT framework	Mapped training requirements, and assessed training attended by beginner, intermediate, advanced levels
Identified gaps	Influencing, political awareness, domain knowledge, teaching skills	Advanced searching, critical appraisal, management skills, marketing, knowledge of NHS processes and policies (mainly anecdotal evidence)	Making sense of the NHS, Marketing – understanding client needs, then (lower) : KM foundations, promotion and customer care, searching skills, political awareness
Training provided	Notes existing networks	Not applicable, intended to inform e-learning provision	Of 68 respondents, 53 had received training in previous six months.
Costs of training	Not applicable	Notes one day workshop costs vary between £50 and 300	Not covered specifically
Benefits realisation model	Focuses on way in which NeLH could support outreach librarians	Not applicable, intention to inform direction for e-learning	Part of ongoing programme to develop KM skills, building on experience and knowledge sharing
Evaluation methods	Not applicable	Considers how e-learning might fit into training provision (consolidation, diversification or enhancement)	'Action research' in philosophy
Links with accreditation scheme	Not applicable	Appendix 6 lists courses, no details provided of accreditation	None
Further follow-up	Commissioned for the NeLH Outreach Librarian Support and Development project	Should inform development of FOLIO programme	Ongoing programme of KM events involving library and other health professsionals

Table 3 Training needs studies 2002-2003

A review to determine the training provision and training requirements for NHS librarians (Lacey & Booth, 2003) conducted desk research on the training opportunities (study days, workshops and formal education) for NHS librarians. A training needs framework was developed on the basis of meetings with several regional library co-ordinators, the COMPLIANT framework (Contextual knowledge, Managerial, Professional, Learning and teaching, Interpersonal and the more health specific examples of NHS structures and Technical skills).

The review was commissioned by the NLH librarian development programme, created to provide a national framework to support librarians moving into new roles. At the time of the review the plans for the NHSU were to make e-learning the focus of its teaching and learning strategy, and health informatics one of the first priorities.

Data collection for the review involved requests to the lis-medical discussion list (JISCmail) for information on training events attended and contact with workforce development co-ordinators, to request details of training needs analyses undertaken. Information was also collected on suggestions for e-learning course topics and face-to-face courses that might be adapted for e-learning.

Results indicated that there were many opportunities (36.5% of all training opportunities) for critical appraisal, literature searching, and evidence-seeking skills. The main training providers for generic skills were ASLIB, CILIP, and TFPL. Costs varied from study days from around £60 per person (including VAT) for the study days put on by health library groups such as LfN (Libraries for Nursing) to over £300 (for ASLIB courses).

Training needs were identified through discussions with several regional library co-ordinators. The key training needs were:

- advanced searching skills

- critical appraisal

- people management and the management of change

- marketing and service promotion.

Underpinning knowledge was required on:

- NHS structures and processes related to performance measurement and benchmarking.

The take-up of training varied across the country, and the approach was reactive rather than strategic. A long list of suggestions for e-learning topics was developed.

2.3.4 Training needs analysis UK health libraries 2004

Two of the studies in 2004 used a focus group or brainstorming approach to elicit suggestions for training priorities from the librarians in their areas. The NW study examined the implications of changing roles such as:

- Clinical librarian working partly in an outreach situation, partly ward-based (literature searching, critical appraisal, communication and presentation skills)

- Expert searcher (some overlap with clinical librarian role, skills as clinical librarian)

- Teacher/trainer (on wards or in the community in outreach situations)

- Electronic resources/intranet manager (web authoring, high level of ICT skills)

- Electronic learning support / help desk (knowledge of online databases, customer service skills, ICT skills)

- IT champion/IT support (skills as above)

- Customer services support (customer services, needs knowledge of copyright, data protection, Freedom of Information)

- Marketing lead (marketing, communication/presentation, statistical analysis)

- Library manager (emphasis on human resources, change management skills)

- Knowledge manager (emphasis also on records, content management, systems management)

- Patient/public liaison (searching skills, customer service)

- Current awareness publisher (abstract writing, marketing skills)

- Researcher (research methodology, statistical analysis)

- Subject specialist (research skills, subject knowledge, dissemination skills)

- Health informatics officer (IT, statistical knowledge, web skills)

- Library assistants (classification, customer service)

Author details	(Davies, 2004)	(London Health Libraries Strategy and Development Group, 2004)	(Urquhart, Durbin, & Spink, 2004)
Method	Focus group	Brainstorming at sector meetings, collation of suggestions	Questionnaire survey, Interviews, activity log analysis
Target group	NW library staff	London Health Libraries, divided by sector	Library staff (all) serving NHS staff in S Yorkshire, 62% response
Competency framework	None, used SWOT analysis to identify future roles	Categorised into Information retrieval/database searching, Teaching/training, NHS policies/awareness, Research support, Business Management. Customer handling, Legislation awareness	Used a technical/specialist, interpersonal and underpinning knowledge framework (Bartram & Gibson, 1994), plus categories based on isNTO(isNTO, 2003a) and draft occupational standards in health informatics (Christie, 2004b)
Mapping	Mapped potential roles to training implications	Mapped 642 suggestions to 22 headings	Mapped current skills gaps (prioritised), future skills gaps, and perceived competencies
Identified gaps	Noted that many roles require advanced ICT skills, teaching skills and expert searching skills. Blurring of professional/ non-professional boundaries	Main learning needs were those listed above in the Competency framework	Intranet/knowledge management, strategic management, e-learning support, research and financial management skills (quantitative analysis)
Training provided	Not mentioned	Not mentioned	Not considered
Costs of training	Noted 'major' funding implications	Not mentioned	Compares study days, training courses, postgraduate fees, in-house training.
Benefits realisation model	Concerned with upskilling	Not mentioned, suggested commissioning courses to cover related areas	Option appraisal (3 options) assessed against risk, value for money, and flexibility
Evaluation methods	Not mentioned	Not stated	Suggests use of graded learning objectives (advanced, practising librarian, paraprofessional) within overall learning outcomes, Advocates coaching structure
Links with accreditation scheme	Not mentioned	Not mentioned	Suggests use of a credit framework (HE based) as a 'unit of currency' for training
Further follow-up	Notes need for wide consultation, participative decision-making (survey follows on work by (Annis, 2003)	Should inform commissioning of training, and dissemination of information on training courses	Not mentioned

Table 4 Training needs studies 2004

The London survey identified the main training needs as (in descending order of importance):

- Information retrieval/bibliographic databases (92 suggestions)

- Teaching/training: skills and knowledge (64 suggestions)

- NHS policies and developments: awareness (62 suggestions)

- Research support (critical appraisal, statistics) (54 suggestions)

- Business management (strategic planning, income generation, project management) (54 suggestions)

- Customer handling skills (reference interviewing, telephone skills, customer care) (50 suggestions)

- Legislation awareness (copyright, etc.) (34 suggestions)

The survey of training needs in South Yorkshire used a questionnaire survey, interviews and an activity log analysis, to help develop some options for training provision. Respondents were asked about current skills gaps, expectations of future skills need and developing roles, as well as assessing their expertise on a range of competencies.

There seemed to be reasonable consensus that the main changes expected are that library managers and professional specialists should have improved skills in:

- Strategic management of the virtual knowledge service (and associated technical skills for web site and intranet management)

- Knowledge management (to support clinical governance, and ensure the service is of value to the organisation)

- E-learning, and learning and teaching skills (to assist users in making use of the services provided, ultimately to improve practice)

- Leadership and interpersonal skills (to ensure that the electronic information services meet the needs of new user groups, and that changes are managed efficiently and effectively).

Similarly, junior library staff should have improved skills in:

- IT (for content management, general IT skills for troubleshooting minor technical queries and using library management systems, including basic cataloguing and classification)

- Literature searching (and basic training of users)

- Customer care (including dealing with an increasing number of non face-to-face enquiries).

Activity log analysis indicated that one of the main problems for professionals was making time to practise new skills, particularly the 'persuading and influencing' and political awareness skills. One of the recommendations was that training programmes should incorporate protected time, and a structure for encouraging skills to put into practice, with either mentoring or coaching.

The main training needs, synthesising the survey findings with the views of the experts and the activity log analysis were viewed as learning outcomes, with learning objectives on a spectrum. Some professionals and paraprofessionals might only require an awareness of the principles, others may wish more advanced skills at the higher end of the spectrum. The survey identified four main learning outcomes for a training programme, with a range of learning objectives as indicated below.

1) Learning outcome: Library staff should be able to develop and support cross departmental collaboration, service delivery change, and the management of projects to promote and evaluate services to new user groups.

> More advanced practitioners should be able to lead knowledge management initiatives, and persuade and influence others in improving health service delivery.

> Most librarians should be able to manage cross departmental projects, including the project management and contractual support necessary, and should be able to assist in the writing of bids.

Paraprofessionals should be skilled in customer care for 'remote' user groups and should be able to handle 'offsite' enquiries, and deal with online or email enquiries.

2) Learning outcome: Library staff should be able to identify the learning support required for various professional groups, including e-learning packages, knowledge of resources, critical appraisal and technical skills.

More advanced (specialist trainer) practitioners should be able to organise and evaluate training, design training programmes, and be aware of the underpinning educational principles.

Most librarians should be aware of the underpinning educational principles, and should be able to advise library users on the training options open to them, as well as offering one-to-one or small group support for training.

Paraprofessionals should be able to offer advice on training options, and should be able to assist in minor technical queries on the use of e-learning packages, or use of specialist resources.

3) Learning outcome: Library staff should be able to support research governance and performance improvement in service delivery.

More advanced (clinical librarian, specialist KM managers) should be able to explain the principles of research design, identify appropriate research designs for a service problem, and be able to distinguish, and describe, qualitative and quantitative research methods. They should be able to conduct a small scale research or evaluation study of their own, and should be able to use, possibly with some assistance, qualitative and quantitative data analysis packages.

Most librarians should be aware of the principles of research design, and should be able to assist clinicians in critical appraisal.

Paraprofessionals should be aware of the ways in which the various resources support evidence-based practice, and which resources should be used for particular clinical or service problems.

4) Learning outcome: Library staff should be able to support knowledge management initiatives and intranet development.

More advanced practitioners should be able to lead knowledge management initiatives, including the support of initiatives which are aimed at the development of 'tacit' knowledge sharing. They will be able to identify and use an appropriate knowledge management platform, as they will be able to relate intranet design to knowledge management requirements.

Most librarians should be aware of the principles of knowledge management and should be able to map how the various initiatives locally (in clinical governance, service modernisation and so on) fit together. They should be able to advise an intranet manager on how the knowledge resources should be linked into the intranet and the care records service to ensure that practitioners provide quality care to patients, and that patients can make informed decisions. They should recognise the principles of web page design and how software packages such as Dreamweaver can assist.

Paraprofessionals should be aware of the principles of knowledge management and should be able to identify how their work contributes to improved patient care. They should be able to maintain the content of web pages.

2.3.5 International comparisons: North America

The Special Libraries Association revised competencies for information professionals in 2003 (Special Committee on Competencies for Special Librarians, 2003). The revision reflected the needs for evidence based practice as a professional. The competency framework divides into:

- Professional competencies (managing information organisations, managing information resources, managing information services, applying information tools and technologies

- Personal competencies (set of attitudes and skills and values)

- Core competencies, defined as:

  - Information professionals contribute to the knowledge base of the profession by sharing best practices and experiences, and continue to learn about information products, services and management practices throughout the life of their careers

  - Information professionals commit to professional excellence and ethics and to the values and principles of the profession.

Within each of the four specific professional competencies, there are general objectives, and some more specific 'applied scenarios' which illustrate how the general objectives could specific and measurable.

The personal competencies set out a clear vision of the aptitudes of the ideal information professional:
- Seeks out challenges and capitalises on new opportunities
- Sees the big picture
- Communicates effectively
- Presents ideas clearly; negotiates confidently and persuasively
- Creates partnerships and alliances
- Builds an environment of mutual respect and trust; respects and values diversity
- Employs a team approach; recognises the balance of collaborating, learning and following
- Takes calculated risks; shows courage and tenacity when faced with opposition
- Plans, prioritises and focuses on what is critical
- Demonstrates personal career planning
- Thinks creatively and innovatively; seeks new or re-inventing opportunities
- Recognises the value of professional networking and personal career planning
- Balances work, family and community obligations
- Remains flexible and positive in a time of continuing change
- Celebrates achievements for self and others

The document details some 'applied scenarios' which set out examples, some objectives which are more measurable. This builds on previous studies of the skills required by health sciences librarians such as the study undertaken by Eskind Biomedical Library (Giuse et al., 1997), which indicated the importance of personal characteristics, as well as technical skills. The purpose of the personal characteristics was to help integrate the librarian into the organisation, and Eskind developed the Vanderbilt University Medical Center (VUMC) model training programme to help librarians integrate into biomedical informatics (Giuse, Huber, Giuse, Kafantaris, & Stead, 1996), and develop clinical librarian roles (Giuse et al., 1998).

The 'informationist' as defined by Detlefson (Detlefson, 2002) is a clinical health information professional with added qualifications, gained either through graduate education or experience. Starting points for such posts could be clinicians gaining specialist skills in medical or health informatics, or librarians gaining additional skills and

qualifications to enable them to work on an equal footing with medical and health professionals. The Eskind Biomedical Library has operated the Clinical Informatics Consult service that integrates librarians into clinical teams, providing support for the development of skills in presenting information to clinical teams, and developing specialist search and filter skills(Florance, Giuse, & Ketchell, 2002).. The CPD model tested and evaluated for Eskind Biomedical Library includes modules in molecular biology, genetic analysis, biotechnology, research literature and databases (Lyon, Giuse, Williams, Koonce, & Walden, 2004). The work at Eskind has a long pedigree, and the specialised training has also included new career pathways for library assistants (Giuse, Kafantaris, Lynch, Epelbaum, & Pfeiffer, 1999).

Other university libraries in the USA have introduced 'bootstrap' training in scientific literacy skills for non-science librarians (Peterson & Kajiwara, 1999). Other large health libraries in North American have improved staff skills in web development, including web databases(Moore, Garrison, Hayes, & McLendon, 2003), as well as pairing professionals and support staff in training for work at a single service desk (combining circulation, reference and curriculum support) (Moore, McGraw, & Shaw-Kokot, 2001). New roles are also expected in supporting patient safety initiatives (Zipperer & Sykes, 2004). More recently, there has been some emphasis on the training and development required to support expert searchers (Holst & Funk, 2005), as the skills required are beyond those acquired at library school (Nicholson, 2005). Librarians could and should play important roles in the systematic review process (McGowan, 2005) (Harris, 2005).

One way in which some hospital libraries in North America differ markedly from hospital-based library services in the UK is the integration of information services for the patient into the main library service, with consumer health digital libraries, and services such as PICS, the Patient Informatics Consult Service at Eskind Biomedical Library (Vanderbilt Medical Center) (Williams, Gish, Giuse, Sathe, & Carrell, 2001)

Other research on changes in roles for reference librarians (Scherrer, 2004) used a series of eight focus groups with reference librarians from private and public academic health sciences libraries, together with interviews of the eight library directors. The main changes noted were that librarians were doing:

- more teaching (requiring underpinning knowledge of educational theory, more knowledge about genetic and other specialised databases)

- more outreach (requiring more information about researchers' needs, to provide filtered and synthesised information for them)

- more innovative use of technology in more innovative ways to provide better access (requiring knowledge of Web page design, personalisation of Web pages)

- less traditional reference desk work

As a result, evaluation of library activity needed to reflect these changes in role. Library directors noted the problems of measuring the changes in activity in a meaningful way, to ensure that the impact of the library services on their organisations could be truly assessed.

2.3.6 North American and UK comparisons: research versus clinical governance

Recent analysis of training needs for health library staff in North America has focused on the opportunities and trends first and worked back to the skills required to enable health librarians to take advantage of emerging roles. There are now several modes of advanced training in the USA in bioinformatics for information and library professionals (Helms, Bradford, Warren, & Schwartz, 2004). The skills required for these new 'informationist' posts include:

- good communication skills (liaising and networking with and for research groups)

- anticipation of client information needs

- identification, evaluation of specialized databases and tools (e.g. genome sequencing databases)

- knowledge management and support for research (including records management, support for research networks and groups)

- education and training (on highly specialist databases such as genomic sequence databases)

- writing (to support research projects)

- intranet systems development

A similar exercise in the UK was the workshop exercise conducted by the Health Executive Advisory Group of CILIP in May 2003 (CILIP, 2003). The main trends identified were service modernisation, services centred on the patient, the emphasis on tackling health inequalities, public health, and improving patient safety, and performance monitoring through targets. The UK perspective stresses cross sectoral working across health, social care and education, and working in multidisciplinary teams, but the focus is more that of practitioner support, rather than the researcher support that might be responsibility of the informationist.

Newer skills required were:

- learning and education

- management of electronic resources

- research skills

Most importantly, a wide range of strategic management skills were required:

- leadership skills, persuading and influencing

- entrepreneurship

- change management, project management and negotiation

- financial management, and audit.

The later HEAG report (Health Executive Advisory Group, 2004) identifies the main changes over recent years as:

- the increase in teaching (requiring awareness of problem based learning and educational principles)

- more sophisticated searching skills

- more outreach work and development of the clinical librarian role

- knowledge management activities

- development of new Internet-based services.

The report suggests that health librarians could be trained alongside other health professionals, to help develop some of the specialist skills required. The report in the section 'Emerging roles and skills' points out that:

- Librarians can, and should, be able to develop specialist skills (e.g. in information retrieval) as a way of gaining promotion as an advanced practitioner – previously the only route was the managerial route

- Team working, in multidisciplinary teams, is more common, and outreach work as a clinical librarian is increasing

- Development and cascading of critical appraisal skills is important

- Rapid decision making can be supported through provision of better quality information

- New services may be developed with a variety of information providers including publishers and public health analysts

- Management of knowledge for clinical governance support, and risk management is becoming more important

- Research skills are vital for librarians if they are to support evidence-based practice

2.3.7 Ireland

The Health Science Libraries group of the Library Association of Ireland conducted a survey during late 2004. The questionnaire divides the skills into:

- functional skills (mostly traditional library skills, plus underpinning knowledge of legal and ethical issues, management skills)

- technical skills (e.g. database searching, research methods, knowledge of library management systems, web page design)

- workplace/people management skills (communication skills, customer care, change management, negotiation, training the trainer).

Notably, the skills listed do not include teaching/training, e-learning, and cross-departmental working or service innovation.

2.3.8 Developments in UK higher education

Over the past ten years many HE libraries have developed converged services, integrating the previously separate IT and library departments. The growth of electronic information services has been rapid, and the skills required by staff working in the hybrid library have been studied in various projects, including the HyLiFe consortium. Roles identified in one HyLiFe project (Garrod, 2001) were:

- learning facilitator/adviser

- electronic information resources manager/evaluator

- liaison with academic staff

- marketing and public relations – cross sectoral

- copyright and rights management

- metadata specialist

- team building within the organisation

Work done in the HIMSS project to examine the skills development for senior staff in hybrid services (Abbott, 2003) (Lancaster & Dalton, 2002) identified skills and attributes for senior staff as:

- generic management skills

- personal qualities

- technical credibility

- specialist skills and knowledge

- management experience

- background in higher education

- library background for converged services

Lack of practice in management skills, particularly strategic management and leadership skills was a problem. Mentoring or coaching were viewed by the respondents as the most appropriate ways of developing senior staff.

2.4 Competency frameworks

2.4.1 Competency frameworks used in training needs analyses

A wide variety of competency and skills frameworks have been used in training needs analyses of health library staff, making comparisons extremely difficult.

The general framework used in the isNTO reports (isNTO, 2001),(isNTO, 2003b) covering the general information services sector in the UK, divides skills into:

- external links (customers and clients, influencing others, research and current awareness)

- job related (education and training, ICT, technical (traditional))

- management (general management, managing people, strategic management)

- personal skills (including creative thinking, writing and communication skills, working with others)

The CIPD factsheet (Chartered Institute of Personnel and Development, 2004) defines competency as the behaviours that employees must have , or must acquire to input into a situation in order to achieve high levels of performance, while competence relates to a system of minimum standards or is demonstrated by performance and outputs. In practice the two terms are often used interchangeably. The problem, as the factsheet points out, is that competencies are used to describe two different activities, inputs or behaviours, and the outputs or technical skills. Competency frameworks typically contain a mix of behaviours, functional skills and knowledge. The factsheet also notes that competencies are identified through some form of job analysis using diaries, interviews, observation, critical incident analysis, repertory grids, checklists or some combination of these methods. Identifying future skills needs would, presumably, require some scenario-building to build on identified trends, as the isNTO work has done, using the key change drivers to help identify the skill requirements.

The LISU national study (Maynard et al., 2000) (Maynard, 2002) was based on a 'knowledge, skills and abilities' framework which seems to relate to definition of competency framework if 'abilities' can be related to 'behaviours'. Their framework distinguished:

- general librarianship skills and knowledge

- health sciences skills and knowledge

- technical skills and knowledge

- management and financial skills

- training/marketing/research skills and knowledge

- personal characteristics

The training overview (Lacey & Booth, 2003) used a similar framework, though the labelling differed, and more emphasis was placed on the 'external links' or Contextual knowledge (Table 5). The framework used for the South Yorkshire study was based mainly on a simple technical/specialist, interpersonal skills (including management skills) and underpinning knowledge framework, covering, for example, educational principles, knowledge of legislation, research methods and statistics, financial and business planning techniques. The framework used by TFPL for the SW study was aimed at supporting knowledge management development, and therefore there was less emphasis on some of the traditional professional or traditional financial management skills, but the business skills emphasised marketing, negotiating and leadership skills.

LISU	Lacey & Booth 2003	South Yorkshire study 2004	London study 2004	SW study 2003
General librarianship and information work	Professional skills	Specialist	Information retrieval and database searching *Others subdivided into other categories*	Information management
(includes current trends, standards, publishing, and KM)	Contextual knowledge	Underpinning knowledge	Legislation awareness	
Health sciences	NHS context	Underpinning knowledge	NHS policies and developments, awareness	Awareness of NHS policies, activities
Technical *(mainly ICT, Intranet, hardware & software)*	Technical	Technical Specialist	ICT skills	ICT skills *(includes database searching, Internet searching)*
Financial and management	Managerial	*Included in underpinning knowledge, and interpersonal skills*	Business management, Financial management, Personnel management	Business skills *Includes marketing, negotiating, influencing*
Training/ marketing/ research	Learning & teaching *Marketing with Managerial, and Research classified as Technical*	*Specialist and interpersonal*	Teaching and training, Research support	Training and HR
Personal characteristics	Interpersonal	Interpersonal	Customer handling	Communication and presentation *Also included in Business skills*

Table 5 Competency and skills framework mapping

There is probably variation in the components of the 'personal characteristics' and interpersonal skills. Interpersonal skills in the South Yorkshire study, and the personal characteristics of the LISU study overlapped with the skills categorised as 'business skills' in the SW study.

The skills required to support research governance and clinical governance tend to be split among several of the categories. For example, skills in literature searching can be considered as 'general LIS skills', specialist skills but other categorisations place them with technical or ICT skills. The LISU classification puts 'evidence-based decision making' with health sciences training, statistics packages with 'technical training', quantitative/qualitative research methods with 'training/marketing/research training'. The London study included critical appraisal, understanding evidence-based medicine and understanding statistics under the umbrella of 'research support'. There is definitely a problem in deciding how best to categorise training needs. The choice is between a scheme which is based on traditional LIS specialist or professional skills, plus additional management skills, particularly human resources skills, personal attributes or behaviour, and underpinning knowledge (particularly domain knowledge) or a scheme which is based on the forecast new roles and devising competency packages around those new roles. The difficulty of devising competency packages around new and emerging roles is that there may be considerable overlap, as the NW study noted. This is to be expected, but it does mean that it is difficult to make clear distinctions between the skill set required of a library/knowledge manager and an outreach librarian.

Another of the problems in making comparisons is that the level of expertise in most of the frameworks is not clear, although the SW study and the South Yorkshire study did ask the participants to assess their level of expertise in some of the skills and knowledge areas.

If it can be assumed that the fuzzier areas are those where is some debate about the skills requirements, and that new roles are emerging in those areas, Table 5 suggests that the following areas deserve attention:

- Core professional/specialist skills – what level of literature searching is demanded of all practitioners and is some literature searching, database searching a more advanced technical skill?

- Financial and strategic management – what is the level of underpinning knowledge expected? What would the skills expected of a paraprofessional be?

- Marketing and influencing (the isNTO 'external links') need to be related also to the knowledge and interpretation of policies in the NHS and health sector. Political awareness and influencing requires both the interpersonal skills and the knowledge of the sector.

- Research skills require some domain knowledge, but also some ICT skills (use of statistics, and other specialist packages), advanced literature searching, as well as underpinning knowledge of research methods and statistics. Reducing research skills to their various components makes it possible for some components to be neglected.

- Teaching skills – are these skills required of all health library staff, and how can the range of teaching and learning support skills (and underpinning knowledge) be characterised. Teaching is not simply a technical skill when coaching or e-learning support is involved.

2.4.2 Occupational standards in health informatics

The project to develop national occupational standards for those working in health informatics arose from the Department of Health human resources strategy (Department

of Health, 2002)for those working in health informatics. An NHSIA project to develop national occupational standards for ICT staff was integrated into the project to develop occupational standards for health informatics staff. The project (Christie, 2004a) sets out the main health informatics staff groups as:

- Knowledge management staff

- Information management staff

- Health informatics senior managers and directors of serivces

- Clinical informatics staff

- ICT staff

- Health records staff

Of these groups, the report notes (p.9) that the "traditional role of the librarian within healthcare organisations or associated academic institutions has developed, including the greater use of ICT. Librarians are now increasingly seen as Knowledge Managers whose role includes: ascertaining clients' information needs, identifying and filling gaps in the provision of useful information, and a distinctive training role. Services may now be delivered through physical or virtual facilities". Of the estimated 20, 000 or so staff working in health informatics in England the report estimates that there are 913 knowledge management staff (and 7,140 ICT staff). The skill areas that are covered by knowledge managers include (p.14):

- Information retrieval (simple and advanced searching) on text databases

- Use of databases and library services to store accredited information that can be accessed electronically (essentially intranets to support evidence based practice)

- Identification and presentation of information suitable for the intended audience, including critical appraisal and evaluation of information and supporting other health staff in critical appraisal skills

- Identifying and collating relevant information to provide targeted current awareness services

- Providing structured training in the use of electronic information resources.

The report acknowledges that librarians have been more used to dealing with explicit knowledge. New emerging roles will focus more on supporting the development of tacit knowledge and generating explicit knowledge from tacit knowledge (through knowledge harvesting tools, possibly). The functional map (Christie, 2004b) includes the main areas of:

- Lead, promote and manage the use of resources to improve health care delivery (A) with sub-areas:

    A1 Provide direction;
    A2 Ensure governance and manage risks;
    A3 Manage change and achieve results;
    A4 Manage resources;
    A5 Manage and develop people;
    A6 Enable the learning and development of others (including through e-learning)
    A7 Manage projects

- Identify, collect, analyse, disseminate and maintain data and information to improve health care delivery (B)

B1 Identify, collect, abstract, classify, analyse, disseminate and audit data and information

B2 Administer, handle and communicate information to support health care delivery

- Enable, develop and manage knowledge to improve healthcare delivery (C)

  C1 Investigate and develop strategies to meet users' needs

  C2 Identify, acquire, appraise, organise and provide information and knowledge

- Plan, implement, sustain and review the provision of ICT to support and improve health care delivery (D)

  D1 Investigate and define requirements

  D2 Manage software development

  D3 Develop software

  D4 Install and upgrade software

  D5 Manage and operate ICT systems

  D6 Test ICT systems

  D7 Diagnose technical faults and identify remedies

  D8 Provide technical advice and guidance in relation to ICT

  D9 Maintain the security of ICT systems

Most of the knowledge management competencies are found in section C1 and C2, although there are relevant general managerial and pedagogical competencies in other sections.

This categorisation does not detail the underpinning knowledge that is required to perform some of the competencies.

2.4.3 Knowledge and skills framework

The Knowledge and Skills Framework (KSF) policy document (Department of Health (England), 2004) produced by the Agenda for Change Project team, together with the job evaluation handbook (Department of Health, 2004) provide guidance on the job dimensions used in the NHS KSF, which are divided into six core and 24 specific dimensions. The core dimensions are relevant to every post (Communication, Personal & People Development, Health/Safety/Security, Service Improvement, Quality, Equality & Diversity).

There are three specific Information and Knowledge dimensions:

IK1 Information processing

IK2 Information collection and analysis

IK3 Knowledge and information resources

The General specific dimensions are

G1 Learning and development

G2 Development and innovation

G3 Procurement and commissioning

G4 Financial management

G5 Services and project management

G6 People management

G7 Capacity and capability

G8 Public relations and marketing

2.4.4 Mapping of emerging roles to the Knowledge and Skills Framework

The mapping (Table 6) indicates how the IK dimensions might relate to some of the tasks, skills and knowledge listed in the training needs studies. The emerging roles are assumed to involve the specialist IK skills in literature searching (at various levels), research skills for research and clinical governance support, and teaching/training skills. The spectrum of literature searching skills might be covered in IK3, with the knowledge management skills in developing intranets covered in level 4 of IK1. The quantitative and qualitative research skills are mostly contained within IK2, although many of the library staff would depend on these for the competencies listed in IK1 and IK3 at the higher levels.

	IK1 Information processing	IK2 Information collection and analysis	IK3 Knowledge and information resources
Level 1	*Input, store and provide data and information*	*Collect, collate and report routine and simple data and information*	*Access, appraise, and apply knowledge and information*
Level 2	*Modify, structure, maintain and provide data and information*	*Gather, analyse and report routine and simple data and information (e.g. use Excel and simple statistical functions)*	*Maintain knowledge and information resources and help others to access and use them*
Level 3	*Monitor the processing of data and information*	*Gather, analyse, interpret and present extensive and/or complex data and information (e.g. collate statistics, appraise research articles and synthesise the main findings)*	*Organise knowledge and information resources and provide information to meet needs (e.g. searches and answers enquiries successfully, organises resources to meet client needs)*
Level 4	*Develop and modify data and information management models and processes (e.g. intranets, KM frameworks, development of Map of Medicine locally)*	*Plan, develop and evaluate methods and processes for gathering, analysing, interpreting and presenting data and information (e.g. evaluate library contribution to intranets, work with PALS for provision of patient information)*	*Develop the acquisition , organisation, provision and use of knowledge and information (e.g. manages library services, integrating local and external resources, assessing needs and organises support services)*

Table 6 KSF mapping to emerging roles

The skills and knowledge required to establish and maintain collaborative working, outreach work with clinical teams, and support e-learning will be described within the General dimensions (e.g. Learning and development, Development and innovation,

Services and project management) as well as the Core dimensions of Communication and Personal and people development.

2.5 Common themes in skills gaps

This section sets out the findings from the synthesis of the training needs analyses.

2.5.1 Technical (ICT) skills

The LISU national survey in 1999 identified intranet management, web page design, desktop publishing and use of spreadsheets as the main technical skills required. The SW study by TFPL (2003) noted the need for 'knowledge management foundations' and the NW study (2004) found that many of the new roles would demand advanced ICT skills. The London (2004) study identified advanced information retrieval as a training need, and the S. Yorkshire study identified intranet/knowledge management as a major gap. Library staff themselves seem to be rather unclear about their possible role in supporting knowledge management initiatives in the NHS (as the workshops confirmed). Knowledge management is not just about the technical skills of intranet management but there seems to have been little general progress since 1999 in enabling librarians' skills in classification and content organisation to be extended for work on intranets within the NHS. Despite the presence of details about knowledge management, and a diagnostic skills toolkit on the NeLH specialist library on knowledge management, awareness still seems limited.

Competence in managing the basics of the ICT aspects might help boost confidence in managing the other aspects of knowledge management. Designing and managing databases is a skill that would be required as well, and these skills need to be enhanced. More skills in database design and management would help the advanced skills in information retrieval. The American 'informationist' skills demand knowledge of more specialised and non-bibliographic databases.

2.5.2 Teaching skills

Teaching methods come up regularly as a skills gap, although there seems to be some divergence between the needs of those doing specialist trainer posts and those who are supporting learning of health professionals on a more informal basis. It may be difficult for those who are not training regularly to amass sufficient teaching hours to enable them to obtain a formal teaching qualification. There are several target groups:

- Trainers who could or should have a formal teaching qualification

- Librarians who organise some training and provide informal support

- Para-professionals who are providing informal support.

The lack of acknowledgement of the importance of educational theory was noted in the S. Yorkshire study. That study also found that over 50% of paraprofessional staff had no experience of taking part in online discussion. To support others' e-learning this group of staff ideally need some experience of their own – over and above experience of doing online ECDL as some may have.

2.5.3 Research and analytic skills

The 1999 LISU study suggested that research skills, skills in quantitative and qualitative data analysis were skills that were required by library staff but library staff were not aware that these skills were needed. Table 2 also indicates another study that identified lack of numeracy as a barrier to career progression for health librarians, as many 'information analyst' roles require such skills. In 2002/2003 critical appraisal skills are mentioned (Table 3), and in 2004 (Table 4) two training needs analyses indicate the importance of skills for 'research support' or quantitative skills as both research skills and financial management skills. In fact the South Yorkshire study found that just under 20% had no

experience of research methods, and research governance, and just over 20% considered their skills to be level 3 or 4 (on a 1-4 scale, 4 being the highest level). Nearly 30% had no experience of assessing performance and benchmarking, or of appraising information, including statistics. Fewer than 10% considered themselves experts in critical appraisal, and ever fewer considered themselves expert in performance measurement and benchmarking. Over 30% had no experience of managing financial resources, and around 50% considered themselves at level 2 or 3 in this.

The lack of confidence in critical appraisal, and the problems in benchmarking, are the tip of an iceberg called numeracy.

2.5.4 Customer care

Customer care skills are mentioned less frequently as a priority. Customer handling, support for e-learning, understanding client needs are mentioned, more as the skills required to sustain some of the new roles. Customers are increasingly remote, requiring more attention to telephone and email communication skills, less on face-to-face customer handling skills. There were few courses identified in interpersonal skills in the e-learning review (Table 3) but there may be generic provision inhouse within Trusts for generic customer handling and telephone skills.

2.5.5 Leadership and strategic management skills

These appear as the need for 'influencing and persuading' skills. In 1999 around 20% had received training, but only 4% perceived a need for training in leadership skills. The need for 'influencing' skills is more apparent in later surveys, particularly for those working in new roles. Table 3 indicates that outreach librarians need 'influencing' and political awareness skills, and that political awareness is required to sustain knowledge management.

Confidence in skills to influence requires some confidence in skills associated with a strategic management skill set such as business planning, strategic planning, fundraising, vision, writing bids, entrepreneurship, managing change and achieving results, project management. Both the LISU survey and the S. Yorkshire study indicated that there were distinct skill gaps here. In 1999 21% had received training in strategic planning, and 13.7% required it. In 2004, in S. Yorkshire, fewer than 5% rated themselves at the highest level of competence on managing change and achieving results, participation in face-to-face networks, or assessing and evaluating user demands for services. Over 50% had no experience in writing bids. More importantly, perhaps, the activity analysis indicated that their 'influencing' skills were little practised.

2.5.6 Professional and paraprofessional skills

Many of the surveys make little distinction between the training needs of professional and paraprofessional staff, and many of the skill areas are the same, the difference being between advanced and basic level expertise.

The 2004 South Yorkshire study found that junior library staff should have improved skills in:

- IT (for content management, general IT skills for troubleshooting minor technical queries and using library management systems, including basic cataloguing and classification)

- Literature searching (and basic training of users)

- Customer care (including dealing with an increasing number of non face-to-face enquiries).

2.5.7 Unidentified needs

The policy document on patient choice, Building on the Best (Department of Health, 2003) sets out the agenda "to ensure people have the right information, at the right time, with the support they need to use it" (para 7, executive summary). The document proposes (paras 82,83):

- Extension of NHS Direct services for digital TV

- Working with other providers of health information, including the voluntary sector, to kitemark health information for patients and the public

- Patient access to their own personalised care plan in 'HealthSpace', with links to the care record shared with their care team (para 57)

The emphasis on empowering the patient and the public, providing services centred around the patient, and modernising service delivery was part of the vision detailed in the NHS Plan (e.g. paras. 6.11, 6.15) (Department of Health , 2000).

None of the training needs analyses mentioned dealing with patient information directly or indirectly. Partly this is the result of historic tradition, as the hospital libraries had very little responsibility, if any, for the provision of information to patients and the lines of responsibility between health promotion, and the libraries funded under postgraduate education funding, were quite distinct. Patient Advice and Liaison Services are usually staffed by health professionals, who have counselling skills. Communications departments may be involved in the preparation of patient information leaflets and specialist skills are required to present such information clearly but accurately (Durbin, Urquhart, & Yeoman, 2003). NHS Direct employs health information assistants who work alongside the nursing professionals, providing them with information and also dealing with the enquiries that purely require information.

The mapping to the level descriptor is approximate (Table 7), based on the type of skills that seem to be implied in the studies. In many cases it is difficult to assess. Sometimes the training need has been identified but only in a very general way and the training needs need to be specified more clearly. Once more standard job profiles are developed such mappings will be easier to develop.

2.5.8 Benefits realisation and costing

Few of the training needs analyses included any benefits realisation models, or option costings (Sections 2.3.2 – 2.3.4).

For realisation of benefits to the individual, the appraisal process was mentioned in some studies. Some studies were part of an approach which was action research in philosophy with the intention of evaluating progress and reassessing priorities.

One training needs analysis considered various training options, comparing these according to:

- Risk (e.g. dependency of the training strategy on external providers, costs incurred if staff drop out, match between provision and need)

- Value for money (cost per 'training event' or 'module')

- Flexibility (ease of making changes as and when required).

KSF dimension	Mapping to identified training needs	Unidentified training needs
Communication	Intermittent mention of 'customer care' – level 1 or level 2 Need for 'persuading and influencing' skills – level 4 (see also Public Relations dimension)	None – but changes to digital library services entail different formats of communication with customers. Dealing with patients directly a need for those working in NHS Direct settings
Personal and people development	General acknowledgement of the need to support e-learning initiatives and workforce development	Need for tighter specification of objectives, particularly for development of others
Health, safety and security	Not mentioned, presumed to be in-house training responsibility	
Service improvement	Strategic management required, also performance measurement and benchmarking	Quantitative methods for benchmarking services? More emphasis on developing new services, less on restructuring existing services?
Quality	Fostering of professional values, but which – CILIP, UKCHIP?	
Equality and diversity	Not mentioned specifically – indirectly through need to support training of staff who have family and other commitments	
IK1 Information processing	Not mentioned specifically, but librarians could require level 4 skills for assisting in intranet development?	Library staff may have little awareness of the scope of the work of other health informatics staff? Linkage with clinical guideline development, and audit unclear?
IK2 Information collection and analysis	Qualitative and quantitative research and analytical skills	
IK3 Knowledge and information resources	Searching skills Ethical and legal aspects of information provision (copyright etc.) Cataloguing and classification Intranets – content management ICT skills for KM initiatives (Level 3 for paraprofessionals, Level 4 for professionals)	Little mention of patient information provision
G1 Learning and development	Teaching skills Educational theory	Will depend on whether staff are designated trainers or not.
G2 Development and innovation	Entrepreneurial skills Working across departments	
G3 Procurement and commissioning	Development of e-library services and appropriate archiving	
G4 Financial management	Financial management, writing bids	
G5 Services and project management	Project management	
G6 People management	Nothing specific mentioned	
G7 Capacity and capability	Strategic planning	
G8 Public relations and marketing	Influencing skills	

Table 7 Mapping KSF to identified and unidentified needs

2.6 Emerging skills gaps

The profile of skills gaps has shifted from the situation five years ago when the LISU survey (Maynard et al., 2000) (Maynard, 2002) was conducted, in two significant ways. Firstly, the perceived need for training in several areas seems much greater. The gap between training received and training required, although estimated in a different way, may be smaller, but this is likely to vary across the country. For example, on the national survey in 1999, 165 (16.9% of the sample) had received training on intranet/local networking, 208 (21.8%) in HTML design/programming. Training was required by 162 (17.2% in intranet/local networking, and by 155 (16.5%) in HTML design/programming. For none of the skills areas did more than 20% of the group indicate a training need in the 1999 national survey. The intranet and web page management skills were given much higher priority in the 2004 South Yorkshire training needs survey, although only for around a quarter of the respondents. Secondly, there is more emphasis now on education and training – principles of learning and teaching.

The emphasis on cataloguing and classification has shifted as under 10% of the respondents in the national survey in 1999 indicated that they needed training in classification systems/subject schemes. What seems to be happening is that this type of library work is being done by library assistants, rather than by professional staff. The classification skills now required are also the content management skills for intranet management.

One of the comments made in the previous national survey (Maynard, 2002) was that there were discrepancies in the perceptions. For example, few believed that they needed training in research methods, but much larger numbers required training in evidence based decision making. To understand evidence based decision making and to assist in critical appraisal requires knowledge of research methods, and at least a basic knowledge of statistics. As indicated in Section 2.5.3 more expertise in critical appraisal skills is required but librarians need the underpinning statistical and quantitative analysis skills to do critical appraisal with confidence.

Knowledge management – there is some debate about what this involves. The types of contributory skills and knowledge are described in different ways in many of the training needs analyses. Some place more emphasis on the business management, others have tried to assess the technical and operational skills gaps.

2.7 Self-efficacy, capability and competence

2.7.1 Capability and self-efficacy: definitions

What is missing in some of the competency frameworks and training needs analyses is an appreciation of where the learners are situated, and how they situate themselves. Bandura (Bandura, 1977) presents a theory of self-efficacy which distinguishes outcome and efficacy expectations. A person may estimate that a given behaviour will lead to certain outcomes, but they may entertain doubts about their capability for that behaviour. In Bandura's model, self-efficacy is affected by 'performance accomplishments' (trial successes), vicarious experience (modeling of activities), verbal persuasion (suggestions, self-instruction) and emotional arousal (relaxation, biofeedback).

Similarly, education for capability is contrasted with education for competence (Fraser & Greenhalgh, 2001). In situations where adults are trying to change behaviour, or coping with new situations, learning requires adaptation and exploration both of unfamiliar tasks and unfamiliar environments. Many of the values posited by the American Special Libraries (Special Committee on Competencies for Special Librarians, 2003) are more a statement of desired capability or performance than simple skills or competencies.

2.7.2 Scaffolding competencies to capabilities

The South Yorkshire training needs analysis provided one view of the spectrum of competencies, but to get to the expert level would require 'capability' as well as 'competence'.

The results on 'perceived expertise' showed that all respondents had experience of explaining library procedures, team working, and communicating effectively in print. Relating some of the advanced practitioner or specialist skills to the corresponding novice skills, some of the barriers to library service development became more obvious. Respondents were asked to rate themselves at one of four levels of expertise, including level zero indicating no experience, with level four being the highest level.

Team working to innovation

Fewer than 30% rated themselves below the highest level of competence at team working, and fewer than 20% rated themselves below the highest level of competence at sustaining working relationships with other departments (although a small percentage had no experience of this).

BUT over 10% had no experience of developing relationships with new user groups, over 35% had no experience of entrepreneurship and innovation, 50% had no experience of managing contractual arrangements, and fewer than 5% rated themselves at the highest level of competence on managing change and achieving results, participation in face-to-face networks, or assessing and evaluating user demands for services. Over 20% had no experience of project management and only around 5% considered themselves expert in project management. Over 50% had no experience in writing bids.

Cataloguing to metadata and intranet management

Around 20% considered their skills were of the highest level at cataloguing and classification, although nearly 20% said they had no experience.

BUT over 50% had no experience of digitisation and metadata, and nobody considered themselves expert at that, and over 70% did not consider their skills in web site content management exceeded the second level of competence.

Communicating in print to catering for the needs of remote users over the Internet

All had experience of communicating effectively in print, over 50% considered their skills in designing forms or leaflets to be at level 3 or 4, and nearly 50% gave their skills in display and signage a similar rating.

BUT over 20% had no experience in communicating effectively via web pages (although 10% rated themselves as expert), and over 20% had no experience of summarising information for different audiences, with around 5% rating themselves as expert.

Simple searching and calculations to critical appraisal and more advanced quantitative methods

Around 20% considered their skills in searching resources and communicating results to be at the highest level (and nobody considered themselves at level 1). Although over 10% had no experience of keeping financial and activity statistics, 50% considered their skills to be level 3 or 4 in that.

BUT just under 20% had no experience of research methods, and research governance, and just over 20% considered their skills to be level 3 or 4. Nearly 30% had no experience of assessing performance and benchmarking, or of appraising information, including statistics. Fewer than 10% considered themselves experts in critical appraisal, and ever fewer considered themselves expert in performance measurement and benchmarking. Over 30% had no experience of managing financial resources, and around 50% considered themselves at level 2 or 3 in that.

Own reflective practice to supporting others in clinical governance

Around 70% rated their skills in developing their own knowledge and practice at level 2 or 3, and all had experience in this.

BUT over 15% had no experience of knowledge management, around 60% rated their skills at level 2 or 3, and fewer than 5% considered themselves expert.

From Basic technical support to web site design and ICT systems management

Over 20% considered themselves expert in troubleshooting minor searching problems.

BUT nobody considered themselves expert in ICT systems management, and over 50% had no experience of web site design.

From simple messages to ensuring effective learning

Over 50% considered themselves at level 3 or 4 in communicating effectively in oral presentation.

BUT only 40% considered themselves at level 3 or 4 in delivering training, and nearly 20% had no experience. Over 25% had no experience of designing learning materials and over 30% had no experience of assessing learning needs, or designing training. Under 5% considered themselves expert in the latter set of skills.

From shelving to prioritising risks

Around 20% consider themselves expert in managing physical resources

BUT nearly 40% have no experience of risk assessment and emergency/disaster planning and nobody considered themselves expert in that.

Separating out the responses from paraprofessional staff showed that over 50% had no experience in:

- Managing financial resources

- Assessing performance and benchmarking

- Managing contractual arrangements

- Participating in discussion online

- ICT systems management

- Writing bids

- Digitisation and metadata

- Entrepreneurship and innovation

- Web site design, web site content management

- Risk assessment.

Of these, the lack of experience in participation in online discussion indicates that e-learning would need to be carefully supported with this group. Paraprofessional staff might also be expected to deal with web site content management and this is another gap. Lack of experience in the other areas of competence might be expected.

Of more concern might be the observation that around only around 15% rated themselves expert in keeping financial and activity statistics, under 30% considered themselves expert in managing the physical resources, or effective time management, and under 20% considered themselves expert in troubleshooting routine searching problems.

The findings indicate that both professional and paraprofessional staff have a basis on which to build, but that perceptions of expertise varied considerably, and that help in

relating new learning to their own situation will be important. Learners need to reflect on their own learning needs very carefully.

2.8 Evaluations of training

Very few evaluations of training delivered are available. The pilot FOLIO programme was evaluated to inform future development (Booth, 2003) of e-learning support for CPD for health library staff in the UK, and has continued to respond to participant feedback (e.g. incorporating a 2-week catch up time to make submission of work more flexible).

Sievert (Sievert, Johnson, Hartman, & Patrick, 1997) compared three delivery modes (satellite broadcast, Internet materials and an intensive seminar) for different topics. The teleconference was used for consumer health information, and telemedicine, and the relation of each to librarianship. The Internet based materials covered the US health care delivery system, MeHS and MEDLINE. The intensive seminar covered other health sciences resources, the biomedical community, trends in health sciences librarianship and medical informatics. The use of the Internet based materials did not produce the amount of interaction anticipated on the listserv. Evaluations showed that the participants liked the satellite broadcast, but the Internet materials were least popular, and the intensive seminar was the most popular. In many respects the ratings simply reflect that teachers and learners are most comfortable with what they know best, but the authors suggest that distance education works best as a team effort with close attention to instructional design.

A review of distance learning programmes and the Professional Awards in IM&T in Health (Urquhart et al., 2002) included a review of networked learning support for CPD in health information management and health informatics. The review notes that evaluations often concern pilot projects only, and long-term evaluations are rarely available. The limited evidence suggests that:

- Negotiation between the higher education provider and the workplace or professional bodies is necessary

- Technology used should be appropriate to the needs of the learner

- The amount of pastoral and academic support required should not be underestimated

- Peer-peer support is valuable, and face to face interaction often desirable

2.9 Professional accreditation in health informatics

The UK Council for Health Informatics Professions (UKCHIP) was formed in 2002 to promote professionalism in health informatics (UK Council for Health Informatics Professionals, 2004). At present it operates a voluntary registration scheme, although it is expected that by 2008 anyone working in the NHS in health informatics should be registered. The discussion document (Anon, 2002) includes libraries and knowledge management within the scope of health informatics professionals. The document also notes the problems of the growing numbers of professional bodies and associations that might represent health informatics professionals. The fragmentation is not considered helpful to the development of health informatics as a discipline. The Council is currently sponsored by the British Computer Society (BCS). In March 2005, ASSIST (the association for IM&T staff in the NHS) became a BCS Specialist Group, part of the BCS Health Informatics Forum that now has over 5,000 members (BCS, 2005).

The report to CILIP(Health Executive Advisory Group, 2004) (Section 2.6.1) suggests that CILIP should refocus its interest away from first qualifications to continuing professional development. Consultations for the report indicated that health librarians believed that membership of CILIP was of no professional benefit to them and the

membership was not valued by their employers. The report recommended (p.37) that CILIP should offer a structured CPD package with accreditation.'

3 Interviews

3.1 Approach

Interviews were sought from a wide range of those with an interest in health information provision or training of information professionals. The basic interview schedule (Appendix 3) was altered for each interviewee, to ensure that the interview focused in particular on what that interviewee could offer.

3.2 Sample

Interviews were sought from Health Libraries Group CPD Panel members, Strategic Health Authority (SHA) library leads, and other expert informants such as NHS Direct personnel, CILIP Health Executive Advisory Group and the FOLIO team, those involved in UKCHIP work and information was also obtained from the USA on the progress of the informationist roles. Further information was obtained from those involved in provision of information for patients and the public through working with PALS services.

In all, 18 interviews contributed to the report, together with detailed email responses from Eskind Biomedical Library (Vanderbilt). Some interview data from a previous survey was used, with the permission of the interviewees.

3.3 Findings

The findings are organised by themes which emerged from the literature review, and the same themes are also reflected in Section 4 (workshop findings).

3.3.1 Current skills gaps

The literature synthesis found that technical ICT skills (intranet management, content management, informationist skills), teaching skills, research and analytic skills, customer care, leadership and strategic management, and some professional skills (literature searching, classification/cataloguing) were the current skills needs.

> *'One of the biggest gaps is still with IT and basic skills…we would like to see…(that) librarians are much more competent and understanding the architectures of things – if things don't work…they understand what's happening and have a much better feel for systems and networks.'*

Interviews illustrated how some of these skills tied together for service development and innovation. New ideas mean reframing, thinking of information services in new ways, to match emerging needs, and then using strategic management skills to assess how to make the changes cost effectively, to culture the changes, and to monitor carefully, to ensure that the customer gets the service they require. The leadership and innovation skills set is an integrated package.

> *'I try to get people thinking about how they would like their services to develop…competition can destroy and distort if taken too far but in its right place, thinking well, I want to innovate here, I want to see how my library can get to the best position to serve people in this Trust for example…it's all reflected from business management…how to run, how to be an entrepreneur, an intrapreneur, working for an organisation and yet being innovative in that.'*

> *'Librarians are traditionally too inward looking, so senior librarians, particularly, they need to be outward focused, need to be knowledgeable about the environment they're working in. And I mean at a strategic level, not operational level…so you're working holistically with other colleagues in the NHS…they need*

to know how to work collaboratively, and they need to know, they need to have to attitude of being able to let go of stuff and contribute to just what is their expertise…there's obviously much more to be done is terms of risk taking, the contribution of ideas, being proactive and the selling….I very strongly believe that we need to sit down and analyse, understand where we get best value and be able to plan our services and cost our services, And to look at things like continuous improvement, how can I change this to make it cheaper? What can I do to improve it so it adds value? So we're looking at cost, quality and customer impact'

' So many librarians/library services don't even get asked for input to the business plan for the year or the organisational goals – they're just not even in the loop.'

'Leadership skills are really important and associated with that negotiation skills and facilitation skills and some of the basic things like, that we all learnt by the seat of our pants like chairing meetings…and I suppose sort of associated things like project management'

'The biggest skills gap I think is around leadership and management – change management and negotiation skills…Those knowledge management, business related skills, understanding the organisation and being able to manage change, being able to provide leadership, there's a huge gap there.'

For the paraprofessionals the impact of the outreach activities is dealing with new types of users, and new types of needs. The practical side of customer relationship management will fall on their shoulders, and they are the people who have to welcome new users in an initiative for widening participation.

'Customer service is very high priority for library assistants. I think customer service has to go up a grade and it's about being in someone else's shoes. Customer relationship management.'

'Information advice and guidance came out as a major development need…for frontline staff we're offering a two day programme looking at things around customer care, around expanding services for widening participation, that's making our services welcoming to a wider range of users.'

Some realignment of the professional/paraprofessional boundaries is required.

'The paraprofessionals should be allowed to participate a little bit more in the areas that you can learn from experience, on the job training so to speak, when then frees up time for the professionals to think strategically…A lot of professionally trained people are getting bogged down on the fact that they are professionally trained and won't let go of things like cataloguing or the bibliographic selection.'

If the librarians are working outside the library, then arrangements have to be made to ensure routine library tasks are carried out. The business processes need to be re-assessed, along with the roles.

'If outlying services are going to make an impact they have to be as close as possible to the business of their organisation and that means getting out of the library and getting into multidisciplinary routines within Trusts. I think the structure of where libraries are placed within the Trusts has also been a bit of a problem.'

'I think there are huge contributions they [librarians] can make to clinical governance in terms of working on guidelines projects and protocols and making guidelines – all sorts of things around that and implementing Map of Medicine because there's going to be local implementation of that. We have one library manager who manages the Trust intranet and is also the Trust FOI officer. I think those are the sorts of roles we could be calculating on, but we need to be aware

– I'm a bit afraid they're going to make this mistake…I think that's the danger – you can get so much out of the silo that in fact the silo starts to fall around because you're not maintaining it as well.'

Some of the training needs need to be graded, or at least staged, so that staff can choose the appropriate level for their roles. This applies, for example, to the teaching/training skill set.

'maybe even some basic stuff around making people feel welcome and what they used to call reference interviews and finding out, and then you could move onto… at the top there's the whole planning lessons, learning outcomes, the whole raft of skills that you need to be an effective teacher.'

In some areas considerable emphasis is placed on the teaching skills of library staff.

'Also, something we're pushing quite hard is the teaching qualification – whether they do the City & Guilds adult education qualification, or whether they do the basic skills education or the ordinary PGCE – that's a big strand for us – so your basic librarianship qualification must teach you to be a good teacher!'

Knowledge management is partly about setting up knowledge exchange databases but there is probably a need for a strategic approach to knowledge management beyond upgrading library staff skills.

'there is clearly a need for some work to be done to support how we develop those (knowledge management) skills in not only library managers I guess but more broadly within staff as a whole…certainly trying to build these ideas of communities of practice…supporting people in spreading good ideas and sustaining good practice.'

Others stressed the need to develop the traditional classification skills, to extend those for intranets, and appreciate other approaches to medical thesauri and controlled vocabularies than MeSH (Medical Subject Headings) used by MEDLINE.

'Content management is…going to be a really good role that librarians could fit into and should fit into…possibly helping to manage intranets or huge websites and the ability to put local, regional, national and international content into perspective is going to be important….you can't force people just to go to one place and in fact it's good for people to go to more than one place and compare what they find.

'I think librarians needs to learn a bit more about controlled vocabularies…SNOMED…ICD…UMLS.'

In other instances traditional skills may be assumed to be present – but checking shows that information retrieval skills are not as sophisticated as they should be for routine literature searching, let alone skills at the informationist level.

'I've seen librarians dive in without stopping to ask questions to understand what the topic is or homing in on one aspect without thinking laterally – just using one database when the question could be answered through the use of several databases. It's the very basic things like that – the lateral thinking of getting to the depth of what a query is about and applying a systematic approach to a search. It's particularly noticeable with older colleagues who were brought up in the days of online searching before the internet was commonly used – who had to sit down and work out a search strategy before you started – the older ones have those skills and a lot of the younger colleagues don't have those skills.'

'Although we train people with Internet skills, database skills and e-journals the specialist searching skills are very poor now…I think it's very easy to overestimate just how much people really know.'

Lack of practice may be one reason, as critical appraisal tools may not be used in practice by most.

> *'Critical appraisal…workshops were well attended but we found librarians weren't using the tools when they went back to work, so the unit was dropped…feedback is coming through that they want longer than a half day session to get to the nitty gritty of critical appraisal but this might be from a select keener few.'*

3.3.2 Emerging needs

In the newer situations and posts which involve health information provision and services for new groups there is no clear idea about the proper career path (and perhaps that would be inappropriate in some circumstances too).

> *'But there's no clear precedent of saying well you know this sort of course really should you know, all staff should do that because it teaches them about this, that or the other…Not a clearer pattern…as to what should be natural development for staff.'*

The need within the sector to rethink the business processes, to think outside traditional professional boundaries, does mean that many health staff will undertake more formal training to accredit what they may already be starting to do. And yes, the money is required to support all the support staff in career development and training courses but there is more than money required. Librarians are recognising, as they have done for years, that the non-traditional learner may need considerable support and encouragement to overcome bad experiences of school education. The personal side of e-learning will often be library staff, and they need to be prepared.

> *'they propose that e-learning will become a key means of delivering education to the NHS…how are they going to support e-learning…we do a lot of this nurturing, supporting, de-mystifying already and we will need to do more of it because people gravitate towards libraries and will do when it comes to e-learning. Because learning's a social activity and they'll want somebody to hold their hand, so whether we want the role or not we're going to have one, so let's find out what best it should be.'*

> *'People need more confidence in the facilitation of e-learning and they need more background in learning theory and how to train or facilitate effectively and what the difference is between the two things.'*

In many ways library staff (and particularly librarians) may have to acknowledge that they don't know the answer to their all their learning needs on how to manage the library business. Nurture but prepare to be nurtured too.

> *'be alert to emerging needs that we can deal with or how do we grasp…grasping opportunities, being constantly alert for opportunities…having come from someone who can find the answer to somebody 'I don't know…I don't know what to do about this yet. I can work on it'*

Inevitably, if the NHS is developing new ways of working much of the useful information is going to be knowledge and personal experience of others in new service models, and that is not the type of information that will be found so easily in the formal literature – or at least not for a while. Librarians have grasped some of the comforts of evidence-based approaches and the certainties of some of the evidence-based resources but the real knowledge management agenda is far more dependent on informal sources of information, expertise and experience, and encouraging that sharing.

> *'not only a responsive approach but also if you like one that's a bit ahead of the game really in terms of being able to know what's going on elsewhere and what's working and what's not working. So if you like there's something about how do we get access to knowledge and information…around service improvement and modernisation…sort of connecting people up in some way to that information.'*

> *'It's going to be a long haul getting nurses and paramedical/allied health staff up to speed on information management and knowledge management is going to be a huge task'*

Specialist skills of the type that characterise the informationist were not mentioned frequently, but the practical point is the most obvious:

> *'if a person's going to have those clinical qualifications and librarian's qualifications…what hospital is going to be able to afford them? If it were proved it reduced medical errors then perhaps an argument could be made for it.'*

With so much emphasis on patient-centred care, and the development of information services for patients such as the PALS services, it might be expected that health library services might have links with their local PALS services. These seem to be rare, and the links very tenuous. However, these may be an area to be monitored for the future.

> *'There is some reluctance to be directly involved in patient information services. Staff are more likely to offer some support to PALS and train PALS people to search relevant databases.'*

> *'However, patient queries is something else – it's an area we're going to have to tackle, even if it isn't a big issue now – it's becoming now…we need to think of guidelines now.'*

Health library services may have to be restructured to meet other service needs, and more specialisation may be required, for some of the more usual LIS functions as well as the highly specialist skills.

> *'It's ridiculous to have ten small libraries in a health economy all trying to do the same thing, all doing ILLs, all doing bits of training…all saying we don't have time to do this outreach….whereas you could have specialist teams who concentrated on marketing, essential skills training.'*

3.3.3 Training delivery models

Training delivery is seen as the responsibility of several individuals and organisations, from the individual and their own CPD plans through organisational and regional provision to national provision.

> *'I think there are five levels of responsibility around training and development: 1) the individual's own responsibility which we have to support by making sure the personal had profile, training logs…2) then the library responsibility…how do we handle it, what do we do in this setting; 3) the organisation's responsibility…for training…like Excel or basic management techniques; 4) regional responsibility…customised development for the LIS community…value added health specific; 5) national level of responsibility, CILIP as the professional body providing development training'*

> *'The library assistants also need to think about what they need to do if they want to advance themselves and if that requires finance and time off then they have to negotiate with their managers. They have to be responsible within the workplace, but the individual has to take responsibility for their own development as well. And the manager's role there is to encourage that.'*

Specialist training may need to be repeated at several locations where library staff are geographically dispersed across a wide area. Ideally the same facilitator would do the training session to ensure some continuity in content.

> *'but it's quite good if we can get facilitators who are willing to travel around and pick up the area that we have'*

For paraprofessionals and NVQ training several routes have been trialled. Funding has been sought from the NHSU for spaces on NVQ programmes. These may be specific

(Library and Information Studies) or more general (Customer Care). Within the NHS, the Workforce Development Confederations have been promoting NVQs (out of the Learning Account scheme) and several groups of staff had to have NVQ level 3 by 1 January 2005. Many support staff are reported to be using their Learning Accounts for ECDL and other IT courses. Appraisals, personal development reviews for support workers are beginning to take place now. With a legacy of benign neglect, some of these staff will need support in their learning.

> *'I think most people, I think, are quite happy to sit in a tutorial or some people are quite happy to do self taught e-learning, bite sized chunks. I think it depends on what they're wanting to achieve from it and if they fell that they need support as well, isn't it? It's all right sitting in front of a PC but if you're not self motivated or if you need…support in understanding what you're trying to learn it can cause you difficulties and I suppose it depends what level you are at.'*

Some areas have made arrangements with local FE colleges for NVQ programmes, and progress is very satisfactory, the one brake on the progress being the difficulty of getting assessors.

> *'I'm very much involved in our own NVQ programme that we've commissioned through [name of college]… so there's a lot of work with the paraprofessionals through the NVQ…and they have monthly meetings for the paraprofessionals…and a very clear programme where they work through the modules together…and good for our staff because they're actually mixing with non-health.'*

If people are to be taken out of the workplace for training, the consensus is that it is better to concentrate the training delivery in one day, with different themes, rather than running separate half days on different topics. In some areas an annual two day conference is used.

> *'We have an annual residential conference which is two days, one night and that includes an update on policies and stuff and personal development and whatever the given theme of the year is – marketing or whatever. We try and get national speakers for that.'*

For paraprofessionals more might be organised very locally, by their own library managers.

> *'with the large numbers of part-time staff often with other commitments it's even more difficult for them to travel and so I think that (training) has to be fairly local and is the responsibility of library managers and I think at the moment we're not doing that sufficiently well.'*

> *'Particularly for our library assistants we need to make very good use of time…half day courses are a waste of money and a waste of time.'*

Training for many library staff has to be organised on a more regional basis but that means that some training possibilities within individual Trusts may be invisible. In addition as

> *'other professional groups apply to their sort of training budget…internal to the Trust'*

this may complicate the way multidisciplinary training might be organised, equitably, throughout a wider area. Even if libraries should have their own training budget, arrangements seem to vary.

> *'Equally, we would expect libraries to have training budgets and they determine training needs through their local CPD as well… I feel one or two of ours have a policy of a central training budget for the Trust but they have a call on it. We would hope to see that they have access to training funds – put it that way! Our policy would be not to put on anything that was available at Trust level – we*

wouldn't do specific 'lifting training' because they should get that from their local organisation. I don't think we have a specific policy but I would not fund it if it was provided locally.'

There seems to be some uncertainty about the role higher education institutions could play in some areas.

'And I suppose the other thought was in terms of providers of CPD for library staff. I don't know that, they may not have the capacity but the library schools, the departments of information studies in the universities, I don't know whether they've got any capacity to offer modules. I'm just thinking if the same model as CPD for health professionals tend to be modules provided by the higher education providers and I would be quite happy to go back to say the local universities here.'

'I think it's true there's still not enough practitioner engagement within the education sector…I'd like to see much closer working between education providers and CILIP, as opposed to the people who actually set the standard'

In others the local higher education institutions are already involved with the regional MLA.

'One of the formal ways we do that is to work with [name of university] because they have a library training consortium…I'm there to inform [name of university] they just co-ordinate this training consortium, to inform their programme.'

Building on training provision, or job shadowing is important.

'if it's going to be continuing professional development type of event, then there needs to be some sort of reflective element built into it'

'We've had people contact us after they've had training and they ask questions or even want to come back for additional training…it really depends where they're at when they, how much they knew when they had their training…and they discovered they're got additional questions…That local level contact I think is very important.'

Action learning and learning sets were mentioned as ways of fostering learning around real problems. Journal clubs are another variation of this approach.

'So learning in small groups in a kind of problem focused way and with a facilitator. To give participants an opportunity to contextualise the learning that they're doing.'

'When you've got a lot of fairly small units, which ours are, the face-to-face meeting of people is actually quite important. Although I'm not very sold on one day training events – and we don't tend to have very many one day training events because I'm not sure just how much actual learning goes on – we have these updating events on new developments around and I'm focussing on a new programme of action learning – we had an opening event, we went away and did some initial work, had a session part of the way through where they checked back with the facilitator and then went away and finished the research, and then we had a feedback session – so it was very much a programme rather than just a one-off thing and that's where I'm trying to steer things to go because I'm a great believer in you learn when you do not just what you're told – you need to reinforce it as well.'

'We have a librarian journal club which has been going for over a year now to which all staff are invited and that's a very good local opportunity for encouraging people in a supportive atmosphere to do a presentation…it's very informal but it works.'

E-learning is helpful but the personal interaction is a missing element for some, and it is important not to neglect the informal social learning that occurs.

> 'Well, I did quite like it (FOLIO). It suits me , to do it at the end of the day but I missed the interaction. It would have been good if it was a bit more blended…so much of our daily work is conducted via email and I just think it's very nice to just talk to people in person…interacting in person equals learning, a bit more fun.'

> 'Obviously there's great stuff that's being done by FOLIO, but that's only part of it. There's a lot of very good work based learning that's going on with staff training each other…and I think informal learning is what we do so much of. Every time we go to a meeting or whatever, we have monthly meetings…and there's so much learning and networking going on there.'

> 'My feeling is it's too great an opportunity to miss, but it does need an awful lot of resources to get a good package…if NLH has resources to have a bank of online programmes that people can tap into when they have a learning need, I think that would be brilliant.'

It is possible that e-learning is simply something that people get used to – others who have had the experience of distance learning are happy with the approach.

> 'I see distance learning as very much my preferred method of learning. It's not a second best. I know some people will say that distance learning or e-learning is something that they do because they can't get time away on a course…I don't learn very well form people talking and I just, I learn a lot better from having a book. And I much prefer to be able to work when it's convenient for me and to skip over the things that aren't relevant to me.'

For organisations the size of NHS Direct, the number of staff working within one site, and the uniqueness of the organisation's purpose mean that training has been done inhouse, and on a regular basis.

> 'There are quality standards which our health information staff have to meet…there is ongoing training…there is built into the system a six weekly update for health information advisers.'

The difficulty with training that is available to library staff alone is that there is limited opportunities for library staff to meet other professionals.

> 'There is a debate over "why should library staff have their own training programme when some training needs are not special to library staff". I believe that the impact of the Knowledge and Skills Framework may reduce the "silos" of training that are currently offered.'

3.3.4 Accreditation and standards

The CILIP framework on revalidation was acknowledged but for those working within the NHS, something that chimed in with CPD points systems used by other health professionals would be useful:

> 'GPs they get CPD points which of course build up to their own development and their own qualifications. If we had something similar for librarians.'

The national presence of something as high profile as NHS Direct implies that training standards, and competencies need to be uniform across the country for staff working within organisations such as NHS Direct.

> '…they're working towards sort of national ideas in terms of what staff should have on training.'

One theme was the fact that the health sector is a different sector for LIS, and increasingly so.

> *'what skills the NHS as an employer would expect from newly qualified people to come out with, and what we'd expect to have to provide...I'd like to see more shorter course follow-up training opportunities with accreditation. It's a huge issue for us, revalidation is still not going to be mandatory'*

High quality training, particularly e-learning materials are costly to produce and kitemarking may help to establish baseline standards.

> *'e-learning certainly can offer a way forward but e-learning is expensive to do, to establish…you would probably need to kite mark some good stuff and you would have to have some criteria for that.'*

For hospital-based services, standards are desirable but less politicised. However, for the health professionals who move around the country, standards of service should be similar and expectations should be similar. Increasingly that means more than the bookstock and journals, it means the competencies of the staff.

> *'How is somebody who goes into an NHS library in X doing to know that they're going to get the same service or quality of service in Y…national training, that one of the areas that I think we need some sort of standardisation on and sort of national accreditation on.'*

What several of interviewees emphasised was that standards should not become a lowest common denominator. What is more important is that the learner's effort should be recognised.

> *'Standardisation is a good thing in the sense that it makes sure that there's a certain base level people can expect, a certain base level of training…I don't support standardisation that tends to mean 'bland', wipes out any sort of initiative, forward thinking.'*

> *'I'm more inclined to think that that what's really important is having some sort of accreditation for the learner…all different types of learning experience are conceived…quality framework implies to me that it might be more restrictive rather than innovative.'*

Within the West Midlands area, Apple has provided an accredited training programme through the Open College for librarians, and a complementary structure for paraprofessional staff, with the option of NVQs for them.

> *'Our priority has been about evidence-based skills and management skills..with paraprofessional staff we approach it in a different way, in some ways there NVQ is very similar to Apple, but it's nationally accredited…we use our own staff but we use Wolverhampton City College as a centre.'*

Recognition of competence is part of the ethos of the NVQ approach, and doing an NVQ is an important first step for some paraprofessional staff.

> *'I think it's really important that we demystify it…the first training that they go on doesn't have to be work related. So it gives them that little boost...the NVQ's given her the confidence because her NVQ stuff is fantastic.'*

Assessment of an individual's training needs should be done as part of the appraisal process and the need for accredited training is in step with the more structured approach to appraisal practised now, for all staff.

> *'It's very rare that people don't get a regular appraisal as all the Trusts have implemented it. That may only be annually, I'm not so sure that people get the quarterly reviews that's supposed to follow – but at least annually'*

The UKCHIP organisation arose from the recognition that it was important to regulate informatics staff, to give them a higher profile, bring them together as a group and provide a structure for discussion of issues of informatics and patient safety. At present the plans for CPD accreditation are being worked out, but the baseline will be 40 hours at present.

The aim is focus more on outcomes rather than a system where you might gain points but *'actually sleep through a whole discussion.'* Three levels are envisaged:

- Level one, entry to the profession (for LIS staff, pre-Chartership, and paraprofesssionals would come in a pre-registration level)
- Level two, with two to three years of health informatics experience
- Level three, probably with higher degree (Masters) and five or more years of health informatics experience, working at a strategic level.

And some views on UKCHIP were very positive on the impact for librarians.

> *'I think that's when our standing – there are very few of us in the NHS, about 1,000 out of 1.2million staff – it's not surprising we get lost, but to see us listed amongst all the other professions, and the professionalisation of Health Informatics itself, and do you know about UKCHIP – that's the UK Council for Health Informatics Professionals – what they are saying is that if you are working for Health Informatics in the NHS anywhere from an IT Helpdesk person up to Director of Information Services or whatever, they're trying to make that a profession as much as doctors or nurses etc., the whole thing doesn't work without Health Informatics people but we're not visible as a group. At the moment, many librarians are reluctant because it's another registration fee if they're in CILIP. But I think if you're a librarian in the NHS, in the next 5-10 years UKCHIP will become a very good voice .'*

However, it must not be forgotten that many libraries serving NHS staff are in fact libraries run by higher education or the public library. Split loyalties can affect everything from service development to consideration of the most appropriate accrediting body for training and training events.

> *'I have seen instances where you have a university providing a service to the NHS sitting within an NHS organisation and the staff and the librarians don't even know who the key leaders are and have no contact further with the NHS and that's a major issue in terms of getting libraries as an organic part of the organisation'*

3.3.5 Relationship with health informatics and health professions

Libraries may be expected to work with clinical governance, to help deliver literature searching training. Library accreditation would encourage those links.

> *'Particularly with clinical governance, we think the link is with risk management…possibly more on the work of clinical librarians on the ward, providing guidelines.'*

> *'…become part of a clinical governance team. And I think being able to give up the boundaries and not feel threatened about being part of other people's teams, as well as having a core set of skills…multidisciplinary education and training creates huge opportunities…mixed critical appraisal workshops could be very important.'*

Those working closely with other professionals may compare the compulsory requirements to keep registration up to date with the voluntary nature of CILIP requirements. Other health professionals may not view librarians as fellow professionals:

> *'he said (to me) "you seem to be talking about librarians being seen as part of the core health professions, well that will never happen"…but what I want to at least be seeing us as part of the core professionals in there rather than just an adjunct service or as a semi-clerical service of clever people who you know…but are essentially clerical.'*

> *'maybe part of the lack of respect for librarians might be that many of us don't have a clinical background or qualifications.'*

Working more closely with others in the health informatics domain might help the updating in IT, to know what is relevant and what is not. It seems to be taking more time to make those links with IT, however, and the size of group may be important.

> *'Librarianship is just part of informatics…it's got to do with technology and electronic materials and resources to facilitate medical care, health care. It's kind of a nice broad thing that is interested in IT.'*

> *'And we've also linked in with our IT colleagues as well, not as much as we would have liked to, but we have made those links.'*

> *'I think what we've got to do is get library into the mainstream IT programme…not just IT in terms of information skills, going a bit beyond your MS Word…in learning how to use computers for all sorts of exciting applications.'*

> *'A few years ago…we had a group called the IM&T group and it was attended by librarians, generic trainers, IT trainers, IT specialists and data people…that worked quite well although it didn't last very long…it was a very large group and maybe that was why.'*

Whatever avenue is pursued the important point is to encourage library staff to seize opportunities, to nurture relationships with other professions, and grasp opportunities for multidisciplinary training.

> *'It's networking, it's marketing. It's really letting people know we're there, that we are capable of doing what we want or need to do. That we are not pigeonholed, that our organisations will look to us when they want to think of different ways o using and managing and spread information. But also letting them know that we do give value for money, that we don't wait to be asked before we show them the value of what we do.''*

> *'And I think …that it shouldn't all be kind of unit-professional. We've got to…find many more opportunities for learning with professionals and in an inter-professional capacity. And that's certainly true with management and leadership aspects. And with the knowledge management learning along with staff with a more clinical background.'*

> *'I was on a project management course…it was very, very useful because I met so many colleagues from our local Trust who hadn't been involved in project management before and were relating the project management to their own experiences. So I think it takes us out of the box.'*

There are some problems, often historical, to the development of multidisciplinary training in the NHS.

> *'The only blot on the landscape is that the doctors tend to want to deal with things amongst themselves – usually that's the senior doctors and it's dealt with through the deanery – we haven't quite broken that barrier yet.'*

One approach to informal learning and mentoring with other health staff has been tried, with some success.

> *'We tried to think in terms of coaching…this (Knowledge of Discovery on WISH website) was originally designed to teach information skills for staff who work in primary care, mental health, and might be administration/receptionists – a really small part of their job…we could link the learner to one of the librarians…it worked to some extent but I think some of the learners on the programme have been somewhat more independent than we could give them credit for.'*

3.3.6 Relationships with other sectors in the domain (MLA)

The role of a regional MLA/MLAC is to broker training:

> *'We don't assume that we're going to deliver any of the training because our job is to broker that training, So at a very basic level we assume that what we're there to do is to advise…we'll do things like train the trainer…we give them the skills to enable them to do it themselves.'*

From the domain perspective, MLA views training in layers:
- Basic induction needs
- Specialist skills (general library and information professional skills)
- Specialist sector skills (for public libraries, or health libraries, museums etc.)
- Management level
- Leadership (persuading and influencing).

In the MLA workforce development strategy (Museums, 2004) the four strategic objectives are to
- develop diversity and quality
- support the development of leadership skills,
- provide advocacy, to help deliver learning organisations
- ensure that research is relevant.

The Demos report which informed the strategy identified the cross domain skills gaps as:
- Leadership
- Management
- Developing learning organisations
- Basic skills awareness
- Advocacy (political awareness)
- Partnership working
- Issues around learning and access
- Service delivery (customer relationship management)
- ICT (web services)
- Commercial skills (bid writing)
- Performance management
- Specialist/technical training
- Evaluation and impact
- Change management
- User consultation
- Communicating the future vision

These reflect many of the identified skills gaps in the health sector training needs analyses. Unsurprisingly, given the length of the list, the MLA has decided to tackle skill sets appropriate to particular policy initiatives, and to work closely with the appropriate Sector Skills Councils (Lifelong Learning UK, and Creative and Cultural Skills).

MLA, in some regions at least, have a mentoring network which encourages people to look for a mentor outside their own organisation. Other schemes support the travel costs for work shadowing, provided the applicants provide a reasoned proposal and evaluation after the shadowing is completed. Cross domain learning is encouraged. Despite the promise, there are challenges.

> *'It'll put a lot of pressure on branches as well in finding people who can assess applications for certification and revalidation and certainly training people to be mentors. But it's a very effectives way of using people's tacit knowledge to support other professionals.'*

> *'I think we should do much more…I think we should encourage that and formalise a structure.'*

Mentoring can often be fruitful if there is a shared link between the two individuals, who are working in different sectors.

> *'I have a mentoring and buddying scheme with another librarian outside…in health promotion and we see each other on an informal basis…that works well because we work closely with the Health Promotion Unit concerned so we know a lot about what they do…we're both different organisations so it's actually quite a good balance.'*

Similarly, shared experience can be helpful and a by-product of shared training which is more cost-effective to run across the sector. Necessity is sometimes the mother of invention after all. Standards should not stifle innovation but it would be useful to share experience.

> *'I wonder whether those innovations only came about because sometimes lack of resources and sometimes just diversity of services…I'd like to look at leaving a lot of things to relatively local innovation…and you 'database' and compare and test things for others and adopt good practice'*

For library assistants, some of the problems in health libraries are likely to be similar to those in other sectors. Cross-domain training makes sense in this case, although the special situation of working in very small teams needs to be considered. The HE sector may be the closest, but more may be done for librarians than for library assistants.

> *'I've just done x years in the education sector and I suppose I don't just think in one library situation because I have worked in various and I can see things from education that I would carry across and things like that.'*

> *'If you're a library assistant in any area they're probably all got similar kind of problems they're tackling. And get them together and you'll find often that there are lot of even local networks that will provide this…HE libraries are beginning to get together which really NHS librarians could possibly tap into for local activities. The library assistants are more challenging really…but I think ..NHS libraries could explore links with local HE libraries to see what they do for their, what the HE libraries are doing for their library assistants.'*

Progress is still required to join up training provision, however.

> *'CILIP also runs courses and study days around health information. Much to Health Libraries Group's chagrin, we don't actually have any input from them. We've actually tried to contribute, but they're organised by CILIP. Their courses have no input from us, and we find that a bit embarrassing, so there is more scope for working closer together.'*

4 Workshops

4.1 Approach

Two workshops were held. The first was held in Manchester on the 29 November 2004, the second in London on the 13 December. Participants included professional and paraprofessional staff, with 15 participants at the Manchester workshop and 27 participants at the London workshop. The Manchester workshop was chaired by Anne Brice, the London workshop by Jane Williamson. Alison Turner and Fran Wilkie assisted at the Manchester workshop, Alison Turner, and Pauline Blagden assisted at the London workshop.

Opinions were also sought via the lis-LKDN, lis-medical and lis-nursing lists and 10 responses were forwarded to the research team by Alison Turner.

Prior to each workshop the participants were emailed a list of questions to consider prior to the workshop (Appendix 1). The questions were selected to reflect some of the current topical issues and developments that might influence recommendations on the type of training approach to be selected. For example, views on the CILIP qualifications framework were sought, as there is little point in fostering the CILIP approach if many health librarians in post are not in fact members of CILIP now, and see no need for membership. Paraprofessionals may prefer to follow other health informatics pathways or more general administrative and clerical routes for career advancement in the NHS. Related to that, the proposals to establish a professional register of health informatics staff within the NHS under UKCHIP provide an alternative route for formal career development and recognition. Views and awareness of UKCHIP may affect recommendations for training.

The literature review had indicated some variation on the formats of training that would be acceptable and effective. Restructuring in the NHS over the past four years has affected the organisation of training for health library staff. For a relatively small professional group within the NHS (c. 1000 staff across the country) training needs to be done collaboratively to make it cost-effective. There are several options for this: national provision of training (face to face workshops/seminars, e-learning), or more local provision with other health staff, or more local provision with library and information professionals from other sectors (HE, public library). One of the workshop questions was therefore concerned with views on local and national training provision.

The literature review findings chimed in with some of the new CILIP framework recommendations on mentoring, and the need for 'buddying' that was tried in the first FOLIO programme. Allied to that, there is a drive for more leadership in the sector. Views were therefore sought on buddying, mentoring, and coaching (as coaching might support leadership training).

Finally, views were sought on the possible future career routes, to compare the views of the workshop participants with the literature review indications.

At the workshop participants worked in small groups (five to seven participants) to consider the questions. The research team, with the help of some NLH staff acted as group facilitators.
After the workshops the responses were collated (Appendix 2) and then synthesised, together with the ten individual responses, to highlight the main findings.

4.2 Findings

4.2.1 Professional accreditation

The collective view (Figure 1) was that CILIP membership was not valued by NHS employers, and currently there was little incentive to maintain membership although the chartering process was useful for newly qualified staff. In principle, the idea of accrediting prior experiential experience was useful for paraprofessional staff who could not afford the time or the money to do a formal degree programme. There were doubts about the way the CILIP framework would meet the emerging needs of specialists, or the new roles and uncertainty about the impact of Agenda for Change. Ideally, there should be clear links between the benefits (in terms of pay and promotion) and the effort in time (maintaining professional recognition, revalidation) and costs of professional membership.

Awareness of UKCHIP activities was low. There were concerns about the way this would fit with the Knowledge and Skills Framework, and some librarians who serve NHS staff but are employed by HE or the public libraries queried how UKCHIP would fit in with their professional needs (Figure 2). There were concerns that health informatics may be too IT oriented, reflecting the much greater proportion of 'IT' and information analyst staff among health informaticians in the NHS. On the plus side, the online form used by UKCHIP was praised, as a easy way of keeping tabs on professional development for the individual. More importantly, the NHS recognition as part of a larger body of professionals would be very useful.
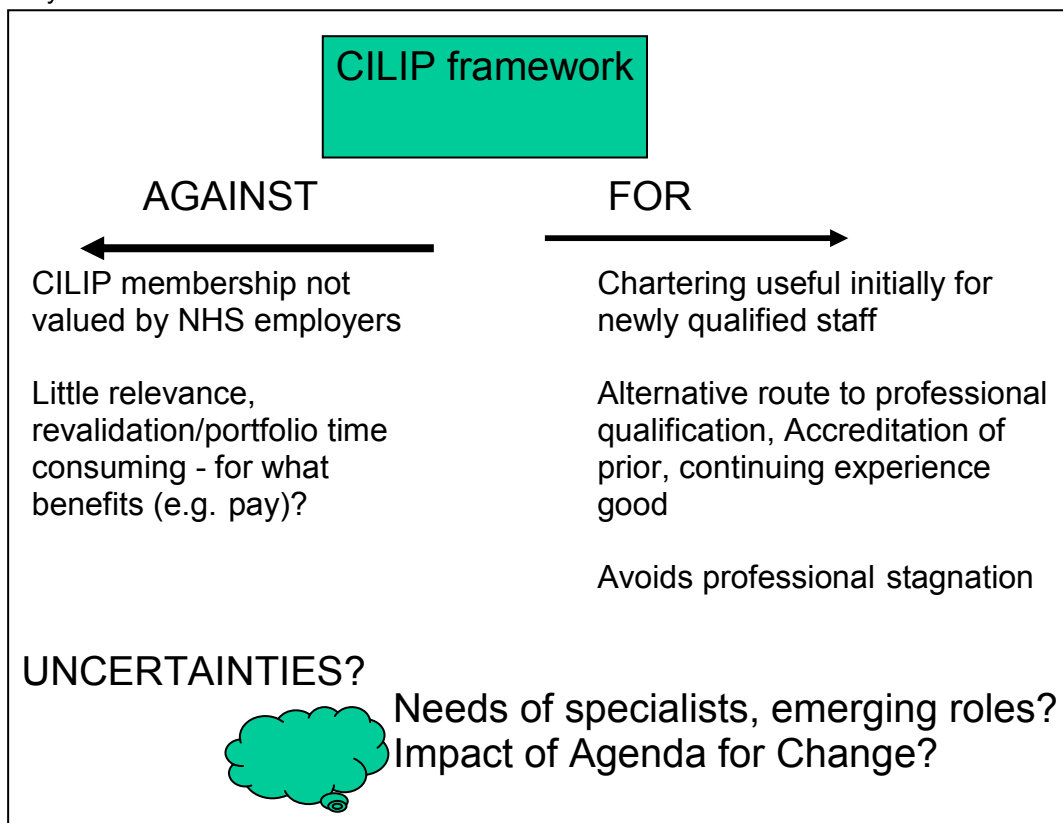
Figure 1 Views on CILIP framework

Dilutes the impact of CILIP in NHS?

What is this? Fit with CILIP, KSF?

UKCHIP

FOR - NHS recognition useful, CPD easily quantifiable like online form

Some library staff serving NHS staff are in HE/FE, public library sectors

Concerns whether too IT-oriented? How transferable outside NHS? Librarians a small group compared with other HI groups
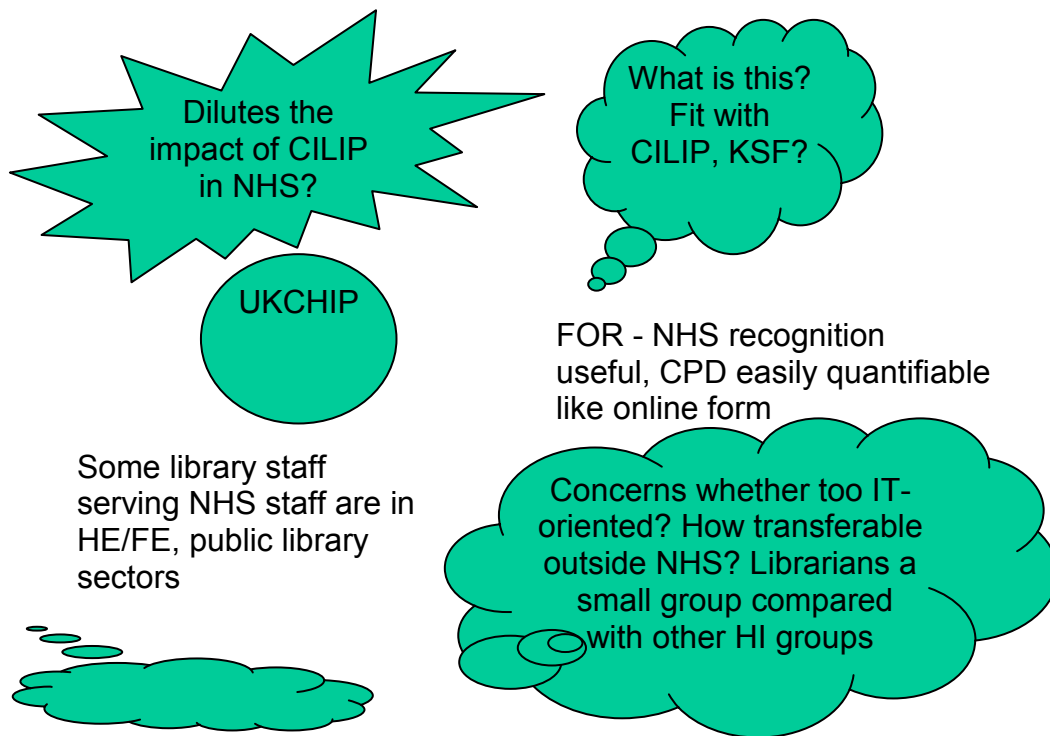
Figure 2 Views on UKCHIP health informatics accreditation

Ideally, any accreditation, any maintenance of a professional portfolio should be easy to complete, and there were concerns that the revalidation plans of CILIP were too time-consuming (Figure 3). Required training 'days' might be difficult for some staff to fulfil, and there needs to be more emphasis on training in professional matters for library assistants. For the professionals, the idea that there is one route upwards no longer holds, and many professionals may move sideways for career enhancement rather than career advancement. Some staff may not want or need accreditation, and there should be some flexibility.

More training for
library assistants

Less focus on
London-based
training

CILIP
Revalidation
plans time-
consuming?

Should be
easy to
complete

Current accreditation
priorities

More flexibility in
approaches - often
need to change
jobs to progress?

Acknowledging some
groups may not need
accreditation?
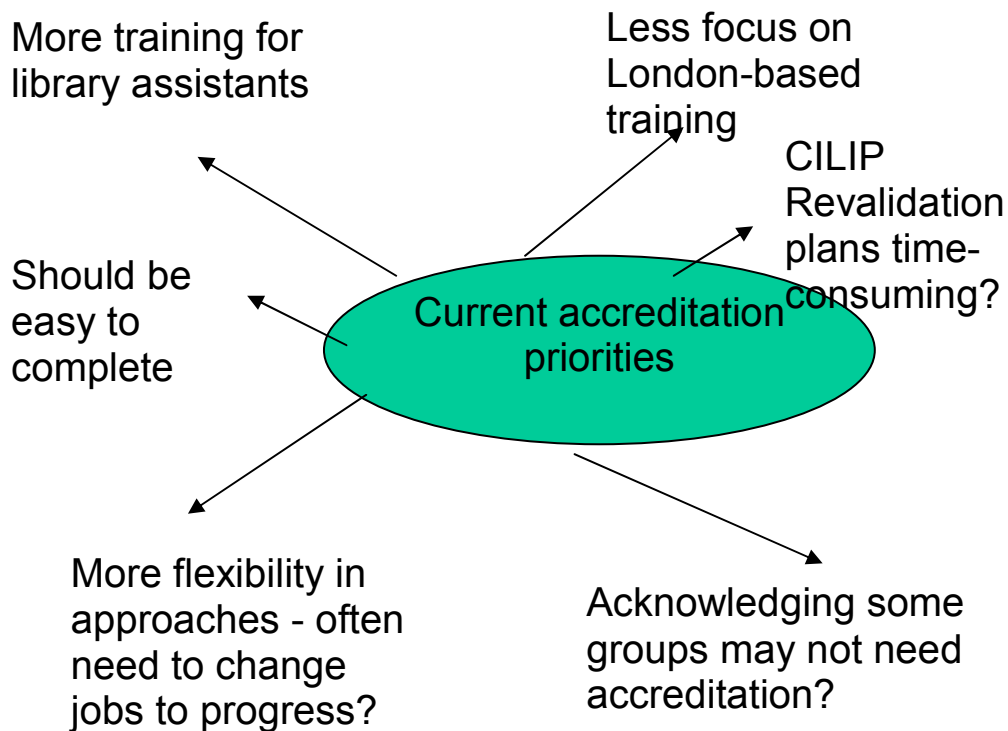
Figure 3 Views on CILIP accreditation

4.2.2 Local and national training provision

The advantages of local training provision included sharing of ideas from other sectors or other departments. Local training was seen to be best suited to general skills training, skills and aptitudes where personal coaching required and shorter sessions of the refresher or 'taster' type (Figure 4). Workshop participants agreed that training should be delivered out of the workplace if possible, and that local training could include training across SHAs where this was logistically easy. Participants welcomed multidisciplinary, or cross-sectoral approaches to training, as this increased visibility within the organisation if mixing with other health staff. Cross-sectoral training could provide new ideas for service provision. Even local training should be 'recognised', however, with some sort of points system or recognition of 'hours of training'.

EXPECTED OUTCOMES: Networking, one to one support, idea sharing, sharing with other sectors locally

BEST for: General skills training (e.g. Dreamweaver basics) and skills where coaching required, Refresher/taster sessions

LOCAL TRAINING

CRITICAL SUCCESS FACTORS:
Delivery away from workplace itself, and joint - across SHAs if possible
Multi-disciplinary/cross-sectoral approaches (new ideas)
Methods of cascading training to others
CPD points system, protected time

Figure 4 Views on local training

The problem with local training was ensuring similar standards of training and training outcomes across the country. One solution would be the provision of national standards – national norms but local delivery (Figure 5).

EXPECTED OUTCOMES: standards, norms - for ensuring that programmes could be designed nationally and delivered locally

BEST FOR: Knowledge about the NHS, legal issues, sharing experience (innovative service developments), specialist skills

NATIONAL TRAINING

CRITICAL SUCCESS FACTORS: Ability to tailor national programme to local needs, provide local support to help put ideas into practice - important for skills such as marketing, business planning, influencing
Information (e.g. web page) giving details about events, courses
Funding opportunities to attend national events

Figure 5 Views on national training

Local needs are likely to vary and hence some adaptation is necessary. National training provision is probably best suited for shared needs such as knowledge about the NHS, legal issues (copyright changes, for example), specialist skills, and there should be some mechanism for sharing experience on innovative service developments.

Whether local or national, training needs to be followed through, to support putting new ideas and new skills into practice. Funding structures for training vary considerably and there should be

- opportunities for attending national events
- more information about training events and courses (a web page with links?)
- local support structures for ensuring that new skills are consolidated.

4.2.3 Use of e-learning

Participants agreed that e-learning does not suit everyone and that enforcing e-learning would not be popular, or effective. E-learning is suitable for topics that all library staff need to know about urgently, and when learners have to fit in learning at times convenient to them. That means, however, that the pace of delivery must not be forced, and that support from a course tutor (a human being) is on offer (Figure 6).

DELIVERY requires support from a course tutor

Better web-based, not email?

BAD - Enforced 'ECDL' - compulsory online training- no thanks

Not suitable for all learners and learning styles

GOOD for time-shifting - if pace of delivery suits the learner

GOOD for remote workers

GOOD for updating, e.g. FOI, copyright issues that are of relevance, and urgently required by all libraries

E-learning

DESIRABLE: Teaching methods need to be diverse to suit different learning styles

Figure 6 Views on e-learning

4.2.4 Mentoring, buddying and coaching

Participants talked about their experiences, noting that very often mentoring or buddying had taken place in their career development but that the process had occurred naturally. In these circumstances it was often difficult to distinguish one from the other. They also noted that job shadowing was a related process (Figure 7). If the process became more formal, there should be protected time for the work involved on both sides, and there should be clear expectations, ground rules for respective responsibilities, together with an

exit strategy, as some relationships may not work out as expected, through no fault of those involved.

Mentoring, buddying and coaching should help foster professional values, but there was a perceived danger that bad habits might be passed on. Perhaps a rigorous approach to evidence-based practice among library staff would alleviate that problem. Participants agreed that buddying is a more informal process, one that could be managed locally, but mentoring might be more formal. To work successfully, mentors should be trained. Coaching was viewed as more informal, and particularly useful for helping to widen the network of contacts, to provide support for the influencing and leadership skills, and for helping solo librarians. Someone working outside the library field could often provide insights and support that would be very valuable (Figure 8).

Job shadowing also related

Should have formal recognition, training

Sometimes difficult to distinguish

Mentoring Buddying, Coaching COMMON THEMES

Personal dynamics important

Need trust - and an exit strategy, ground rules

Often done 'unconsciously', invaluable aid to reflection, and there is an untapped resource BEWARE - learning bad habits a possibility

Finding protected time for the relationship important

Figure 7 Views on mentoring, buddying and coaching

BUDDYING is between equals, informal
USEFUL for peer evaluation, familiarisation of new staff
BEST if matching done informally, and locally

Mentoring, Buddying, Coaching CHARACTERISED BY...

MENTORING is more formal than buddying, different staff levels, often one-sided (but needn't be!)
USEFUL for advice, learning short-cuts, career development
BEST if mentors trained

Fostering values

COACHING informal, different levels, backgrounds involved
USEFUL for generating new ideas, widening network, influencing skills, helping solo librarians
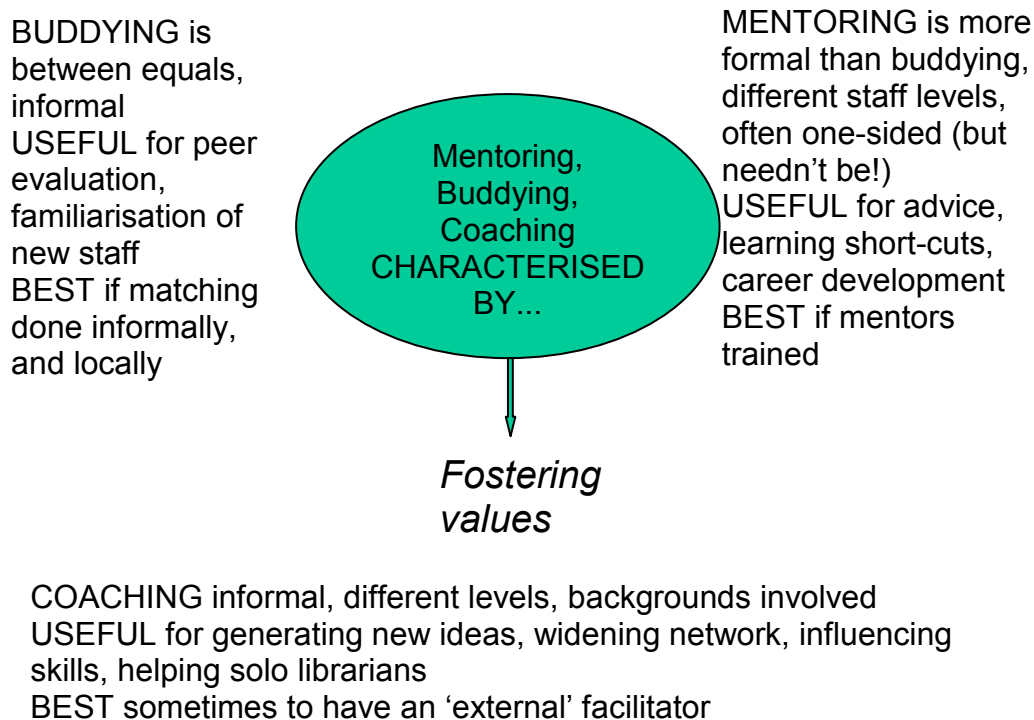BEST sometimes to have an 'external' facilitator

Figure 8 Requirements for mentoring, buddying and coaching

4.2.5 Career pathways

Participants agreed that the trends were towards more outreach, and more working outside the library building itself – as far as professional staff were concerned. Professionals might be expected to develop outreach, or clinical librarian, or research-based skills for research and clinical governance. Specialising in teaching and training was also possible, although all staff had responsibilities in supporting education and training. Other career routes were specialist information support for public health and health promotion, and these might be a type of knowledge management service. There was some debate about the definition of knowledge management and what this might involve. How much might be technical support for intranets? How much was actually involved in content management? How could library staff contribute to the development of knowledge management models?

The impact of Agenda of Change was considered to be unclear at present. The likely changes might be that library assistants would be taking on more responsibilities for running library services, if professionals were outside the library doing the outreach work. There would need encouragement to develop specialist roles, but at the same time, pathways to allow specialists to re-integrate back into managerial roles (Figure 9).

The main perceived problems of the new and more interesting posts being developed were the short-term contracts associated with them. Attracting experienced staff may be difficult, it becomes more difficult to get the trust established, and that in turn makes it problematic to demonstrate the worth of new posts.

On the other hand (Figure 10), librarians need to upgrade their skills, develop specialist skills for necessary knowledge management, support for research and clinical governance. If they don't – others will come in and fill the gaps.

MORE **outreach** (getting outside the library generally)
clinical librarian, multidisciplinary working, journal clubs
teaching specialists, training promotion
research-based skills and research/clinical governance
public health, health promotion
IT/Intranet/ Knowledge management (?)

Career pathways

AND THEN… Agenda for Change
Library assistants need to take on more
library-based responsibilities
Some staff may need to re-integrate back into
library managerial work
More sideways career moves?

PROBLEMS, QUESTIONS…
High status interesting jobs = short-term contracts?
Difficult to demonstrate worth of new jobs
Time to establish trust, and skills to be assertive

Figure 9 Views on future career pathways

SKILLS welcomed and required:
Teaching skills
Research skills
Strategic management skills
More information science
Intranet/KM management
Must not be afraid of statistics
quantitative data analysis necessary

Career routes

If librarians (pity about the name) don't upgrade their skills, someone else will fill the gaps for necessary knowledge management of the research base, and support for the research support tools.

Alignment with clinical governance - or similar - may help.
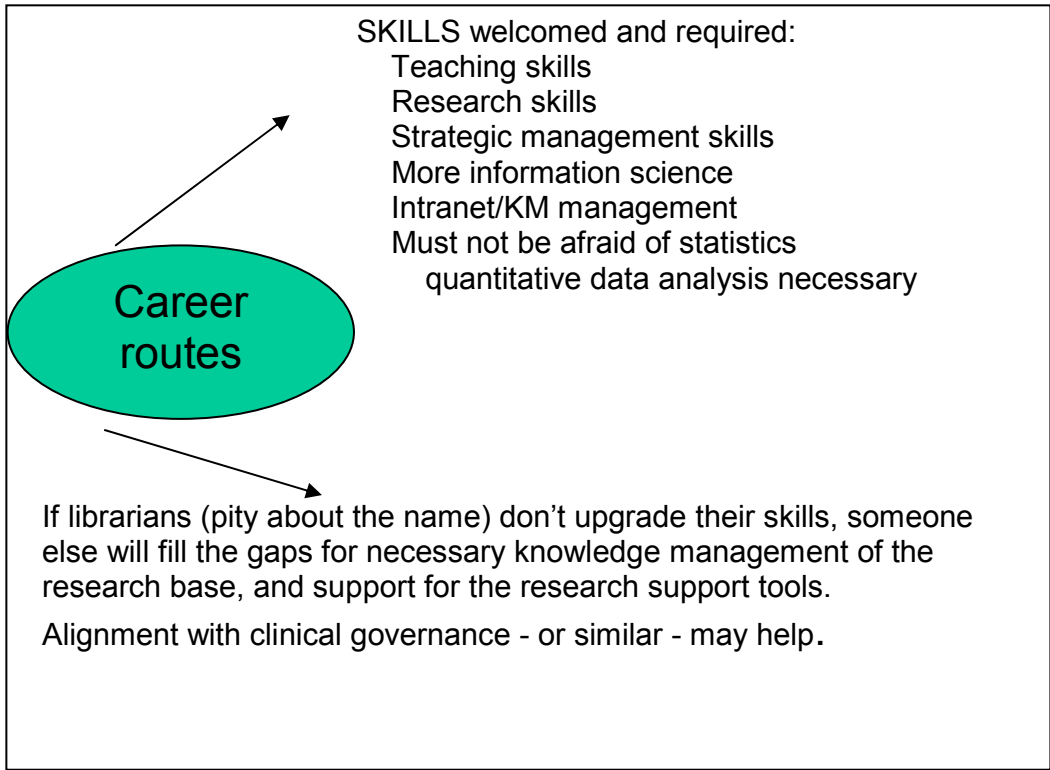
Figure 10 Requirements for new career routes

The main areas where specialist skills were required include the areas identified in the literature synthesis of the training needs analyses:

- teaching/training
- research skills (including quantitative data analysis)
- strategic management
- information science (information retrieval and database development)
- intranet and knowledge management

5 Conclusions

5.1 Lessons learned

5.1.1 Conducting training needs analyses

Training needs analyses have been conducted by a variety of ways, including questionnaires, focus groups, interviews, activity log analyses and analysis of advertised job specifications. Questionnaires generally need to be based around a competency framework or pre-set categories, and require subjective estimates of skills required or competency levels. Interviews can probe for examples of occasions when skills are used, or not used, and some of the barriers to career progression or enhancement. Focus groups can throw up a large variety of suggestions but may require considerable work after the session to collate the suggestions. Activity log analyses can be used to identify where skills are not being practised. Scenario planning has been used in the form of a SWOT analysis to identify the needs of future roles. The workshops used in the current project provided a way of encouraging staff to recognise how needs might be met.

One of the difficulties in synthesising the findings of previous studies was that a perceived skill requirement for 'enhanced literature searching skills' could mean anything from awareness of the features of a variety of databases to skills required to support systematic reviews.

> **Recommendations**
> **Future training needs analyses for healthcare library staff should use a mix of methods. Methods such as focus groups, scenario planning workshops encourage involvement and interest of the staff, but they need to be complemented by more objective methods such as questionnaires (with a recognised competency framework, preferably), activity log analyses, or analysis of job specifications.**

5.1.2 Competency frameworks

Many of the training needs analyses have tried to use a recognised competency framework but there has not been a suitable scheme, appropriate for healthcare library staff, which is specific to health sector needs, but also comprehensive enough to cover professional and paraprofessional skills. Some of the existing competency frameworks, and the studies did not differentiate levels of competency. Table 5 indicated some of the variations in categorising the types of skills required. (Section 2.4.1)

Considerable effort has gone into the health informatics occupational standards and the Knowledge and Skills Framework. Tables 6 and 7 indicated that it should be possible to map current and future roles for healthcare library staff using the KSF framework, but there is more work required, and a danger that future roles might be neglected in favour of sorting out current job profiles. (Section 2.4.2 – 2.4.4)

The North American work has produced an interesting vision of the personal competencies required of the health information professional, and is specific about the aptitudes required (Section 2.3.5).

> **Recommendations**
> **The KSF framework provides a good framework for mapping skill requirements, at various competency levels, and has the advantage of being recognised across the NHS.**
> **The Special Libraries Association (USA) list of personal characteristics of health librarians provides the 'vision statement'.**

5.1.3 Skills gaps

The same themes recur, although the situations in which those skills will be applied are changing.

From the synthesis of training needs analyses (Section 2.5) the main themes were:

- Technical (ICT skills) to support knowledge management initiatives, Intranet and content management skills, database design and management, and more advanced information retrieval skills.

- Teaching skills appropriate to the role, with awareness of e-learning and educational theory and practice

- Research and analytic skills, with an emphasis on the quantitative data analysis skills gaps

- Customer care, from identification of new client needs to telephone skills

- Leadership and strategic management, the 'influencing and persuading skills'.

The workshop participants agreed (Section 4.2.5) that future roles and their requirements were:

- Teaching skills (of various levels)

- Research skills (for critical appraisal, journal clubs, supporting clinical librarian activities, for librarians working in public health and health promotion)

- Strategic management skills

- ICT/information retrieval skills

- Intranet and knowledge management skills.

Workshop participants agreed that there would be more emphasis on outreach activities in the future – the librarian would be working outside the library. One consequence was that paraprofessionals would be taking on roles and tasks previously viewed as professional work.

The government policies for patient-centred care and the consequent emphasis on patient information and health information for the public has meant that the traditional health library services are not directly involved in many of the newer initiatives such as PALS services, NHS Direct. Politically, this might be detrimental to developing future career roles. In addition, health library staff are viewed as health informatics staff within the NHS. (Table 7). The various health information professional groups need to be aware of the contribution each other makes. (Section 2.5.7)

There are many different perspectives on knowledge management, and considerable debate over what it is, and what is required of library staff. (Section 2.6, Section 3.3.1). Perhaps the NLH should organise some training and awareness initiative to help library

staff to realise how they might contribute to better knowledge management within the NHS. This might be wrapped up around the 'Map of Medicine' roll-out?

> **Recommendations**
> **Technical (ICT) skills, teaching skills, and research skills require underpinning skills and knowledge. Training programmes should offer more than a 'quick fix'.**
>
> **A 'training and awareness' initiative is required for many library staff to appreciate how they might best contribute to better knowledge management within the NHS.**

5.1.4 Training delivery options

One of the training needs studies indicated how it might be important to build confidence and competence through scaffolding, and building on existing skills (Section 2.7.2). More recent training needs analyses emphasise learning outcomes more than previous studies (Section 2.3.4). There are few evaluations of training to assist in deciding which format is most appropriate for particular groups of learner and topics (Section 2.8), but ongoing negotiation between provider and training recipients appears necessary. Formal training sessions should preferably be one day long, with separate themes (Section 3.3.3). A mix of national and local training provision seems desirable, appropriate to topic and learning style, but recognition of training (a 'points system', or accumulation of credits) is a good incentive (Section 4.2.2.) There should be a better business model (Section 2.5.8).

The workshop findings indicated a need for:

- Mix of training delivery options to suit different learning styles and preferences

- E-learning, but used appropriately for urgent updating required for many staff

- Mentoring and coaching to ensure skills acquired in training are put into practice (but mentors should be trained for the role)

- Cross-sectoral training useful for some skills needs, and multidisciplinary training sessions within the NHS provided greater visibility for the library staff

- Local training, with national norms – and recognition of training.

> **Recommendations**
> **Training delivery options should vary according to need, but more emphasis should be placed on scaffolding on existing skills and competence.**
>
> **Opportunities for cross-sectoral and multidisciplinary training should be explored.**
>
> **More emphasis should be placed on expected learning outcomes from training, and evaluation of training, to assist in cost-benefit analysis of training.**

5.1.5 Best practice

Some examples of best practice identified included the arrangements made with further education colleges to support NVQ training for library assistants. For professional staff the use of action learning sets seems to be effective in getting training incorporated into practice. (Section 2.3, Section 3.3.3)

> **Recommendations**

> **Action learning and coaching appear effective approaches to getting the best value from training.**
>
> **For paraprofessionals, working with further education colleges may be one way to ensure good quality training for library assistants.**

5.1.6 Accreditation

Awareness of either the CILIP qualifications framework or UKCHIP is limited, and few health librarians perceived many benefits of CILIP membership beyond the registration period. Some recognition of standards by other health professionals might help the image of librarians within the NHS. (Sections 2.9, 3.3.4, 4.2.1, 4.2.2).

Accreditation of training events or training courses is also desirable, but this requires some national standards.

> **Recommendations**
> **Working with the NHS standard of the KSF through UKCHIP seems the best way of ensuring recognition of health library staff within the NHS**
>
> **Individuals may wish to pursue the CILIP framework for their own career progression.**

5.2 Priorities

5.2.1 Entrepreneurial and leadership skills

There is an acknowledged gap in leadership skills among health library managers, and this skills gap is not new. The persuading and influencing skills are important for initiatives such as the incorporation of the 'Map of Medicine' into the NPfIT, the development of clinical governance and knowledge management support, and outreach work in the primary care and social care. (Section 2.3.4, 2.5.5, 3.3.1, 4.2.5)

5.2.2 Research skills

Research skills of many types need to be enhanced. Librarians need to be skilled in critical appraisal, they need to have confidence in doing research in their own discipline, and they need better quantitative and qualitative data analysis skills. (Section 4.2.5)

5.2.3 Development of paraprofessionals

There should be more emphasis on the spectrum of skill requirements for health information staff, recognising that some paraprofessionals may have specialist expertise in a few areas. (Sections 2.3.5, 2.5.6, 4.2.5)

> **Recommendations**
> **Paraprofessional and professional skills need to be viewed as a spectrum, not as a binary divide.**
>
> **The professional staff need support in developing leadership skills of the 'influencing and persuading' variety.**
>
> **Librarians need to be more numerate – in the health sector the lack of research and analytic skills is preventing them from playing a full role in clinical governance support, or in making bids to develop new services.**

5.3 Working and learning with others

5.3.1 Learning with other library staff

Workshops indicated some interest in cross sector working, for example HE-NHS, and NHS-public library, for training. (Section 3.3.3, 3.3.6)

Mentoring across the sector is one way of providing informal training support (Section 4.2.4). One way of helping those working in traditional health library settings to become more aware of developments in patient information provision (Section 2.5.7) would be to encourage mentoring relationships across NHS Direct and the health libraries.

Mentors should be trained, to avoid passing on bad habits, and to foster professional values among staff. (Section 4.2.4). There should be protected time for the mentor and the mentee to sustain the mentoring relationship.

Buddying is useful for informal support, but is difficult to enforce. Coaching is on a different level of support and could occur between health librarian and a librarian in another sector – or with another health professional.

Clear ground rules for sustaining and completing informal support relationships are required. (Section 4.2.4)

Recommendation
Opportunities for cross sector mentoring and informal support should be exploited where appropriate.

More importantly, mentoring relationships across health information professional groups might foster awareness of other ways of working, particularly between NHS Direct and 'hospital libraries'. Staff working in traditional health library settings need to be more aware of developments in patient information provision.

More structure is required in the current provision for mentoring and coaching in particular – buddying will always be informal.

5.3.2 Learning with other health professionals

Arrangements for multidisciplinary working vary locally and it seems sensible to build on existing arrangements. (Sections 3.3.5, 4.2.2)

One way of encouraging leaderships skills and fostering collaborative relationships would be to encourage health librarians to have 'coaches' who are health professionals rather than library professionals. (Section 4.2.4)

Recommendation
Librarians should be coached in leadership skills by health professionals.

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Appendix 1 Workshop questions

(Accreditation)

1. How does the CILIP qualifications framework map to your needs – for professional qualification and for re-validation? What might the impact of UKCHIP be? What are the accreditation needs of different groups of library staff – managers, specialists, trainers, assistants…? What matters most to you locally?

(Training)

2. What should be delivered locally and how? What should be delivered nationally and how? Underpinning this is the problem all too familiar to those who provide database training – that you can provide the training but how is it linked to practice problems, and how do learners practise their skills and gain confidence? You get the training – but how does your practice improve afterwards?

   Recent evidence suggests that the current priorities include knowledge management and intranet management, content management of websites, strategic and financial management (particularly for outreach and cross departmental working), persuading and influencing, support for e-learning (and teaching).

(Training support)

3. What are the advantages and disadvantages of mentoring, buddying, coaching? What has your experience been? How would mentoring/buddying/coaching prepare you for future career roles? How does this work for people in solo librarian positions? Would you be prepared to be a mentor/buddy/coach? What would you gain from the process, if anything?

(Future roles)

4. Clinical librarians and outreach work has been viewed as an add-on to 'normal' library activity. Should we really be debating whether clinical librarian approaches and outreach are the norm? Librarians – almost as a side effect of their professional route – have been isolated within their organisations. What career routes can you see in other areas of health informatics that might offer career pathways out of the library – as well as into the library?

Appendix 2 Workshop responses

NLH CPD RESEARCH PROJECT

Notes on workshop, Manchester 29 November 04

Theme 1 Accreditation – who needs it?

How does the CILIP qualifications framework map to your needs?
Responses:
- Little awareness of the CILIP work – impression that CILIP accreditation useful initially useful but once established of little relevance and not considered essential by employers. Employers often more impressed by business management, for example.
- The revalidation – for Fellow – seemed quite time consuming and doing a teaching qualification, for example, might be more relevant to workplace needs. And the three year frequency? An updated cv and short report should suffice.
- Accreditation of prior experience useful, so possibly a need for those who wanted some recognition of their accumulated experience. Similarly revalidation good in theory, but lots of reservations about the paperwork.
- Other library assistants have a degree already so a Masters would seem the most relevant route to them.
- More online courses might solve some of the distance problems in gaining additional qualifications.
- Librarians need to be pro-active but difficult when the operational chores need to be done.
- Incentive to accredit – would this be reflected in the pay awarded? Cost/benefits?
- CILIP could do more e.g. job profiles for the Agenda for Change.
- Chartership needs to be flexible to reflect the various professional groups.
- Should chartership be mandatory?
- Could CILIP do more about the image problem?
- Is CILIP offering official recognition to library assistants? (It should do more)
- (notable that a minority of the workshop participants were in fact paid up members of CILIP)

What might the impact of UKCHIP be?
Responses:
- Are we clear on what constitutes 'information professionals'?
- Could dilute the effect of CILIP within the NHS. How would this fit for HE and public library supported library staff serving NHS?
- But UKCHIP could become more recognised than CILIP in the NHS.
- Conversely – how transferable would UKCHIP accreditation be outside the NHS?
- Too many bodies? Some in HE would go for HEA (previously ILT membership).
- In HE – converged services, so the impact of CILIP has diminished anyway.
- (notable that awareness of UKCHIP very low among workshop participants)

What are the accreditation needs of different groups of library staff? What matters most to you locally?

- o More training opportunities for library assistants (although health libraries, as they are small, offer a wealth of experience in different aspects of the work)

- o More training outside London (Birmingham is not the North!)

- o Time for training difficult

Theme 2 Linkage between local and national training provision for health library staff

What should be delivered locally and how?
Responses

- o General skills training would be best delivered locally

- o Training best delivered away from the workplace – too many distractions

- o CPD points scheme would be useful for demonstration of completion of some courses – and showing follow-up into practice would be valuable.

- o Any follow-up and demonstration of practice has to be sanctioned by the manager (example given of ECDL – skills learnt for the ECDL but not practised or consolidated since)

- o Examples – maybe web site management and design (basics of Dreamweaver could be delivered locally).

- o Example – the 'persuading and influencing' may need local coaching.

- o Disadvantages of some local delivery – meet the same people, unless courses are cross-sectoral, multidisciplinary (latter within NHS would help to raise the library profile?)

- o Shared training beneficial to all the (local) organisations concerned

- o For the supplier training – the telephone conference approach – this is fine (in limited quantities, for something specific and of short duration)

What's best delivered nationally and how?
Responses

- o More specialised training could be delivered nationally

- o For example, KM – what is it? Need to develop and share experience through case studies, with more local development and support possibly

- o Attending national events expensive – so some support welcome – a national budget? Or specific Trust budget that could be called on? Costs often come out of the library budget – not easy to support several staff attending events.

- o Specialist training – the informationist – how relevant is science knowledge for this?

E-learning – views
Responses

- o Possible solution to some difficulties, but certainly doesn't suit all

- o Comments on the relentless pace of FOLIO

- o Could be useful when updating is required on copyright, FOI – of interest and relevance to all

- o Need wide range of teaching methods to suit all learning styles, and types of background

Theme 3 Mentoring, buddying and coaching
Responses

- o Some uncertainty about the differences between these

- o General consensus that mentoring is more formal than buddying, often a one-sided relationship, although mentor and mentee could learn from the relationship (but do they?)

- o Mentoring can be informal, local networks of health librarians can be used for advice (and then the discussion list)

- o Concern that mentors can pass on bad habits and bad advice

- o Mentors may need training themselves

- o Personalities do matter in these relationships – there needs to be something that clicks between those involved

- o Finding 'protected' time for that process, particularly when more formal – whether mentoring/coaching is essential. Shouldn't be seen as an extra burden. Managers need to be proactive in the process. Need ground rules for 'access' to mentor

- o Buddying – difficult to match formally, if forced there can be lack of enthusiasm from the partners, and (e.g. FOLIO) can seem artificial if forced. Could provide mutual support – same status, uninhibited relationship

- o Coaching is viewed as a more challenging process – asking you the questions, generating ideas, and not being the instant solution to a problem. Often an external facilitator would be required.

- o When done effectively – helps to build confidence, acquire short-cuts to make more effective use of time, avoid pitfalls, manage staff, helps in future career. Should widen the network, particularly for the solo workers

- o Supporting graduate trainees doing part-time Masters courses seen as useful – for both mentor and trainee

Theme 4 Career pathways, career development
Responses

- o Likely developments – career pathways will be more outside the library, more outreach, more multidisciplinary working, more clinical librarians, specialisation into teaching /or supporting EBM

- o Possible that many librarians (e.g. in PCTs) are already clinical librarians – there is a funding problem if there are to be more clinical librarians

- o The important point will be the development of trust between health professionals and librarians in 'extended' roles

- o In HE as well, librarians are 'out and about' more

- o Result – the library assistants taking on additional responsibilities in running the library and answering queries

- o Career advancement – in HE, for example, there are more opportunities for moving sideways than upwards. May need to think about career enhancement as well as career advancement

- o For management – may need more MBA courses – general and advanced skills

- o Are librarians way behind information analysts and IT managers in perceptions of image and relevance in the NHS?

- o Need to obtain recognition of present role

- o Necessary to retain/update core/transferable skills whilst gaining specialist skills to enable change of career direction

- o Profession could be undermined if there is the creation of a two tier system with some roles perceived as more prestigious?

- o And – is the danger that the prestigious roles are attractive because of perceived status – rather than making a difference to patient care?

- o Demonstrating the worth of new roles (e.g. clinical librarians) takes time, and contracts often do not allow this.

NLH CPD RESEARCH PROJECT

Notes on workshop, London 13 December 04

Theme 1 Accreditation – who needs it?

How does the CILIP qualifications framework map to your needs?
Responses:
- Value of chartership – limited, and not recognised as much in some sectors, most useful for newly qualified staff working in larger organisations

- How does the framework address the needs of specialists, who may be developing roles in primary care, clinical librarianship, health promotion, patient information – such roles may not be full time, but is it possible to specialise and deal with broader skills?

- For para-professionals the framework is beneficial – they are 'kept in the loop', it does give an alternative route to a professional qualification

- Revalidation – criteria not very specific (cf UKCHIP)– problem of a balance between generic and sector specific skills.

- Revalidation could support requests for training

- Query over how many times revalidation would be sought?

- Accreditation and framework valuable for all staff – notion of credibility important

- Could CPD be more formalised, with points systems for high quality CPD events?

- Agenda for Change likely to be the main driver, if 'chartered member' a requisite of being within certain pay bands

- CILIP framework – is it worth the effort? Potential problem for some employees who have family and other commitments who can do the job but cannot spare the time for the portfolio building etc – could they be viewed (wrongly) as less committed?

- What is the value (monetary) of pursuing and maintaining chartership?

What might the impact of UKCHIP be?
Responses:
- Not well established, unsure about impact

- Too specialised, too macho IT? On the other hand continuing need to upgrade IT skills among librarians

- More clarity required re relationship between CILIP and UKCHIP – and Knowledge and Skills Framework (NHS) – maybe not competing but could be some confusion

- Online form a useful approach

- UKCHIP – the NHS recognition for information staff would be useful, professional recognition useful and valuable

- More 'quantifiable' than CIILIP

What are the accreditation needs of different groups of library staff? What matters most to you locally?

Responses

- Need for flexibility in approaches to chartership and revalidation

- Some groups may not need accreditation

- Implication that at present need to change jobs to progress

- Pressure on the individual – what is the benefit to the employer?

Theme 2 Linkage between local and national training provision for health library staff

What should be delivered locally and how?

Responses

- Advantages of local training – networking, one to one support and idea sharing, so

    training topics should take this into consideration

- CHILL approach – loosely arranged, informal, organise guest speakers,

- Problems in deciding whether a full day course is worth the cost (money and time) – alternatives include taster or refresher courses – shorter

- Is it possible to cascade, for example, national training received by one individual to others in the locality?

- Alternatively – could the NLH train the trainer for cascade training within the locality/region – but costing model and CPD points need to be sorted out!

- Paraprofessionals – often only received local inhouse Trust training which may or may not serve their needs. Generally underserved. Other problems include the number of part-time staff – and finding good training times to meet their needs. Sometimes this might be achieved through joint training with other sectors.

- Higher profile – and protected time required for CPD, also necessary IT support.

- Important to take advantage of opportunities available to other professionals in the area – mainstreaming and joining in with other professional groups might help to raise the profile of the library

What's best delivered nationally and how?

Responses

- Could deliver a national programme within local regions – common needs are NLH content, promotion and marketing, business planning and influencing, e-learning

- Other ideas for core modules include databases, literature searching, customer service skills, knowledge about the NHS, copyright

- Problem of cost and lack of specified training within the budget for some librarians

- Would be useful to have a central web page detailing the various 'national' courses available and if possible some feedback from those who have attended

- Main problem is still getting the training into practice – and this requires local support, appraisal after the training event

- 'Standards' of training – maybe national training could be cascaded locally

E-learning – views

Responses

- Advantages of time shifting – should be able to do this when convenient, self-pacing allows time to focus on the individual learning needs

- Better if web-based and not email

- Requires support from course tutor

- Enforced ECDL, i.e. compulsory online training unlikely to be popular or effective

- Important to match content to delivery method, and to be aware of the range of learning styles, level of understanding, ability/willingness to request feedback

Theme 3 Mentoring, buddying and coaching

Responses

- Some muddying of the distinctions between? Often done without realising that it is happening – there is an untapped resource, and "sounding boards" are very important. Done well, in a safe environment should offer opportunities for reflection, help and advice, reaffirmation of knowledge gained, give a different perspective, airing grievances constructively.

- Buddying seen more as between equals, mentoring slightly different levels, as should be coaching – where often skills transfer important, specific and directed focus

- Buddying useful for familiarisation of new staff, linking up with peers when lone working, and some 'peer evaluation'. Risks of transfer of the wrong information, may be inappropriate for some problems, and depends on the participants. Difficult to enforce artificially.

- Should have formal recognition, important for the mentor and mentee, ditto coach and trainee, developmental for both sides, after all. Protected, quality time important.

- Personal dynamics important to make the relationship work – are people wary of offering? The element of trust is very important. Also need an exit strategy to bring relationship to an end when necessary.

- How to organise? Can organise mentoring at a distance, but should buddying and coaching be seen more as 'local' activities?

- Coaching – could be one:one or possibly in small groups.

- Risks of mentoring – time pressures on both sides, can be line manager but risks involved in that – conflict over decision making, can teach bad habits, and mentors may need support/training themselves

- Advantages – satisfying, can build relationships outside the library if non-library mentor involved, good way of inculcating values – same goes for coaching

- Need 'dating agency' (CILIP, HLG?)

- Importance of networking should not be underestimated – and librarians need to be skilled in the skills related to coaching/mentoring at higher level - influencing takes time and effort.

- For career development and succession planning – helps to give ideas on potential opportunities. Solo librarian may be disadvantaged – need to cater for their needs.

- For each role, different skills are required – need ground rules, and training for the coach, mentor, buddy to make the best use of CPD opportunities.

Theme 4 Career pathways, career development

Responses

- Essentially an individual responsibility – but assistance and advice useful

- Need to think of career enhancement – sideways moves as well as up

- Pace of change means that staying in one place no longer means status quo rules

- Effect of Agenda for Change?

- Routes – specialisation possible (but are there problems in increasing specialisation?)

- Lack of practice may also mean loss of (core) skills?

- Infiltration – or just scatter?

- KM – what is this all about?

- Lack of awareness of existing skills capacity among library staff?

- Routes – research based skills, outreach training, manager/strategic development, public health and health promotion, IT/Web site development

- Those coming in – might look for those with skills in personnel, customer services, IT background, medical support

- Need to be aware of the need for some to reintegrate back into library work, need for IT training, or management skills. Can't be 'Elastigirl' indefinitely

- Problems in 'new' roles the length of contract – uncertainty – and the pace of change nationally may be held up by local barriers – lack of staff, lack of training, lack of money, and change management cultural issues

- Networking has helped to reduce the isolation – e.g. clinical librarian conferences, NeLH primary care event

- Require skills to influence outside the library domain

- Better if more mainstreaming possible so that health professionals more aware of potential contribution

Appendix 3 Interview schedule

Questions concerned:

1. Views on current training provision for professional and non-professional staff

2. Preferred formats for training

3. Priorities, gaps – interviewees' perceptions

4. Multidisciplinary training (training with other health professionals, informatics staff)

5. Accreditation options

6. Cross-sector training

7. Visions of the future