

## **Going virtual: is it a reality? Experiences and ways forward in providing library services to support the health services management function in the UK.**

### **Background**

The Health Services Management Centre (HSMC) at the University of Birmingham is one of the leading centres for management education and research in the UK. HSMC's purpose is to strengthen the management of health services and to promote better health. This purpose is pursued through research and development, postgraduate teaching, seminars and conferences, and management development activities.

HSMC is unique at the University of Birmingham in that it is the only Department to have a dedicated, independently financed library and information service, separate to the service provided by the main University (Information Services). HSMC's library service is in part funded internally by HSMC itself and in part by external contracts with local NHS providers. The core user groups are HSMC academic staff, HSMC postgraduate students, students on the national NHS Management Training Scheme (MTS), public health specialist registrars in the West Midlands and local NHS managers.

Although a traditional library with core collections of books and journals remains and is under continued development, library and information services have been developed to reflect the business nature of HSMC, and much of this business takes place away from the Centre. For example many academic staff are engaged in consultancy work nationally and internationally, there is a prevailing "working from home" culture, most of the postgraduate students are part-time and in employment, and the NHS MTS students are scattered in NHS organisations throughout the UK; they only come to Birmingham for teaching weeks about two or three times a year.

Therefore, it has been necessary to think beyond the confines of a traditional library service which supports users on site. With this in mind, hybrid library services have been developed which combine access to traditional collections and related services, with an approach that pushes information out to users in their external environments, using web-based technologies.

### **Web-based developments**

HSMC's library web pages can be accessed at: <http://www.bham.ac.uk/hsmc/library>. Access to a range of resources and information about services can be found from this home page – for example

- Electronic journals
- Details of journals holdings
- Library catalogue
- Links to full text health policy documents
- Separate listings of latest additions to stock
- Databases

- Links to education and training support
- “hot topics” which bring together links to resources on salient issues in the NHS
- Current awareness services

### **Are we getting it right?**

Because of the dispersed nature of many of our users, noted above, it was deemed necessary to take this approach and “push out” as much information as possible to the users within their environments. However, this was done without any formal consultation as to the content users want on the web site, which elements they are likely to find most useful, or without collecting any information as to their skills in interrogating and utilising information in this format. In addition, an approach which focuses on delivering information digitally could raise questions as to the viability of the retention of traditional services and on the skills required by library staff – culminating in the question – Going virtual: is it a reality?

### **NHS MTS students – a questionnaire survey**

As noted above, students on the national NHS Management Training Scheme are one of our key user groups. With an in-take of approximately 70 students per year, HSMC has the contract, jointly with De Montfort University in Leicester, to deliver the educational components of the training scheme. This is a two year programme. All MTS students are eligible to register for HSMC library services. They are given an initial induction as to what we provide (which includes demonstrations of, and handouts about, our web-based resources). This is followed up, later during the first year, by an additional training session whereby MTS students can present themselves, either in large groups or individually, to ask questions related to the provision of library and information services and to indicate any problems they might be facing in using resources virtually. In addition, MTS students have the email addresses of all library staff and are encouraged to seek support, at the point of need, during the two years they are registered with us.

In order to evaluate the appropriateness of our web-based resources and to consider the future direction of our services in relation to developments in the virtual environment, a questionnaire was designed and targeted specifically at NHS MTS students. This user group was chosen because:

- They are the one user group most spread geographically across the UK
- They are rarely at HSMC
- They are mostly very young (the majority are recent graduates) and so are likely to have some degree of computer literacy
- They are the senior NHS Managers of the future and an early indication of their library and information needs and information seeking behaviour would be useful in planning such services to support NHS Managers
- Competition to attain a place on the NHS MTS scheme is very fierce – therefore they are regarded as very bright.

The questionnaire was emailed to all those NHS MTS students in year two during the academic year 2001 – 2002 (About 62).

The questionnaire was designed to find out whether the respondents used the HSMC web site to obtain information, and if so, how often. It also sought to determine what were the main reasons for using the web site, asking respondents to grade 1 – 5 from least to most important against a number of possible reasons as follows:

- To search the HSMC Library catalogue
- To look for electronic journals
- To conduct a literature search using available databases
- To access full text policy documents
- To search for organisations to which we have created links
- To access links to education and training sites providing help and advice
- To browse generally

In addition, respondents were asked to rank their perceived levels of success in finding the information they were looking for from the HSMC web site, identify any specific barriers they come across and make suggestions as to ways in which the web site could be improved.

As it was intended to also consider the roles of the library team and to determine how far going virtual is a reality in the context of the web developments underway, respondents were also asked whether they make contact with members of the library team and for what reasons. They were also invited to make comments as to how far we should be moving to providing information totally virtually, without access to physical resources, and if this was to be the way forward, what did they perceive to be the role of the library team.

## Survey findings

36 questionnaires were returned by email (representing a 58% response rate) and of these, 33 had at some point used the web site to obtain information. On average, respondents reported that they used the web site once or twice a week to search for information.

On analysing the reasons why they consulted the web site, against the options given, and against a likert scale of 1 – 5 (one being the least important), the following could be noted.

**Aggregated totals: potential maximum: 165 (33 (number of web users returning questionnaire) x 5 ( the highest ranking to any one activity))**

Accessing electronic journals	136
Databases	135

Searching HSMC Catalogue	126
Full Text policy Docs	103
Browse generally	92
Link to other organisations/web sites	83
Training/ advice links	79

Accessing electronic journals came out with the highest aggregate score, although only one point ahead of using the web to search databases for references to support assignment work. It is perhaps not surprising that the need for full text electronic journal articles should score highly amongst postgraduate students studying from a distance. This may have important implications for future direction around journal purchasing policies. Currently, the focus of HSMC's policy is to purchase hard copy journals primarily, and to make available electronically only those titles which come freely per se, those free with the hard copy subscription or at a drastically reduced rate with the same.

It is noted that database searching ranked almost as important as accessing electronic journals. This tends to suggest a tendency for self sufficiency in identifying materials over and beyond those supplied on reading lists, and, potentially, a reduced role for library professionals in conducting mediated searches (although to be fair, resource constraints mean that self sufficiency is advocated to NHS MTS students as the preferred option to the "spoon feeding" alternative). However, a high ranking in using the web for this purpose does not necessarily indicate a competence in searching skills. (See self-reported perceived barriers to using the web successfully, reported below).

Access to the HSMC catalogue also scored highly. As this only provides bibliographic details of books / reports and grey literature held in-house, with no full text information, then this indicates that the perceived value of this source of information is still high. This in turn suggests a need to retain traditional services – an up to date in-house library of subject relevant books and reports, backed up by a postal loan service for those who are rarely based at HSMC. This also emphasises the importance of retaining members of the library team with traditional skills – the ability to catalogue and index bibliographical material to aid easy and meaningful retrieval for the "virtual" searcher.

HSMC library web developers have invested a lot of work in developing pages which provide access links to lots of self-help material ; for example, web sites which offer advice on how to search the internet effectively, making the most of medline / other databases and in developing critical appraisal skills for evaluating database search returns and the content of web sites. However, this scored the lowest as a reason for using the HSMC web site, with an aggregate score of only 79 out of a possible 165.

However, in tandem 31 out of 36 survey respondents indicated that they contact the library staff, rather than rely on the web alone for information. Regarding the reasons why they contact the library staff, 5 respondents said it was for advice on literature searches, 6 for advice on where to locate materials, and 2 were unspecific, but indicated general reference-type enquiries. This suggests that even at a distance, great weight is given to the importance of the human interface (either by telephone or email) for troubleshooting advice. This is perhaps perceived as a quicker

way of finding answers rather than looking for a web site and that computer technology can act as a supplement to, but not as a substitute for, the information professional.

More detail on why NHS MTS students contact library staff is given below.

Borrow/reserve/renew books	18
Request photocopies of jnl articles	11
Advice in locating materials	6
Advice on literature searches	5
Advice on access to other libraries	2
General Reference enquiries	2
<b>Total:</b>	<b>41</b>

(note some of the 31 respondents cited more than one reason)

As well as seeking some form of advice (discussed above), by far the most frequent reason for contacting staff related to document delivery requests. Eighteen respondents contact library staff to borrow, reserve or renew books, eleven noted it was to request journal articles that they are unable to get either electronically or through other sources locally. Again, this emphasises a crucial traditional function fulfilled by the library service. Although increased access to full text electronic resources would be useful, not only because it was the prime reason for accessing the HSMC web site, but also to reduce the number of document delivery related requests to staff, there is no guarantee that a dramatic rise in full text access will be forthcoming in the short term. This is due to a range of reasons – costs, licensing agreements, archiving, up to dateness of electronically-available journal articles and the need to link to locally and / or nationally agreed procurement arrangements for purchasing electronic materials. Therefore, it can perhaps be anticipated that document supply services from a central point will continue to be a key service at least in the short term.

Another element of the survey was to try and determine how successful NHS MTS students felt they were in finding what they wanted from conducting searches of the HSMC web site. Again they were asked to rank their perceived success on a scale of 1 – 5 (1 being the least successful).

#### **Self-reported analysis of success in searching the HSMC Web site.**

Ranking	Number of respondents
1	0
2	2
3	13

4	16
5	2

Most feel they are fairly successful in getting what they want ( ranking 3 or 4). Although only 2 consider they are always successful. However, this does not factor in any form of measurement of preconceived expectations, nor does it take into account respondents' knowledge of what is potentially available. In addition, many respondents identified specific barriers that mean they are not always successful. The following barriers predominated.

- Not enough access to full text articles from the electronic journals web pages.
- Not sure which are the best sources to tap into.
- Lack of ability in defining search terms / developing search strategies.
- Confusion over passwords.

Although there is clearly some way we could move towards going virtual and improving web-based resources eg. exploring the possibility of increasing the amount of full text journals, many of the barriers suggest a continued need for librarian/user interface. Barriers which indicate the need for ongoing troubleshooting, training and user education predominated.

#### **How could the web site be improved? – User views**

Twenty three of the thirty three respondents tackled this question. Out of these, ten reported that more full text information would be the one improvement they would like to see. Most of these cited journal articles although two mentioned HSMC reports and other grey literature. Three considered that the content and lay out was user friendly and so had no suggestions as to how the site could be improved. The other ten responses covered access to reading lists, access to other libraries' catalogues, the ability to reserve or recall books on the web-enabled HSMC catalogue, more filtered information related to the topics chosen for assignments and a more sophisticated internal search engine.

Although the findings focused on the desire for more full text information, the results showed the importance of library and information professionals working in partnership with end users when developing web sites, so that the needs of end users may be met. This is a view which has been picked up in the professional literature. Noble (1998) refers to a report by the United States' Special Libraries Association (SLA) "Competencies for Special Librarians in the 21<sup>st</sup> Century" which focuses on the librarian as a proactive provider serving the needs of customers, rather than focusing on library buildings or collections. Stallings (2002) when discussing the move towards the virtual university notes that although technology everywhere will continue to improve, the human presence will provide the primary standard for value in our globalized, service-intensive economy. On a similar note, Mort (2000) sees the information professional as moving away from a gatekeeper who merely organises and distributes resources to one of a partner, collaborating with end users to meet needs.

Finally, respondents were invited to comment on whether they believed going totally virtual was a reality and what did they perceive to be the role of library staff within this context. Thirty respondents provided answers to these questions. Only five believed that going totally virtual was a reality and was their preferred option, although many others saw that we could move

further down the virtual route by increasing the range of full text documents available. There were many reasons cited by the majority of respondents who believed this was not the preferred route. Some were pragmatic – it may be good in theory, but they identified too many practical issues thwarting the drive to make more material available electronically. However for many, it would be the case of lamenting the loss of a physical resource. It was clear that many NHS MTS students like to browse collections and some expressed a dislike at reading information off screen.

Many linked the idea of going totally virtual with the possibility that access to individuals might also be reduced and the good news for library and information professionals is that this would be seen as abhorrent! Indeed, 100% of respondents (even those who advocated the notion of going virtual to support distance learning needs) felt that the information professional would continue to have a vital role to play. A number of roles were identified.

- Keeping web sites up to date
- Designing a user friendly web site
- Offering help and advice on search strategies
- Offering technical support
- Signposting to the best resources
- Marketing new resources / web updates
- Ongoing liaison role with users

These key roles were backed up by quotes such as :

“You cannot replace the human help that we all need”

“The library team would still have a valuable role as experts”,

“It is nice to know you can discuss searches with someone as they can tell you what you are doing wrong” and,

“Conversations with librarians helps to ensure clarity of thinking and spark off ideas”.

## **Conclusions.**

Clearly, the provision of web-based resources will play a crucial future role in the provision of library and information services to support the needs of NHS Management Trainees working predominantly away from HSMC. Many trainees supported the move towards providing more full text information in electronic format. This should have implications for decisions about purchasing journals and it would be prudent to work with local and national initiatives to enhance the potential of purchasing electronic resources. However, evidence from the survey demonstrated that going totally virtual is not a reality. Notwithstanding that there will be a number of issues related to the procurement of electronic materials, there was also evidence to suggest that users also wish to retain physical resources and definitely require access to library staff because of the variety of skills the latter bring to bear. It seems that the way forward is to continue to develop hybrid library services which combine traditional services with high tech web developments. Library staff will need to be flexible in delivering hybrid services and in responding to the evolving demands of users. Ways forward in offering flexible hybrid services have put forward in the HyLiFe (Hybrid Library of the future ) project in the UK (Walton et al , 2001). Others have written about the vital role that librarians play in developing the virtual library which mirror some of the findings to come out of the NHS MTS survey . For example Burke (2001) identifies the following roles; to provide intellectual access to information in any format; to evaluate available sources of information, to organise and structure information, to ensure the preservation of information, and to offer specialist staff to offer instruction and assistance. Rather than reducing the role of the librarian Hawkins (1998) warns that a prudent library planner should expect increases rather than decreases in the human capital needed to

assist users, whilst echoing some of the findings of the survey ,related to personal preferences, Young (1998) observed that the computer will not replace the book any more than the book has replaced speech.

Going Virtual: Is it a reality? The evidence suggests not. To obtain an affirmative answer the question should perhaps be rephrased to Going hybrid: developing flexible services to meet the needs of distance learners?

Steve Rose

Manager, Health Care Libraries, Oxford University, UK

(formally, Library & Information Services Manager, HSMC, University of Birmingham, UK)

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