North Western Deanery

‘Exploiting the Knowledge Base in the Primary and Community Care Sectors’

Project Final Report

Blending Service with Training
The Department of Postgraduate Medicine and Dentistry, The University of Manchester.

November 2000 - November 2001
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Executive Summary

Introduction

The *Blending Service with Training* project developed from 4 separate areas that all raised the same concerns. These concerns centred on the need for better access to clinical information for health care professionals in the primary and community care sectors of Blackpool, Wyre and Fylde NHS Trust. The project was created to assess the current state of access to information resources and the current awareness and confidence of staff in accessing these resources, providing staff with training in this area and to assess the impact this training has had on patient care, clinical practice and continuing professional development.

Method

There were four main stages in the methodology of this project. 27 Blackpool practices were visited in order to carry out an information audit of the information resources available and to interview the practice managers' about information resources, staff training and the project. This was followed up with 350 baseline questionnaires being sent to all staff in Blackpool primary and community care. This was sent to discover information resources usage, information resource availability, and information needs amongst health care professionals. The audit and questionnaire provided valuable insight into the information skills and needs of staff that enabled the project to create training workshops to educate health care professionals in these areas.

Four workshops were created:

- **Workshop 1:** Introduction to the Internet for Health Care Professionals
- **Workshop 2:** Searching the Web for Clinical Information
- **Workshop 3:** Searching the Health Databases available through Aditus and OVID.
- **Workshop 4:** Focusing the Question and Finding the Answer

Two methods were then used to evaluate the workshops, participant evaluation forms and an evaluative questionnaire. Participant evaluation forms were indicators of the quality of the workshops and how they were received by attendees' and the evaluative questionnaire looked to demonstrate the impact the workshops had on the confidence and abilities of health care professionals' in using electronic information resources.

Results

The project has shown:

- **The importance placed on access to information resources by primary and community care staff.**
  This was demonstrated in the 70% response rate to the baseline questionnaire and the demand for the training workshops from health care professionals.

- **Poor Internet awareness and usage amongst staff in primary and community care.**
  The baseline questionnaire revealed that only 1/5 of respondents used the Internet. The awareness of respected clinical Web sites was also very low. (3%-9%)
Lack of awareness of the issue of information quality and reliability.
The baseline questionnaire showed the high usage of non-validated resources for information, such as promotional/product literature and commercial search engines and demonstrated the low usage of quality clinical Web sites and Evidence Based Practice printed journals.

Low confidence in using Web-based technology.
Only 22% of respondents felt 'quite to very confident' using the Internet and only 12% had the same level of confidence accessing clinical databases.

Poor knowledge of concept and process of evidence based practice (EBP).
Despite the term EBP appearing in many documents and being a key part of modern patient care, the lack of knowledge displayed about this concept was worrying.

Importance of training and continued professional development.
The demand and feedback in the training workshops have shown the importance placed by health care professionals on having the opportunity to attend training that is relevant and beneficial to their role.

Future Developments
The project made several recommendations based on its findings:

- Improve the awareness of electronic sources of quality clinical information
- Better access to quality electronic clinical information
- Provide training for information retrieval

The project and the Blackpool, Fylde and Wyre Health Library have addressed these recommendations and are developing quality information services to support and enable the use of quality information resources by health care professionals. These take the form of:

Access to quality clinical databases.
The library is providing free access to 9 clinical databases and online full-text access via the NHSnet or the Internet.

Library Intranet/Internet site.
This site will provide direct access to the library catalogue, a library links page to quality clinical resources, a comprehensive list of available electronic journals, and downloadable training workshop workbooks. These will be available at work or from home.

Continuation of the training workshops.
The popular training workshops will continue to train health care professionals in the Blackpool area. Another 6 workshops have been formalised to build on the skills and knowledge acquired in workshop 1-4.

Training Workshop Roadshows and drop-in sessions
This service will enable the training to be carried out at interested practices in the area. Several community information resource rooms will also become drop-in centres where staff can receive advice and expertise in accessing information.
1. Aims and Objectives

1.1 Background

Four key developments necessitated the need for a project like this to be initiated:

1. In the Blackpool, Fylde and Wyre area the Blackpool Health Professionals’ Library at Victoria Hospital provides a range of library and information services, and acts as a central hub for accessing the knowledge base. Work on the Hospital's Intranet is progressing and a 24-hour virtual library should be in operation by the end of this year. This will provide access to much of the knowledge base from any part of the hospital. However, there is still scant access to high quality digital information from the primary and community sectors’ sites, which are distributed throughout the area. Penetration and use of Internet technologies is currently patchy and uneven. The Information Technology aspect of this is beginning to be addressed, but, for this to have an optimal impact on learning and practice, there appears to be a need for greater co-ordination and strategic planning of resourcing, funding and training.

2. The development of existing BWF Community Trust Information Resource Rooms, and linking of these to the NHSnet will support staff within reach of the units at Fleetwood, Lytham and Parkwood. PCs are in place and connected to the Internet. Further penetration of the NHSnet throughout BWF Community Trust is also projected.

3. The North West Lancashire Local Health Community Implementation Strategy plans to 'link all computerised practices to the GP Net [the NHSnet] by no later than March 2001’ (NWLLHC, 1999)

4. The Morecambe Bay Local Medical Evidence Centre (LMEC) project was designed to enable and enhance access to biomedical databases throughout the Primary Care Groups of North West Lancashire and South Cumbria and to provide training in the use of these resources. So far Blackpool Primary Care Group (BPCG) has not benefited from this nor have any passwords been supplied to any GP practices. Although highly competent IT professionals have been employed on the Morecambe Bay project their experience, skills and knowledge of how to exploit biomedical databases and electronic library resources are limited. If funding is made available for the LMEC to continue, its activities would be complementary to this project. Practice IT training would continue to be carried out by Mrs. Katherine Thompson, the NW Health Authority's GP IT trainer, while biomedical database and electronic library training would be carried out by the Distributed Services Development Librarian provided by this project.

1.2 Project Aims

The project aimed to:

- Assess current access to information resources, both paper and electronic in the Primary Care and associated Community Care sectors of the Blackpool, Wyre and Fylde Community Healthcare Trust
- Provide all staff with the appropriate training for exploiting effectively the knowledge base of digital healthcare information
- Generate a demonstrable impact on patient care, clinical practice and continuing professional development and learning of all staff

1.3 Project Objectives

The success of this project depended on the completion of a number of key deliverables:

<table>
<thead>
<tr>
<th>Key Deliverable</th>
<th>Description</th>
<th>Benefits</th>
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<tbody>
<tr>
<td>1 Information Resource Audit</td>
<td>The Project Officer would produce an information audit following his visits to the primary care sites. A detailed log would be made of what information resources (i.e. print and electronic) were currently available at each site, as well as its usage.</td>
<td>This information would determine what the existing situation was and assess the scope for future developments. It would also allow him to assess whether training could be conducted onsite or at a dedicated training centre.</td>
</tr>
<tr>
<td>2 Baseline Questionnaires</td>
<td>In conjunction with the North West Lancashire Medical Audit Advisory Group (MAAG), questionnaires would be developed covering information resource usage, availability and needs.</td>
<td>The questionnaire would complement the information audit, indicating the current situation and allowing the formulation of training strategies.</td>
</tr>
<tr>
<td>3 Staff Training</td>
<td>Working from the results of 1 and 2, training sessions would be formulated to train staff in the efficient exploitation of knowledge resources.</td>
<td>Training would teach best practice in accessing digital health care information, and promote a culture of multi-disciplinary evidence-based practice and life long learning.</td>
</tr>
<tr>
<td>4 Help &amp; User Guides</td>
<td>Working from the initial research, help and user guides would be developed to assist staff in accessing digital health care information.</td>
<td>The help guides could be used as tools during the training sessions. The user guides would be a point of reference for staff to assist them in best practice for accessing electronic health care information.</td>
</tr>
<tr>
<td>5 Evaluation Questionnaires</td>
<td>Collaborating with MAAG again, questionnaires would be developed and distributed to assess if the training has led to a demonstrable change in accessing digital information.</td>
<td>These questionnaires, coupled with the training evaluation sheets completed after the training sessions, would establish if the project has been successful.</td>
</tr>
</tbody>
</table>
2. Method

The Project Initiation Plan (PIP) (appendix 1) outlined the four main stages to be completed for the project to be seen as a success:

1. Resource gathering & research.
2. Assessing information resources & formulating training strategies
3. Conducting training workshops.
4. Evaluation of project.

These four stages were plotted to fit into the 1-year time scale of the project.

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Months 4-5 (Feb 2001-March 2001)</td>
<td>Assessing information resources &amp; Formulating training strategies</td>
</tr>
</tbody>
</table>

This programme should be read in conjunction with the actual programme detailed in section 2.6 of this chapter.

In the next sections each of the four stages of the project will be examined in light of what was achieved.

2.1. Resource Gathering & Research.

The project officer was allowed the time to induct himself into his role. This involved a two week period where he reviewed similar studies in relation to information resources and healthcare, key documents to do with information published by the NHS and the Government and the role of the library in Healthcare. It was also an opportunity to update his knowledge and skills of the Web-based resources and databases he would be using to train Clinicians.

As well as this self-education the project officer attended several external training courses. These being courses on 'The Essentials of Project Management' organised by the Postgraduate Department of Medicine and Dentistry at the University of Manchester and 'Finding the Evidence' organised by the BMA Library.

The project officer attended meetings to learn more about the workings of groups within the Health Service, such as the Blackpool Primary Care Group, the Research & Development Committee of the Blackpool, Wyre and Fylde Community Trust, as well as to raise the awareness of the project to influential people.
The initial 2 months of the project also involved the project officer liaising closely with the project consultant to discuss the activities and direction of the project. This included the completion of the PIP document (appendix 1), which had been left in a state of flux with the departure of John Rule, the former Library Services Manager.

The project consultant also set up a Project Board to oversee both the Blending Service Project and the Marketing Librarian Project which was taking place at the same time. The formulation of the Blackpool, Wyre & Fylde NHS Library Developments Projects Board (appendix 1.A) was felt to be necessary to ensure continuity of activity of the project, to provide a secure background for the work of the Project Officer and to ensure the results are obtained which assist the stakeholders. The Board met for the first time on 20th December 2000 and agreed to meet every 3 months.

During the initial meeting of the Project Board it was agreed that because the project only had a 12 month life span, it was unrealistic to assume that the whole of the Blackpool, Wyre and Fylde Primary and Community care sites could be assessed and training made available to all of the staff as set out in the original PIP. Instead it was proposed that during stage 2 of the project, assessing information resources and skills, the 29 primary care sites in Blackpool were concentrated on in order to ensure that all the project deliverables were met.

2.2. Assessing Information Resources & Formulating Training Strategies

As well as a valuable promotional opportunity, the initial meetings that the project officer attended were useful in the information he obtained. The close relationship which developed between the BPCG and the project enabled the project officer to obtain a reliable insight into the practices in the area. From these meetings the project officer gaged that there were 29 practices in the Blackpool area which has different levels of electronic connectivity. These ranged from being fully computerised to being paper-only environments. About half a dozen practices were highlighted as being willing participants to the project. As well as this valuable advice on which practices would be accessible to piloting aspects of the project, the project officer was provided with practice addresses, contact names and maps by the BPCG. The BPCG had recommended that the practice managers of the surgeries would be the key people to contact about the project. Not only because of their close contact with all practice staff but that they could provide an overview of electronic information access and confidence in using the technology.

The ‘first contact’ with each practice came in the form of telephone calls made by the project officer to the practice managers during December. In these phone calls he outlined the purpose of the project, the training opportunities that staff would be offered and arranged visits to look round the practice and interview the practice managers. There was a very positive response to the project and the project officer arranged 27 visits to commence in January 2001. The two Practices who were not included in the Project were due to chronic staff shortages and a desire not to be part of the project. A list of the 27 participating practices can be seen in appendix 2.

2.2.1. Information Audit & Practice Visits

The first of the key deliverables outlined in the PIP was to produce an information resource audit following the project officer's visits to the practices. In order to produce this audit a detailed written log would be made during his visits of what and where information resources were currently available at each site. The audit would include details about resources such as listings of visited Web sites, computer-based databases used, printed journals read, textbooks consulted and audio-visual materials accessed.
The log took the form of a table that detailed each information resource under 6 clearly defined headings:

1. A description of the resource  
2. Whether the Media was electronic or printed  
3. The cost of the resource (e.g. journal subscription)  
4. Currency (e.g. Was the journal or textbook the latest edition)  
5. Who it was used by. (This was gaged by the location of the resource)  
6. The location of the resource (e.g. GP’s office, resource room)

The information obtained by the audit would be supported by the interviews of the practice managers that the project officer would undertake during the visits. There were 11 questions which depending on the responses would take between 15-30 minutes to conduct. The audit log and the interview responses were noted down in a pack that the project officer took to each visit (appendix 3). This pack was slightly refined after piloting the audit and interview at Waterloo Medical Centre, a practice that had kindly offered its support to the project. The Audit and Practice Visits commenced on the 15th January 2001 and each took an average 45-60 minutes to complete. The final Practice was visited on 1st March 2001.

2.2.2. Baseline Questionnaire

The second key deliverable was to produce a baseline questionnaire to discover information resource usage, availability and needs amongst staff associated with the 29 practices in Blackpool. The questionnaire was developed in conjunction with the North West Lancashire Medical Audit Advisory Group (MAAG) who through Mrs Christine Laverty, provided the project officer with a wealth of experience and knowledge to ensure that the questionnaire would answer the questions the project needed to move forward. From November 2000 through to March 2001 several meetings took place between the two parties to discuss the content and distribution of the questionnaire. At these meetings it was decided that a questionnaire should be available to all practice staff, including community care staff associated with the surgeries, that it should be short (no more than 20 questions) and simple to complete (i.e. tick boxes).

As with the audit and interviews, Waterloo Medical Centre offered its assistance in piloting the questionnaire. The pilot highlighted several problems with the questionnaire. Firstly, it emerged that staff were confusing the clinical databases (e.g. MEDLINE) with the clinical systems (e.g. Torex) they used daily to access patient details. Also, certain questions which repeated answers that had already been gaged were removed from the questionnaire ensuring that it remained as pertinent as possible. It was also noted that a few paragraphs were needed at the start of the questionnaire to provide staff with some information about why they should complete it as well as contact details for the project officer.

Taking into account these recommendations, 350 copies of the amended baseline questionnaire (appendix 4) were sent to 27 practices on the 1st March 2001. The questionnaires were addressed to the practice managers’ who had been made aware of the questionnaire during the project officer’s visit a few weeks earlier. They contained a covering letter for the practice manager and a copy of the questionnaire for roughly each member of staff. The practice manager’s had agreed to promote and distribute them to staff over a 2-week period during the visits. The project officer, because of the small area the Practices covered, visited each practice to collect the questionnaires on the 16th March 2001. The results of both the audit and questionnaires are detailed in section 4 of this report.
2.3. Conducting training workshops.

While the audit and questionnaires provided valuable insight into the skills and needs of staff associated with the Practices in Blackpool, this was only one step in developing a quality training programme for staff to attend.

2.3.1. Workshop Subjects

The first step came from the questionnaires and research that the project officer conducted during the initial months of the project. This involved the subject of each workshop. The project had made it clear that it would not be offering any training that was already provided to staff in primary and community care through the IM&T Training Department and the Health Authorities who both provided training in using the Internet. The project officer had identified from the questionnaires two clear elements that Health Care Professionals' would welcome training on; searching the Internet for information and searching clinical databases for information. His initial research also identified other possible subjects to base the Workshops on. Firstly, the important issue of information quality on the Internet that few people seemed to be aware of and secondly how when searching for information it should follow the Evidence Based Practice (EBP) process which fits into the NHS model for modern patient care. These four subject areas were agreed with the Project Manager as being fitting to the Project philosophy of "exploiting the knowledge base". Not only would staff be exploiting these resources by improved searching abilities but they would be following the information validation process and EBP process that are important issues in current healthcare thinking.

Once the subject areas were decided upon, the project officer began to research each topic using respected textbooks, materials gathered from training sessions he had attended and building up a quality list of web resources that he could promote to workshop attendees. The four workshops are detailed below:

**Workshop 1: Introduction to the Internet for Health Care Professionals**

To provide participants with an introduction to the Internet and highlight the quality health Web-sites that are available in their chosen field. Also to raise awareness of the issue of information quality on the WWW.

**Workshop 2: Searching the Web for Clinical Information**

To help participants improve their ability to search for the information they need by using search techniques and following an information-seeking process.

**Workshop 3: Searching the Health Databases available through ADITUS & OVID**

To help participants improve their ability to use the ADITUS and OVID interfaces to access clinical databases and carry out specific searches using search techniques and strategies.

**Workshop 4: Focusing the Question & Finding the Answer**

To help participants improve their ability to formulate a clinical question into a search strategy and to find evidence systematically about clinical effectiveness. Also to introduce participants to the Evidence Based Practice process.
2.3.2. Identifying the Attendee’s Needs

The project officer wanted to produce workshops that would be directly relevant to health care professionals. Through the interviews with the practice managers he was made aware of the heavy workloads that health care staff had to contend with, therefore any time allocated to training would have to be seen to be ultimately useful. Therefore, as well as making the content relevant it was equally important to obtain an idea of the existing skills and knowledge of attendees. The questionnaire results and registration forms (appendix 5) returned provided this insight and allowed the workshops to be pitched at the right level for the majority of attendees.

2.3.3. Structuring the Workshops

Drawing up a list of aims and objectives helped the project officer to form a structure to each training workshop. The aims would give the attendee an insight into the educational intent while the objectives would be what attendees were expected to learn. This method allowed the project officer to draw up an outline of each session. They allowed him to focus on each area and devote as much time as need be to each element of the workshop subject. These aims and objectives would eventually be used on the title page of the workbooks supplied for each workshop (appendix 6).

2.3.4. Training Methods

The project officer wanted to make the workshops as interesting as possible to the attendees. He attempted this by using several methods of delivering the training which are listed below.

<table>
<thead>
<tr>
<th>Method</th>
<th>Advantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presentation/ Demonstration</td>
<td>▪ A good method for providing an overview of a subject</td>
</tr>
<tr>
<td></td>
<td>▪ Can be used to show the correct procedure</td>
</tr>
<tr>
<td>Practical</td>
<td>▪ Promotes learning by doing</td>
</tr>
<tr>
<td></td>
<td>▪ Focused to individual needs and can be self-paced</td>
</tr>
<tr>
<td>Handout</td>
<td>▪ Can be used to reinforce points made during a session</td>
</tr>
<tr>
<td></td>
<td>▪ Can be used after a workshop to refresh a topic discussed</td>
</tr>
</tbody>
</table>

2.3.5. Training Materials

Once the project officer had decided on the methods, he needed to write and produce presentations, handouts and exercises for the sessions. After experiencing disappointment at the quality and quantity of training materials previously, he devoted more time than allocated in the project Gantt chart (appendix 1.B) to develop materials that would aid attendees by reinforcing the content of the workshops. The presentations were supported by Microsoft PowerPoint which provided examples to key points displayed in large colourful form via a projector and whiteboard which were viewable to anyone in the training suite. The workbooks (appendix 6) ranged from 15-25 pages and provided an annotated version of the workshop
as well as extra information, exercises to practice, and URL's to the Web resources featured. Each workshop was given its own logo to distinguish it from one another (see section 2.3.1). This logo was evident in each workbook which also featured other logos to highlight special sections of the workbook.

They are explained below:

<table>
<thead>
<tr>
<th>Section Recap</th>
<th>This section would succinctly recap the major points of each chapter of the workbook</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exercise</td>
<td>This logo represented a practical exercise that attendees could perform. Each exercise provided step-by-step instructions.</td>
</tr>
<tr>
<td>Contact</td>
<td>This section provided contact details for the project officer to ask any questions about the workshops or for attendee's to book onto another workshop.</td>
</tr>
</tbody>
</table>

### 2.3.6. Timing and Scheduling of Workshop Activities

Session outlines were created to ensure that all the key elements of each workshop were addressed during the timescale. These were flexible and were amended depending on the skills and needs of participants. The table below outlines the session for **Workshop 4: Focusing the Question & Finding the Answer**.

<table>
<thead>
<tr>
<th>Time</th>
<th>Key Points</th>
<th>Method</th>
<th>Resources</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1200-1215</td>
<td><strong>What is EBP?</strong>&lt;br&gt;The EBP Process</td>
<td>Presentation</td>
<td>Workbook</td>
<td>15 mins</td>
</tr>
<tr>
<td>1215-1245</td>
<td><strong>The PIOC Framework</strong></td>
<td>Presentation</td>
<td>Workbook</td>
<td>10 mins</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Practical</td>
<td>Exercise in WB</td>
<td>20 mins</td>
</tr>
<tr>
<td>1245-1330</td>
<td><strong>The Search Strategy</strong></td>
<td>Presentation</td>
<td>Workbook</td>
<td>10 mins</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Practical</td>
<td>Exercise in WB</td>
<td>35 mins</td>
</tr>
<tr>
<td>1330-1345</td>
<td><strong>The Hierarchy of Evidence</strong></td>
<td>Presentation</td>
<td>Workbook</td>
<td>15 mins</td>
</tr>
<tr>
<td>1345-1400</td>
<td><strong>Internet Resources</strong></td>
<td>Presentation</td>
<td>Workbook</td>
<td>15 mins</td>
</tr>
</tbody>
</table>
These steps allowed the project officer to assess the training strategies in order for the workshops to be interesting to attendees, informative and beneficial to their positions and in support of EBP. Because of the high importance placed on the content and materials of the workshops the project officer felt that the flexibility of the Gantt chart (appendix 1.B) allowed him to devote extra time to this aspect of the project.

2.3.7. Venue and Location

The time of each workshop depended on the details provided by the health care professional. The workshop registration forms (appendix 5) included a table where staff could tick a 2-hour ‘window of availability’ to attend the workshops. These ranged from 12-2 up until 6-8 on Tuesday, Wednesday or Thursday afternoons. These time slots were decided after consultation with the Practice Managers during the visits about suitable periods where staff could attend and Practices could afford to lose them.

All the workshops were held at the CAL (Computer Assisted Learning) suite at the Blackpool Education Centre Library in the grounds of the Blackpool Victoria Hospital. This training suite had 9 PC's with fast Internet access via the NHSnet. As well as this tea and coffee were supplied through Catering Services (paid for by the project budget) and there was no charge for the use of the facilities. For new visitors to the Education Centre, a map was provided with the information pack for all attendees and signs directing to the CAL Suite were put up from the entrance of the building.

2.4. Evaluation of project

The main methods of evaluation planned for the training workshops were:

2.4.1 Participant Evaluation Forms

This took the form of a one-sided questionnaire (appendix 7) distributed at the end of each training session to be completed before they left the workshop. This ensured that there would be a high response rate to the evaluation. The form was used to gage qualitative data about attendees' level of satisfaction with the course. The form used 6 Likert-scale questions to assess the level of satisfaction in the workshop generally, presentation, exercises, handouts, level and length. Attendees were then given the opportunity to comment on any aspect of the workshop in a comments box. The results of these evaluation forms are detailed in section 3.4. of this report.

2.4.2 Evaluative Questionnaire

Whereas the evaluation forms were indicators to the quality of the workshops and how they were received by the attendees', the evaluative questionnaire wanted to ascertain if the workshops had an impact on the confidence and abilities of health care professionals in using electronic information resources.

The questionnaire (appendix 8) followed the same structure and parameters as the original questionnaire. It was agreed that it should be short (around 20 questions) and simple to complete (i.e. tick boxes). Because of the workshops taking place until September the project officer did not have the advantage of several months to discuss and promote the questionnaire. This coupled with MAAG's disbanding meant that it would not be possible to create a questionnaire as grand in scale as the baseline. It was decided that the project officer would randomly send questionnaires out to 35 workshop participants to gage the impact of these sessions. He chose a cross-section of attendees and posted a 4-sided questionnaire with an attached covering letter outlining the importance of the results. As an
incentive to complete and return the forms over a 2-week period, staff were offered a certificate of attendance and inclusion on a mailing list for future workshops. A good response rate ensued and these questionnaires were collated by Mrs Julie Bousted, Audit Assistant at the BPCG. The results of these evaluation forms are detailed in section 3.5 of this report.

As well as these 4 main stages of the project, the project officers time and efforts was taken up with an ongoing promotional campaign to raise awareness of the different project stages. The methods used are detailed below.

2.5. Promotion

The project officer raised awareness of the project by using similar promotional tools to the ones used in the commercial sector.

During the first few weeks of taking up his role, the project officer spent time deciding on a logo that would be used to identify the project and, subsequently, the training workshops. This was considered to be important because the logo is what health care professionals would associate the project with, so it had to be unique in order to grab peoples attention from the many other logo's they are exposed to daily and also explain what the project was about. The logo that was chosen (figure 1) conveyed all the elements of the project. The person was obviously, by his clothing, a health care professional and the magnifying class represented the idea of searching for information. The logo was used for the first time in a set of flyers and posters (appendix 9) which were sent to the participating practices before the project officer visited them. This campaign asked the question "Struggling to find the clinical information you want?" And then featured the statement 'Then the Health Professionals' Education Centre Library is coming to help you.' The back of the A5 flyers then provided information about the project and contact details. These were sent to the practice managers who left them in staff areas of the practice. The logo was then used in all written correspondence which took place and was eventually incorporated into the workbooks, presentations, help sheets and signs for the workshops in July.

As well as creating a successful cover image, the project was promoted in the form of articles printed in several different publications. Firstly in February, the project officer and the project officer for the Marketing project wrote a joint article. This was published in the Communicate newsletter, which is sent to all the Community sites in the local area for staff. As well as this, the project officer had an article published for the Practice Manager's Newsletter, which was sent to the 29 practices in Blackpool. Another joint article was published in April in the Research & Development Investigate newsletter, which again was sent to all Community sites. The project officer was invited to write an article for the Library and Information Health Network Northwest Newsletter LIHNNK UP to be published in October 2001. The article was again co-written by the marketing project officer and project manager and allowed them to produce a more detailed piece of work which included the results of the baseline questionnaire and information about the workshops. This article moved the project forward from being known locally to gaining recognition throughout the North West. Copies of these articles are in appendix 10.

Another medium to promote the project was a evening lecture, given by the project officer, which was used to launch the training workshops in April. The project officer, with the help of the GP Secretary, Mrs Yvonne Coyle, sent flyers to all the practices in Blackpool, Fylde and Wyre. The lecture was given the title 'The Internet - Gateway to Quality Information for
Healthcare Professionals' and included content from workshop 1 and also presented the findings of the baseline questionnaire which had recently been completed. The launch took place on the evening of the 30th April at the Health Professionals’ Education Centre and included a buffet meal before the lecture. Over 30 primary care staff attended and each were given information about the workshops and registration forms. As well as this, Floppy Disks were distributed to all attendees which included a list of quality Web resources in clinical information for health care professionals to install onto their computers. These disks were labelled with the project logo and were organised by subject areas so as to aid navigation of the resources.

2.6. General Comments

The timescale of the project had to be amended in the light of factors which are detailed in this report. Details of the amended timescale are given below.

**Amended timescale November 2000 - November 2001**

<table>
<thead>
<tr>
<th>Month 1-2</th>
<th>Resource gathering and research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Month 3-4</td>
<td>Practice visits including information audit</td>
</tr>
<tr>
<td>Month 5</td>
<td>Baseline questionnaire - distribution and collation</td>
</tr>
<tr>
<td>Month 6</td>
<td>Launch of the training workshops - Preparation and organisation</td>
</tr>
<tr>
<td>Month 7</td>
<td>Development of workshop content and materials</td>
</tr>
<tr>
<td>Month 8</td>
<td>Piloting of workshops and content and material refinement</td>
</tr>
<tr>
<td>Month 9-11</td>
<td>Training workshops</td>
</tr>
<tr>
<td>Month 12</td>
<td>Evaluative questionnaire, final report &amp; continuation of workshops</td>
</tr>
</tbody>
</table>

2.6.1 Staffing

Trevor Morris, the Project Officer, was appointed and commenced employment on the 13th November 2000. Shortly before the project began John Rule, the Library Services Manager, resigned from his post. This resulted in no one assuming the role of project manager. Mrs Valerie Ferguson, formerly Postgraduate Medical and NHS Libraries Adviser in the North West, was invited to act as Consultant and Projects Adviser on a part-time basis pending the appointment of a Library Services Manager. In April 2001, Mrs Norma Blackburn was appointed as Library Services Manager and took over management of the project.
3. Statement of Results

The project officer used several methods throughout the project to address the challenge of 'Exploiting the Knowledge Base in Primary and Community Care Sectors'. The results of each information gathering exercise allowed the project to progress to the next stage in its 12-month life span. The results of four of these exercises and a report on the training workshops themselves form the heart of this chapter:

1. Information Audit & Practice Manager Interviews
2. Baseline Questionnaire
3. Training Workshops
4. Training Evaluation Forms
5. Evaluative Questionnaire

3.1. Information Audit & Practice Manager Interviews

3.1.1. Background

A favourable response to phone calls made by the project officer to the practice managers of the 29 Blackpool Surgeries, ensured that 27 visits were arranged to enable him to carry out the audit of information resources and interviews with the practice managers. The two practices who were not included in the project were due to chronic staff shortages and a desire not to be part of the project.

The information audit consisted of the project officer visiting the 27 practices and involved interviewing the practice managers and, where possible, visiting the library/resource room of the practice. These visits took place over a 7-week period between the 12\textsuperscript{th} January to 1\textsuperscript{st} March 2001. It soon became clear that it would be very difficult to log all the information resources held in each practice due to the fact that information tended not to be based in one location (i.e. resource room, staff room). Certain locations were out of bounds during the project officer's visit due to them either being in GP consultation or practice nurses rooms which were usually in use. Because of this the interviews with practice Managers became an integral part of supporting the audit results.

3.1.2. Results

The pilot questionnaire, which was carried out at Waterloo Medical Centre, proved to be one of the best examples of the access and storage of information resources in Blackpool Practices. The Medical Centre had a good-sized resource room, which had access to information in a variety of mediums. Details are listed in the table below:

<table>
<thead>
<tr>
<th>Information Resource</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet and Clinical Database access</td>
<td>As well as a dependable Internet connection an impressive list of clinical Websites had been bookmarked including The Cochrane Library, PubMED and BMA Online.</td>
</tr>
<tr>
<td>Printed Journals</td>
<td>10 journals were subscribed to with an archive of previous editions.</td>
</tr>
<tr>
<td>Textbooks</td>
<td>About 150 Textbooks were organised by subject and a reference section included encyclopaedia and dictionaries</td>
</tr>
<tr>
<td>Audio-visual Materials</td>
<td>Several videos were subscribed to with a TV and VCR in the room</td>
</tr>
</tbody>
</table>
The resource room at Waterloo proved to be only one of 7 practices who had either a library or resource room accessible to all staff. These 7 ranged from staff rooms with shelves of books and journals to rooms like Waterloo with P.C. and study facilities. Figure 2 highlights the percentage of these results.

![Resource/Library Rooms in Blackpool Primary Care](image)

Because of the low number of resource/library rooms throughout the 27 practices, trying to gather information about the information resources held proved to be a difficult task. Therefore because of the patchy information obtained it was decided that the baseline questionnaire should incorporate a question to reflect the information resources available and the staff use of them.

The audit and interviews did provide some other useful information to aid the project officer.

i. Despite a large financial outlay by the BPCG in providing hardware and connectivity to the Internet via the NHSNet only 52% of Practices had at least one user actively using the resource. It was hoped that the baseline questionnaire would ascertain the reasons for this low percentage.

ii. The interviews with the practice managers provided detailed information about the staff compliment in each practice. This not only included staff employed by the practice but also Community Care staff who used the practice as a base for their visits.

### 3.2. Baseline Questionnaire

#### 3.2.1. Background

From the information obtained during the visits to the practices, 350 baseline questionnaires were printed and distributed to the practice staff from the participating surgeries on the 1st March 2001. 241 (69%) questionnaires were completed with 23 (79%) practices represented. A breakdown by discipline is shown in figure 3. Admin/Clerical staff, who consist of 170 bodies, accounted for a large proportion of respondents’ (105). GP's (30) and Practice Nurses (35) responses exceeded the perceived expectations. A good cross-section of 12 professions responded to the questionnaire. Possibly the biggest disappointment of the questionnaire was the low response rate from Community staff. Just 41 forms were received from potentially 135 staff. Possible reasons for this could be down to the culture of Primary
Care where Community staff are not associated as being part of a practice despite residing there for a proportion of their working week. This perception might have meant Community staff not being made aware or receiving the forms to complete.

3.2.2. Results

After the difficulties encountered in the information audit it was hoped that the questionnaire would indicate information resource availability and usage by practice staff (figure 4).

An interesting conclusion from these results highlighted the poor use being made of the Internet as an information resource. A possible explanation for this can be seen in figure 5 which examines respondents confidence in using the Internet and computer-based databases.
Figure 4 also highlighted the poor usage made of computer-based clinical databases including databases provided by Ovid and Silverplatter. Only 19% of respondents used these databases as information resources.

Respondents were offered the opportunity to give reasons for not using the resources. 58 staff responded with 9% indicating no computer access, 5% indicated a lack of time and the resources mentioned not being applicable to their job, 3% highlighting a lack of training and 1% being unaware of the facilities.

MAAG’s experience of collating questionnaire results indicated that the number of no responses to this question (figure 5) could be assumed as being an indicator of no confidence. Therefore in combining them both and adding the percentage with those with little confidence, 50% of respondents lacked confidence in using the Internet and 68% lacked confidence in using computer-based databases.

Of those who used the Internet as an information resource, the Web sites that were being accessed did not collate with sites that were perceived as quality resources for clinical information (figure 6)
If the awareness of these resources was disappointing then the usage was highly alarming. Noticeably the much heralded resources of the NeLH (National electronic Library for Health) and OMNI (Organising Medical Networked Information) which between them accounted for 12% awareness and 2% usage. These worrying statistics were not limited to electronic resources, as printed sources of quality clinical information were generating similar results. The evidence-based journal, Bandolier, was read by 7% and 92% were not even aware of it. The same results greeted Guidelines in Practice with 13% being aware of it and only 9% reading it.

As well as gaging information resource availability, awareness and usage another aim of the questionnaire was to highlight the training needs that staff needed to instil them with the confidence to use these resources. The questionnaire revealed that of the 21% of respondents who have performed a computer-based search for clinical information many were not performing the most effective searches. Search techniques, which provide users with the tools to get only results specific to their query, were in limited use. Most respondents (78%) used free-text searching which leads to many and irrelevant documents and relies on the user to provide the exact wording. 29% of respondents used thesaurus searching which is seen as an optimal way to retrieve documents because it will search for variations of the same concept. 10% used Boolean operators (AND, OR, NOT) which will help to increase or decrease the number of documents you locate.

Two other training needs were identified from the questionnaire.

i. Training was needed to reduce the amount of time it took staff to conduct information searches. The questionnaire revealed that only 31% of staff who had performed a computer-based search for information took less than 10 minutes to carry out the search. It took 24% of staff between 30 - 60 minutes to perform a search and 18% said that they had spent over an hour looking for information.

ii. Training was needed to highlight issues of information quality and raise the profile of the quality clinical resources that existed on the Web. The questionnaire had highlighted the issue of information quality in several areas. Firstly, 41% of respondents admitted to using promotional/product leaflets and literature for information. In the climate of EBP and best evidence to support decision-making this method would seem highly inappropriate. Secondly, 57% of respondents who had previously performed a online search used commercial search engines (e.g. Yahoo, Google, Ask Jeeves) The resources listed by these search engines range from unbiased, scientifically credible information to poor, unevaluated information. In terms of raising the profiles of these quality Web resources, figure 6 had highlighted this need for training.

3.3. Training Workshops

3.3.1. Background

Based on the information gaged from the audit, questionnaire and research conducted by the information officer, 4 workshops were rolled out in July 2001 (see section 2.3.1.). The workshops had been promoted via letters sent to practice managers and health care professionals who had expressed an interest during the initial months of the project. The letters sent out provided details about the workshop content and included 10 registration forms (appendix 6) for distribution. The launch of the workshops on 30th April also provided exposure for the workshops and allowed attendees to register for the sessions. More information on the methodology of the workshops can be seen in section 2.3.
3.3.2. Results

41 workshops were held between the beginning of July until the end of September. The table below outlines the date and time of each workshop:

<table>
<thead>
<tr>
<th>Date</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 7 July</td>
<td>12 - 2: Workshop 1</td>
<td></td>
<td>2 - 4: Workshop 1</td>
</tr>
<tr>
<td>8 - 14 July</td>
<td>2 - 4: Workshop 1</td>
<td></td>
<td>12 - 2: Workshop 1</td>
</tr>
<tr>
<td>15 - 21 July</td>
<td>12 - 2: Workshop 1</td>
<td>2 - 4: Workshop 1</td>
<td>4 - 6: Workshop 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12 - 2: Workshop 1</td>
<td>6 - 8: Workshop 1</td>
</tr>
<tr>
<td>22 - 28 July</td>
<td>12 - 2: Workshop 2</td>
<td>12 - 2: Workshop 1</td>
<td>2 - 4: Workshop 2</td>
</tr>
<tr>
<td>29 July - 4 Aug</td>
<td>12 - 2: Workshop 2</td>
<td>2 - 4: Workshop 2</td>
<td>12 - 2: Workshop 2</td>
</tr>
<tr>
<td>5 - 11 August</td>
<td>2 - 4: Workshop 2</td>
<td>12 - 2: Workshop 2</td>
<td>4 - 6: Workshop 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>6 - 8: Workshop 2</td>
</tr>
<tr>
<td>12 - 18 August</td>
<td>12 - 2: Workshop 3</td>
<td>2 - 4: Workshop 2</td>
<td>2 - 4: Workshop 3</td>
</tr>
<tr>
<td></td>
<td>4 - 6: Workshop 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26 Aug - 1 Sept</td>
<td>2 - 4: Workshop 3</td>
<td>12 - 2: Workshop 3</td>
<td>4 - 6: Workshop 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>6 - 8: Workshop 3</td>
</tr>
<tr>
<td>2 - 8 September</td>
<td>12 - 2: Workshop 4</td>
<td></td>
<td>2 - 4: Workshop 4</td>
</tr>
<tr>
<td>9 - 15 September</td>
<td>12 - 2: Workshop 4</td>
<td></td>
<td>12 - 2: Workshop 4</td>
</tr>
<tr>
<td></td>
<td>4 - 6: Workshop 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 - 22 September</td>
<td>2 - 4: Workshop 4</td>
<td></td>
<td>4 - 6: Workshop 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>6 - 8: Workshop 4</td>
</tr>
</tbody>
</table>

121 health care professionals attended the workshops. The staff disciplines included GPs, Practice Managers, Practice Nurses, Clinical Practice Nurses, Receptionists, Physiotherapists, Speech and Language Therapists, Psychologists, Clinical Governance Facilitators and Care Pathways Facilitators. Of the 121 who attended the sessions 30 health care professionals came to workshop 1, 32 attended workshop 2, 28 attended workshop 3 and 31 attended workshop 4. The feedback and assessment of the workshops are detailed in section 3.4.

3.4. Training Evaluation Forms

3.4.1. Background

The popular method of an evaluation questionnaire being distributed at the end of a workshop session was used to collect qualitative data. Borrowing from the thoughts of Hepworth (1991) that "all training should be evaluated to identify any problems and to assist planning for future provision." Following methods developed by the Trent Institute for Health Services Research to encourage feedback, a one-page questionnaire was developed incorporating a simple design, 6 Likert-style questions, anonymity and a comments box for honest feedback. Each of the 4 workshops had its own evaluation form which asked attendees to rate 6 areas of the session: The workshop in general, the presentation, the exercises, the handouts, the level and the length. Attendees were asked to circle the appropriate number (1 = Excellent, 5 = Poor).
One of the main problems identified with this form of evaluation is obtaining a high response rate. This was not a problem as the project officer asked attendees to complete the forms before they left the workshops. Of the 121 attendees only 10 people failed to hand in their evaluation form.

3.4.2. Results

Looking at the collated results of the evaluation forms (appendix 11) it is noticeable from the results how certain aspects of the sessions were graded higher as the workshop progressed. This highlights the growing experience, skills and confidence that the project officer, now trainer, experienced.

From the results all the workshops were highly rated by attendees with 103 (out of 111) giving the highest rating to the workshops in general. The extra effort (outlined in the section 2.3.4.) given to the training methods of the workshops were justified in the results of the questionnaire. 103 attendees gave a 'Excellent' rating to the presentation of the workshops, which used PowerPoint and a projector connected to a laptop to provide examples and explanations of the training content. The desire to offer interactive training, in the form of step-by-step exercises, was also fully justified with 97 of respondents awarding an 'Excellent' rating to this question. The extra time used to produce quality workbooks and help sheets to aid attendees was also, seemingly, appreciated with 105 respondents rating them as 'Excellent'. The information gathered from the baseline questionnaire also had enabled the project officer to highlight the information resource skills and needs and create workshops which would be pitched at the correct level for attendees. This was shown in the collated results of 'the level of the workshop' question with 98 of respondents deeming it worthy of an excellent rating and 10 awarding it a '2' rating (good).

The question that produced differing opinions was that of the workshop length. As the table below indicates:

<table>
<thead>
<tr>
<th>LENGTH</th>
<th>1 = Excellent</th>
<th>2 = Good</th>
<th>3 = Average</th>
<th>4 = Below Average</th>
<th>5 = Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workshop 1 (Dur: 1 hour)</td>
<td>17</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Workshop 2 (Dur: 1 hour)</td>
<td>18</td>
<td>5</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workshop 3 (Dur: 1½ hours)</td>
<td>20</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workshop 4 (Dur: 2 hours)</td>
<td>28</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>85</strong></td>
<td><strong>15</strong></td>
<td><strong>9</strong></td>
<td><strong>1</strong></td>
<td><strong>1</strong></td>
</tr>
</tbody>
</table>

Looking at the table it becomes clear that participants would favour workshops of between 1½ to 2 hours. The comments box reinforced the feeling that workshops 1 and 2 'could have done with being for longer' to allow 'more time (for) practical work'.

The evaluation questionnaire were also used in the next stage of promotion for the training workshops with the best comments from the workshops being used to produce posters and flyers that asked people 'What's being said about the BWF Health Library Training Workshops?'(appendix 12)
3.5. Evaluative Questionnaire

3.5.1. Background

The purpose of the evaluative questionnaire was to ascertain if the workshops had made an impact on the confidence and abilities of participants in using electronic information resources. On 17th October 2001, 35 questionnaires were sent to a cross-section of participants to gauge the impact of these sessions. A good response rate of 22 (65%) evaluative questionnaires were returned from a range of health care professions; GP, Nurse, Physiotherapist, Speech and Language Therapist, Psychologist, Clinical Co-ordinator and Clerical staff.

3.5.2. Results

The poor confidence levels of health care professionals in using the Internet and computer-based clinical databases had been a worrying conclusion from the baseline questionnaire and the evaluative questionnaire was hoping to prove that the workshops impacted on this. When asked, 97% of respondents felt more confident using the Internet after the workshops and 100% felt more confident using the Clinical Databases. The questionnaire wanted evidence that the workshops had not only raised the confidence levels of participants but that they were putting the skills and knowledge to use at work. When asked about the value of the workshops to their work 19 said it was very valuable. 21 said that they were now using the knowledge learned in their job and 19 said they were using the skills in their job.

Studies by Wood (1995) and Elayyan (1988) have shown that colleagues are a popular source of medical information. This reliance on 'informal' sources of information should be viewed with caution as it doesn't support the concept of EBP, which involves the 'use of current best evidence in making decisions about the care of the individual patient' (Sackett 1997). Because of this the questionnaire hoped to demonstrate a change in the order of information sources that health care professionals used after they had attended the workshops. Respondents were asked to indicate the order of information sources they went to before the workshops and then to indicate if the order had changed since the workshops. Figure 7 and 8 shows the results.

![Figure 7: The order of information resources consulted by health care professionals before attendance of the workshops.](image-url)
Figure 7 shows the order of information resources used before the workshops and it is easy to see that consulting colleagues was the first place that health care professionals would go for information. This was jointly matched by paper sources (which included journals, text books, reference books and leaflets) which proved to be the most popular source of information by it being the second and third places to consult as a resource. It is noticeable how few people put electronic sources of information (such as the Internet, computer-based clinical databases and electronic journals) as one of their primary sources of information. Most respondents placed it as 4th or 5th.

Figure 8 demonstrates the impact that the workshops had on attendees. Despite the fact that consulting colleagues is joint 1st, less health care professionals placed it there and it reduced significantly as the second source they consult. What is most noticeable about the table is the emergence of electronic information as a source of information. It is now the joint 1st source that health care professionals go to and has replaced paper sources as the 2nd and 3rd source they visit for information. These findings highlight that electronic information, which can be more up-to-date, searched in a shorter space of time and provide access to the best evidence available, is now being used more by workshop attendees than before the sessions.

Another finding from the baseline questionnaire highlighted the poor use that health care professionals were using of quality Web resources. The evaluative questionnaire results demonstrated that the workshops had impacted on this by raising awareness and giving attendees the skills and confidence to access them. The usage of these quality Web resources can be seen in figure 9. Several noticeable comparisons between the usage of these Web resources before the workshops and after the workshops include TRIP (Turning Research into Practice) which no one used from the results of the baseline questionnaire but now 19% of those who responded to the evaluative questionnaire now access it for information. The NeLH (National electronic Library for Health) Web site had 2% using it but now had 27% using it as a resource. OMNI, which only 1 out of 241 respondents used, now accounted for 20% of those who responded to the evaluative questionnaire.
The baseline questionnaire revealed that only 21% of respondents had performed a computer-based search for information. It was hoped that the evaluative questionnaire would show a marked increase from this low percentage. Around 70% of respondents had performed a computer-based search for information in the few weeks since the workshops had finished. When asked about the reasons for not performing a search, the 30% who had said 'no' indicated the reasons as being no time (5), poor access (2) and no need (1).

The 70% who did perform a computer-based search were asked to indicate the online search tools they had used to find information. These results are illustrated in figure 10.
Again, the results displayed the healthy use being made of quality clinically-related search tools to locate information. 86% of the search tools now used were linking to clinical information which was either peer-reviewed, research-based or evaluated. The 14% using Internet search engines, which was a noticeable reduction on the 57% who used them in the baseline questionnaire, must be taken into account that the workshops didn't rule out Internet search engines as search tools but did advise caution when looking at the links they returned.

The baseline questionnaire had highlighted the lack of awareness that health care professionals had of search techniques that could aid them in their searching. The evaluative questionnaire set out to show the impact that the workshops had on encouraging attendees to use these techniques. Figure 11 shows the search techniques used by attendees of the workshops.

![Figure 11: Search techniques used during searching for electronic clinical information](image)

The impact of the workshops in teaching search techniques can be clearly seen when you compare the figures with those of the baseline questionnaire. Free-text searching had accounted for 78% of respondent's use of search techniques. This form of searching, which can lead to many and irrelevant documents, was being used by a much smaller percentage of respondents (17%). Boolean operators were now used by 32% of respondents, an increase from the previous 10% in the last questionnaire. As well as thesaurus searching (25%) other search techniques were now being used that were not even mentioned during the baseline questionnaire.

As well as informing attendees about search techniques, workshop 4 had outlined the EBP process and taught health care professionals how to turn a clinical query into a focused question which would help them locate relevant information. This was taught using the PIOC principle for formulating a question. 75% of respondents to this question said that they were now using PIOC to organise their search. A result that highlights that the workshops have impacted on EBP and, therefore, should result in improved patient care.

The questionnaire also wanted to see if the workshops had impacted on the results and time it took to perform a search for clinical information. 92% of respondents to this question said that they had found the information they were looking for and 100% felt the search they performed was more efficient than ones conducted before the workshops. 90% of respondents said that the time it took to perform the search was less than before the workshops.
4. Conclusions

The project set out to address four key developments that had been highlighted in section 1.1. These were the areas of:

1. Poor access to quality clinical information in primary and community care.
2. Develop the 3 information resource rooms based in community sites.
3. Raising awareness of the quality resources available to primary care through the newly installed NHSNet.

As section's 2 and 3 show, significant progress has been made in 3 of these 4 areas (The plans for the resource rooms will be discussed in section 5).

The purpose of the audits and questionnaires carried out over the 12 months of this project sought to prove that these areas needed to be addressed if the Blackpool, Fylde and Wyre NHS Trust were to keep on track with national NHS information directives as outlined in the Strategic information objectives for the NHS 1998 - 2005:

"To provide every NHS professional with online access to the latest local guidance and national evidence on treatment, and the information they need to evaluate the effectiveness of their work and to support professional development" Department of Health, NHS Executive (1998)

As the project developers noted 'access' did not just mean providing Internet ready computers but also the skills and knowledge to access this online information. This is where the training workshops came in.

On analysis of these key deliverables, which were outlined in section 1.3, several conclusions were derived.

4.1. The Importance placed on access to Information resources by Primary & Community Care staff.

High response rates to the baseline questionnaire and registration to the training workshops indicates the importance health care professionals regard the area of information access. The number of responses from a broad range of professions also shows that it is an area that is important to a wide range of health care professions. It is not only an important issue to staff in primary and community care. A large number of workshop registration forms have been received from hospital staff who have heard about the workshops from colleagues. The hospital might provide access to the technology but having the confidence and skills to use the resources is a different matter.

4.2. Poor Internet awareness and usage

The baseline questionnaire highlighted that while Internet access is available to a large number of respondents, only 20% actually used it. This low usage of the Internet was reinforced when respondents were asked to indicate their awareness of several quality clinical Web sites. Of the 36% of respondents who were aware of the NHSNet, only 16% were actually using it. Considering the financial input that BPCG had put into giving practices access to the NHSNet these figures demonstrate the poor funnelling of information concerning the NHSNet to practice staff and again raised the issue of access being more than the purchase of PC's.
All other Web sites mentioned which provide high quality clinical information had a low percentage for respondents awareness of their existence, (ranging from 3%-9%) and an even lower usage count (0%-5%).

4.3. Lack of awareness of issue of information quality and reliability.

71% of respondents to the baseline questionnaire indicated that their practice had promotional/product information in their practice. This is probably due to the constant barrage and targeting of pharmaceutical companies, etc at primary care. The alarming conclusion from this though is that 41% of respondents admitted to using these sources for information. As healthcare professionals are urged to practice EBP and Clinical Governance this usage of promotional and product information is a cause for concern.

The results also highlighted the lack of awareness about issues of information quality and reliability on the Internet with mentions made of commercial clinical Web sites and the large use of commercial search engines for clinical enquiries (57%). The worrying aspect in the area of printed journals usage was the low percentage for EBP journals such as The Bandolier (read by 7%) and Guidelines in Practice (read by 9%). This suggests a need to promote EBP and Clinical Governance within Primary Care.

4.4. Low confidence in using Web-based technology

A need for training in electronic resources was highlighted to raise the confidence and abilities of health care professionals. Only 22% of respondents felt "quite confident" or "very confident" using the Internet and only 12% had this same level of confidence accessing clinical databases.

4.5. The poor knowledge of evidence based practice

Despite EBP and clinical governance being an important part of modern patient care, the lack of knowledge displayed amongst health care professionals about these concepts was worrying. The workshops set out to slowly build up attendees awareness of the importance of locating the best evidence to support their decision making before explaining, in workshop 4, how it all fits into the EBP process. The fact that, in the final questionnaire, respondents admitted to now using aspects of EBP in their decision making helped to vindicate the importance of the project and the need for this continuing education.

4.6. The importance of training

The interest and feedback in the training workshops show that it is a vitally important aspect in the continuing professional development of health care professionals. The final questionnaire highlighted that there remains a need for further and continual access to training.

Several problems were encountered concerning the workshops:

1. A number of non-attendees were observed over the 3 months of the training workshops. The project is well aware of the ever increasing workload placed on GP’s and health care professionals and that travelling to and attending workshops can be a difficult commitment to keep.

2. The Blackpool Victoria Hospital suffers, like most hospitals, from a chronic lack of parking. This is clearly in evidence at certain times of day. Because of this, workshops were either delayed due to people having to find parking or poorly attended due to attendees being unable to find a car park space.
3. Certain smaller practices could not afford to send any staff to attend the workshops to ensure that the practice could continue to function. Practice Managers in these surgeries expressed their concern that staff were missing out on these training opportunities.

Possible solutions to these problems are outlined in section 5.
5. Recommendations

It was clear in the early stages of this project that this would not be a finite project. The 12-months that have passed have laid the foundations for the training and services that the project has set-up to be expanded and improved over the course of the next few years. Therefore the recommendations featured in this section represent the idea of 'how can this be taken forward in the future?

5.1. Developing quality information services

Developing information services to support and enable the use of quality information resources by health care professionals is a key area to discuss. 3 recommendations came out of the initial months of the project.

- Improve the awareness of electronic sources of quality clinical information.
- Better access to quality electronic clinical information.
- Provide training for information retrieval.

These recommendations have all been addressed by the Blackpool, Fylde and Wyre Health Library at Blackpool Victoria Hospital and several services have been implemented in response:

5.2. Access to quality clinical databases.

The Library is improving staff access to electronic clinical information by providing health care professionals with free access to the ADITUS and OVID gateways to 9 clinical bibliographic databases and online full text access to over 30 biomedical and nursing journals. These can be accessed via the NHSNet and the Internet.

5.3. Library Intranet/Internet site

The information audit highlighted the lack of space in many primary and community sites accounting for the poor information resources available to all staff. This highlights the importance of electronic resources to health care professionals. The library is addressing this with the library Intranet site expected to be online in early 2002, with plans to load it on to the World Wide Web later in the year. This site will not only provide direct access to the library catalogue, but also the project officer has created a library links page to the quality clinical resources outlined in the training workshops. These links are organised in subject areas. The site will also feature a comprehensive list of electronic journals which are organised in both alphabetical order and by medical subject. Future plans for the site will include online registration forms for the workshops and Pdf versions of the workbooks to download.

5.4. Continuation of the training workshops

The popularity and obvious need for the training workshops have resulted in the project officer being appointed as the Training and Development Librarian at the BFW Health Library. The funding, which was obtained through the NW Lancashire LIS group, will provide the opportunity for all staff in Blackpool, Fylde and Wyre to attend the workshops. The workshops will raise their awareness of the Internet and clinical databases and enable them to find high quality electronic clinical information which can answer questions relevant to their day-to-day practice and be performed in the minimum amount of time.
The demand for these workshops is without question. With no extra promotion of the project, another 170 registration forms have been received from a range of health care professionals over the past 4 months. Also, the attendees of the original workshops have expressed an interest in attending other workshops and refresher sessions. The project officer has outlined another potential 6 workshops that would be beneficial to staff in accessing quality electronic resources.

5.5. Training Workshop Roadshows and Drop-in sessions

In response to the problems of parking and non-attendance of the workshops, the Library is developing a service which would enable training to be carried out at interested practices in the area. These 'roadshows' would follow the same course content as the training workshops but be performed to members of a practice via a presentation and, where possible, hands-on exercises. Also the Information Resource Rooms, which were an initial reason for the formulation of the project, could become drop-in centres where health care professionals can visit them and receive advise and expertise from a librarian in accessing information which is relevant to them.

5.6. Continued Promotion

The project will continue to promote the training workshops in similar ways to those outlined in section 2.5. This will mean the creation of new posters and flyers to be sent to health care professionals. New forms of media will be used including email and web-based technologies. Update articles will be written for the newsletters and publications mentioned in section 2.5. Presentations are planned to highlight the work of the past 12 months and the workshops.

5.7. Strengthening links throughout the North West

An exciting area which will be developed will be developing strong links with other similar trainers in the North West. Several meetings took place over the course of the project with other library skills trainers but it is planned for all the trainers in the North West to meet as a learning group to create generic workshop guidelines which will explain the subject content of the workshops currently being taught in the area and provide a detailed list of reading materials, web sites and training exercises to perform. This group will meet several times in the year to add to these guidelines.

5.8. Endorsement of the workshops

At present, the workshops have accreditation from the PGEA for GPs and go towards the practice development plans for all other staff. It is hoped that through the close links with the other trainers in the North West that a respected institution or academic body will put their weight behind the workshops in the area. This will not only raise the profile of the workshops but give them, and the certificates that are provided, more importance.

These recommendations will strengthen the workshops that will enable health care professionals to support their decisions with the best evidence available to provide the best care for patients, and to support education, research and lifelong learning.
References

Used in report:


Used during project:


