# Finding The Evidence For Public Health Professionals: an assessment of the a information literacy workshop as part of a regional Public Health Intelligence training pilot programme in the East Midlands

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## Abstract

The UK-wide Public Health Skills and Career Framework (2008) sets out the public health workforce competencies and the knowledge base which underpins it. Thus within this framework the core competency "Assessing the Evidence" and the defined competence "Public Health Intelligence" are cited. The framework highlights the importance of the awareness of evidence, the sources of evidence and the knowledge of literature-search techniques and the subsequent appraisal of primary and secondary research. The aim of the initial 8-day Public Health Intelligence (PHI) workshops piloted by the East Midlands Public Health Observatory (EMPHO) was to try and build a course that would fit into the skills and career framework, the material for which could then be picked up and used by other regional Public Health Observatories (PHO).

A request was made for a collaborative partnership with East Midlands' healthcare librarians to develop a "Day-9 workshop" on "Finding the Evidence" to compliment the preceding workshops. Consequently, five members of the East Midlands' Library Trainers' Forum (EMLTF) - in collaboration with EMPHO - agreed to design, prepare and deliver an interactive information literacy session to Public Health professionals in September 2008 at a regional venue, with a view to the workshop, piloted in the East Midlands, becoming a national model. The session covered: an introduction to the hierarchy of evidence and protocols for searching; the National Library for Health (NLH) and the Public Health specialist library; The Cochrane Library; NLH Search 2.0; critical appraisal skills and Web 2.0 applications. The training featured a mixture of PowerPoint presentations, demonstration and hands-on practice with time for questions. The trainers were on-hand to assist delegates when needed. An information pack was also provided to support the sessions and for future reference, including the contact details of library trainers and knowledge services.

The subsequent evaluation of this workshop using a quantitative word count, indicated the success of the course with participants commenting on "greater understanding" in how to access the literature using the resources covered and appraise the literature. Furthermore, the interactive nature of the course was wellreceived, although more time and detail on each aspect was encouraged for future training. The collaborative nature of the work between the EMLTF librarians and EMPHO also proved beneficial in being able to share expertise according to the needs of today's public health workforce.

## Introduction

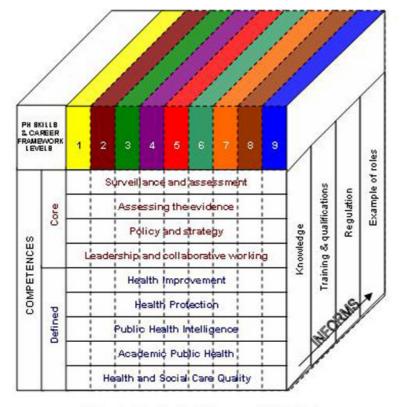
Public health, according to Acheson (1988) is: "The science and art of preventing disease, prolonging life, and promoting health through the organised efforts of society"<sup>1</sup>. Thus the purpose of public health is to improve health and well-being in the population; prevent disease and minimise its consequences; prolong valued life

and reduce inequalities in health. This is achieved in part by "ensuring that preventive, treatment and care services are of high quality, evidence-based and of best value" <sup>2 (p4)</sup>. Therefore the need for "evidence" is essential for the effective implementation of the public health agenda.

However, mere data and information alone are not sufficient, so "Public Health Intelligence" (PHI) the "...appropriate, tailored collection and interpretation of information so as to be useful to somebody" (D Jenner, personal communication, 2008) is a crucial element in providing the evidence underpinning public health. Consequently, PHI training is aimed at those who work in, or for public health and who specialise in analysing, interpreting and presenting data .

## Background

The UK-wide *Public Health Skills and Career Framework* (2008) sets out the public health workforce competencies and the knowledge base which underpins it. Thus within this framework the core competency "Assessing the Evidence" and the defined competency "Public Health Intelligence" are cited. The framework highlights the importance of the awareness of evidence, the sources of evidence and the knowledge of literature-search techniques and the subsequent appraisal of primary and secondary research for public health professionals. This framework, coupled with Department of Health's *Informing Healthier Choices (2006)* strategy, and the *Development Plan for Public Health Intelligence in the East Midlands* (2007) <sup>3</sup> were the key drivers in developing and the piloting of the Public Health Intelligence programme, aimed at Public Health analysts and related professionals, specifically at framework levels 4-6 (Fig 1).



Public Health Skills and Career Framework

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# Fig.1

The aim of the *Informing Healthier Choices* strategy is: "To improve the availability and quality of health information and intelligence across England and to increase its use to support population health improvement, health protection and work on care standards and quality" <sup>4 (p2)</sup>. Similarly, following a positive response to EMPHO's training course for new public health trainees and analysts in autumn 2006, and the subsequent recruitment of new analysts in Primary Care Trusts across the East Midlands in 2008, a further 8-day training programme was envisaged, the Department of Health having commissioned EMPHO and the South West Public Health Observatory (SWPHO) to develop a training course for public health analysts looking to increase their knowledge and skills in public health intelligence.

The initial Public Health Intelligence training pilot workshops, scheduled to run across the East Midlands from April – June 2008, were as follows:

- Day 1 Background & context
- Day 2 Data sources & techniques
- Day 3 Basis Statistics
- Day 4 Applied Public Health Intelligence
- Day 5 The Effective Analyst
- Day 6 Advanced Statistics
- Day 7 Surveys & Modelling
- Day 8 GIS

# **Collaborative Meetings**

The East Midlands' librarians involvement in the programme began through a series of regional meetings to determine what knowledge and skills the local healthcare librarians could offer to support the public health intelligence training. A meeting was convened for East Midlands' librarians by Richard Marriott, Education Infrastructure Advisor, East Midlands Healthcare Workforce Deanery (EMHWD) in December 2007, to discuss collaborative working with public health, at the behest of the East Midlands' lead for Workforce Development, and the Deputy Director of the East Midlands Public Health Observatory (EMPHO).

Previous discussions about the competency requirements for public health professionals raised the potential involvement of librarians in providing information literacy training for them. It was acknowledged that all libraries across the region provided a similar service which is useful to the needs of a public health workforce, with a primary focus on:

- Literature searching
- Current awareness
- Training
- Critical appraisal

As a result the librarians agreed on three potential areas of action:

- The production and distribution of a flyer outlining library and knowledge services available to public health staff
- The development of shared training modules, to include evidenced-based public health resources, literature searching and critical appraisal
- Developing current awareness services for public health professionals

Consequently, further discussion took place at the East Midlands' Library Trainers' Forum (EMLTF) in early 2008, in which volunteers were asked to design and deliver a proposed training session on assessing the evidence as part of the course for public health analysts later that year with the possible intention of developing a national template

A further tele-conference brought together the five library trainers who suggested that the following key areas be included in the workshop:

- Developing a protocol for searching the literature
- Framing a question to find the evidence
- Navigating your way around the evaluated sources of evidence
- Understanding the different levels of evidence
- Principles of critical appraisal

The group agreed to meet again to allocate areas of responsibility, with two librarians focusing on each area. A further trainers' meeting in April confirmed the date and venue as September 2008 at Tapton Conference Centre, Chesterfield. EMPHO would be responsible for the publicity and registration of participants, with materials for inclusion in the information packs sent ahead of time.

A final planning meeting between the librarians in July 2008 confirmed the proposed programme for the Day 9 workshop:

- Introduction to hierarchies of evidence
- National Library for Health & Public Health Specialist Library
- The Cochrane Library
- Search 2.0 (MEDLINE etc.)
- Critical Appraisal
- Using Web 2.0 to Keep-up-date

Together these sessions would cover the original focus of evidence-based resources, literature searching, critical appraisal and current awareness in providing information literacy training for public health analysts.

# **Workshop Delivery**

In September 2008 five East Midlands healthcare librarians (with two available on the day) delivered the "Day 9" workshop to 16 public health analysts and related professionals (20 were originally registered but four did not attend). The workshop covered the subject areas outlined above with two trainers responsible for each session, and the remaining librarians available to support users as and when needed.

The training featured a mixture of PowerPoint presentations, demonstration and hands-on practice of electronic resources with time allotted for questions during each of the sessions. Throughout the sessions the trainers used obesity as the focus of their practice examples in keeping with a topic of particular relevance to public health analysts. An information pack with handouts and user guides was also provided to support the sessions and also included the contact details of the library trainers and local library and knowledge services for future reference.

# **Results**:

## Evaluation

The workshop employed the same method of evaluation as the preceding eight workshops, using different coloured Post-It<sup>TM</sup> notes as follows:

- Purple What will you take away with you in terms of learning?
- Blue What worked well for you in the workshop?
- Green Anything that would be better if done differently if so what / how?
- Yellow- Areas that you feel that you would like to revisit in more depth?

# Feedback

A quantitative method of "word counting" (recording the number of times certain words or phrases appears in responses) was used to identify the key feedback from participants (Table 1), who placed the various coloured Post-Its<sup>TM</sup> on the wall at the close of the workshop, according to the various sections detailed previously. Although the librarians could views the anonymous responses immediately, these were subsequently collated by the EMPHO administrator for the workshop and later circulated for assessment. A summary of the responses is detailed below.

A summary of the participant responses

Participant Evaluation	Topic Areas	Occurrences
What will you take	National Library for	5
away with you in terms	Health (NLH)	
of learning?	Web 2.0 (including RSS)	5
	Critical Appraisal	5
	(appraise)	
What Worked well for	Use of laptops (PC)	5
You in the workshops?	Hands-on, interactivity	4
Anything That Would	More time, rushed	4
be Better if Done	More detail, depth	4
Differently?		
Areas That You Feel	Cochrane	4
You would Like to	Web 2.0	4
<b>Revisit in More Depth</b>	Critical appraisal	3

# Table 1.

## What will you take away with you in terms of learning?

"A greater understanding of web-based sources, of evidence, how to access and appraise"

The word count revealed that sessions on the National Library for Health (NLH) portal and critical appraisal were particularly informative for the participants. Searching for the evidence, using the NLH site as the gateway, was also a key interest and indeed a main focus of the day.

#### What worked well for you in the workshop?

"Particularly enjoyed the practical hands-on aspects and was grateful for the support from the tutors"

The interactive, hands-on nature of the workshop worked well according to the participant responses. The opportunity practice using the laptops and the use of practical examples in the sessions were effective.

## Anything that would be better if done differently if so what / how?

"Needed a bit more time to explore and expand on what was shown"

A common comment was the lack of time to explore the resources in more detail. This was also true of the afternoon critical appraisal session which "although useful and well-delivered" could be run as a separate session, said one participant.

#### Areas that you feel that you would like to revisit in more depth?

"Felt sessions gave me a good base to explore all areas..."

Participant responses indicated that the Cochrane Library, Critical Appraisal and Web 2.0 were areas which could be explored in more depth, although the limited time factor was once again cited, when looking at the resources.

#### **Discussion**:

Overall, the positive feedback from participants confirmed the important of adding a ninth day to the regional Public Health Intelligence programme pilot in 2008. This was in keeping with the aims of the *Informing Healthier Choices* strategy as well as the *Public Health Skills and Career Framework*. Furthermore, it brought healthcare librarians across the region to work in partnership and collaboratively with EMPHO to produce a joint training, setting a possible standard for public health observatories and also avoid duplication. The fact that the sessions were targeted at public health professionals (primarily analysts) was a useful exercise in preparing our local information literacy training programmes for specific groups of healthcare staff for future implemention.

# **Conclusions**:

The subsequent evaluation of this workshop indicated the success of the course with participants commenting on "greater understanding" in how to access the literature using the resources covered and appraise the literature. Furthermore, the interactive nature of the course was well-received , although more time and detail on each aspect was encouraged for future training. The collaborative nature of the work between EMLTF librarians and EMPHO also proved beneficial in being able to share expertise according to the needs of today's public health workforce.

Further to the 2008 programme, nationally some public health observatories are in the process of developing there own programmes, a new series of workshops are due to be launched beginning in the summer of 2009, with the Day-9 "Finding the Evidence" workshop now an integral part of the Public Health Intelligence training in the East Midlands later in the year.

# Postscript

It has been tentatively agreed, that due to the limited time constraints, that the searching session (with NHS Evidence replacing the National Library for Health as the main portal) and critical appraisal should be the main focus of the new workshop while the Web 2.0 session, despite positive feedback from participants, might be dropped to allow for more time. It was also suggested that an external trainer be hired to cover The Cochrane Library to offset the loss of the two librarians who had since left the East Midlands.

# References

- 1. Acheson, D. Public health in England. London: HMSO, 1988.
- 2. *Public Health Skills and Careers Framework*, Oxford: Public Health Resource Unit: Oxford, 2008..
- 3. NHS East Midlands, *Development Plan for Public Health Intelligence in East Midlands* (v.4): 2007.
- 4. *Informing Healthier Choices: Information and Intelligence for Healthy Populations*, London: Department of Health, 2006.