

## **Developing the evidence base in Public Health and Health Improvement – the crucial role of the healthcare librarian**

Cheryl Twomey, Electronic Projects Librarian, London Library and Information Development Unit

Lesley Glassington, Clinical Effectiveness Librarian, University College London Hospitals NHS Trust

### **The Project**

Recent government initiatives in the United Kingdom, such as *Saving Lives: Our Healthier Nation*<sup>1</sup>, the *NHS Plan*<sup>2</sup> and *A Research and Development Strategy for Public Health*<sup>3</sup>, emphasise a modern patient-centred healthcare service with strategies to improve health and reduce inequalities. Critical to the success of these policies is the building of an evidence base for public health and health improvement activities so that standards may be set, research commissioned and authoritative information and guidance be disseminated to those working in public health and health promotion. In turn the establishment of an up-to-date map of the evidence base for public health relies on effective searching of the literature.

The experiences and outcomes of a project to provide high quality literature searches commissioned by a national health development agency are described. This poster aims to promote healthcare librarians as essential partners in the development of evidence based practice whilst also allowing dissemination of experiences of those conducting literature searches in the public health field.

### **Skills of the healthcare librarian**

The health development agency required specialists who would be able to undertake and deliver high quality literature searches on specific public health issues. They had contacted a number of national library and information organisations but had only been able to find those who carry out basic key word searches and found the ideas around the use and development of complex search strategies, including the use of quality filters, difficult to grasp. However, the necessary skills and experience were identified amongst the relatively small number of librarians working in the National Health Service (NHS). The healthcare searchers had the following attributes:

- A high level of understanding of Ovid Online and Medline, CINAHL, PsycINFO, Embase, Sociofile, Science & Social Science Citation Indexes, Cochrane Library etc
- Able to construct complex search strategies similar to those devised by NHS Centre for Reviews and Dissemination at York (<http://www.york.ac.uk/inst/crd/search.htm>) and Health Evidence Bulletins Wales (<http://hebw.uwcm.ac.uk/methodology/appendix2.htm>)

- Ability to make an immediate contribution to the development of such searches
- Experienced users of Dialog and Datastar
- A good grasp of the subject area of health, public health and evidence-based practice to help contribute to the development of subject terms for the searches
- Experience of helping to prepare abstracts of research and practice related to health and public health
- Proficient in the use of MS Office and Reference Manager

## The Literature Searches

The searches covered the following topics:

- Smoking prevention and cessation
- Health Impact Assessment
- Community Development

The remit was to construct consistent search strategies to retrieve systematic reviews, meta-analyses, guidelines, expert opinions and “other” review articles from the literature. For each topic, a set of clinical effectiveness sources was searched, including systematic reviews, appraisals of reviews and evidence-based guidelines, available via the web and as recommended by the NHS Centre for Reviews and Dissemination at the University of York:

- Cochrane Library: Cochrane Database of Systematic Reviews
- DARE <http://www.york.ac.uk/inst/crd>
- National Research Register (including CRD Ongoing Reviews) <http://www.update-software.com/National/>
- Health Technology Assessment Database <http://www.york.ac.uk/inst/crd>
- SIGN Guidelines <http://www.sign.ac.uk>
- National Guideline Clearinghouse <http://www.ahcpr.gov/clinic/assess.htm>
- National Coordinating Centre for Health Technology Assessment <http://www.hta.nhsweb.nhs.uk>
- NICE web page (published appraisals) <http://www.nice.org.uk/nice-web/>
- HSTAT <http://text.nlm.nih.gov/>
- The DH Research Findings electronic Register <http://www.doh.gov.uk/research/rd3/information/findings.htm>
- TRIP <http://www.tripdatabase.com>
- SchARR Lock’s Guide to the Evidence <http://www.shef.ac.uk/uni/academic/R-Z/scharr/ir/scebm.html>
- Clinical Evidence: A compendium of the best available evidence for effective health care.

- Health Evidence Bulletins Wales  
<http://www.uwcm.ac.uk/uwcm/lb/pep>

Working with the topic researchers, the searches were broadened to include appropriate additional bibliographic databases and web sites. To select evidence-based information from the databases, quality filters published by the NHS Centre for Reviews and Dissemination, University of York; Health Evidence Bulletins Wales; and McMaster University were used. The searchers developed quality filters for databases where search strategies have not been published. The databases and web sites searched are shown below:

- Medline & PreMedline
- CINAHL
- Sociological Abstracts
- PsycINFO
- EMBASE
- Health Management Information Consortium Database
- Social Science Citation Index
- Science Citation Index
- ASLIB Index to Theses
- Dissertation Abstracts
- Popline
- Health Promotion Register & EPPI-Centre and related reports (<http://eppi.ioe.ac.uk>)
- CHEX [www.scdc.org.uk/chex](http://www.scdc.org.uk/chex)
- ZETOC (British Library electronic table of contents service)
- MRC [www.mrc.ac.uk](http://www.mrc.ac.uk)
- ESRC [www.esrc.ac.uk](http://www.esrc.ac.uk)
- BUBL [www.bubl.ac.uk](http://www.bubl.ac.uk)
- OMNI <http://omni.ac.uk/>
- SOSIG (Social Science Information Gateway) [www.sosig.ac.uk](http://www.sosig.ac.uk)
- Google [www.google.com](http://www.google.com)
- British Library Public Catalogue (including SIGLE grey literature collection) <http://blpc.bl.uk>
- North West Region Health Care Libraries Grey Literature Circulars [http://www.nwpho.org.uk/library/lib\\_index.htm](http://www.nwpho.org.uk/library/lib_index.htm)
- Networked Digital Library of Theses & Dissertations (NDLTD) [www.theses.org](http://www.theses.org)
- Academic Dissertation Publishers <http://dissertation.com>
- Australian Digital Theses Program <http://adt.caul.edu.au>
- Virginia Tech Electronic Theses and Dissertations <http://scholar.lib.vt.edu/theses>
- Lund University Dissertation Abstracts [www.lub.lu.se/dissdb](http://www.lub.lu.se/dissdb)
- Wageningen Dissertation Abstracts [www.agralin.nl/wda](http://www.agralin.nl/wda)

## Project Outcome

The results of the literature searches met all the requirements of the health development agency and highlighted additional expertise provided by healthcare librarians, namely:

- The ability to work as equal partners with colleagues in other disciplines
- A systematic and comprehensive approach to literature searching
- Knowledge of multiple methods of searching information sources
- In-depth knowledge of health and social care information resources
- Ability to identify and use controlled thesaurus and free-text terms for searching bibliographic databases effectively
- Appropriate use of truncation, adjacency and Boolean operators
- Effective and efficient web searching skills
- Capacity to add value to information by selecting and organising appropriate references from databases and web sites

## References

1. Department of Health (July 1999) *Saving Lives: Our Healthier Nation*, Cm 4386, London: Stationery Office
2. Department of Health (July 2000) *The NHS Plan, a plan for investment, a plan for reform*, Cm 4818-I, London: Stationery Office
3. Department of Health (April 2001) *A Research and Development Strategy for Public Health*, Available: <http://www.doh.gov.uk/research/documents/randdpublichealth.pdf>