Approaches to evaluating Clinical Librarian Services: a systematic review

Presented by:
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On behalf of NW England Clinical Librarians Systematic Review Group

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Library and Information Health Network North West
NHS and the North West

Nationwide employs:
• around 90,000 hospital doctors
• 35,000 general practitioners (GPs)
• 400,000 nurses
• 16,000 ambulance staff
(www.nhs.uk)

The North West covers the 5 areas of Greater Manchester, Merseyside, Cheshire, Cumbria and Lancashire with a population of 6.8 million.

Approximately 8% of people work in the healthcare sector – including a team of librarians interested in clinical librarianship!
UK North West Clinical Librarian Systematic Review Group:

- Lucy Anderson, NHS Bury
- Alison Brettle, University of Salford
- Michelle Maden-Jenkins, Edge Hill University
- Rosalind McNally, National Primary Care Research and Development Centre, University of Manchester
- Tracey Pratchett, University Hospitals of Morecambe Bay NHS Trust
- Jenny Tancock, University Hospitals of Morecambe Bay NHS Trust
- Debra Thornton, Blackpool, Fylde and Wyre NHS Foundation Trust
- Anne Webb, The Christie NHS Foundation Trust
Drivers

- The Hill Report (2008) – includes recommendations that librarians evaluate their services
- Measuring impact of services is a challenge
- Previous research demonstrated variability in models and limited effectiveness of Clinical Librarian Services
What’s Known to Date?

- 3 other reviews
  - Weightman & Williamson (2005)

- Identified Weaknesses
  - Small sample size
  - Low response rate
  - Response bias
  - Poor reporting/inadequate information on methods
  - Researcher bias/desirability bias
  - Non-specific patient care outcomes
  - Non-use of reliable/valid methods
  - Subjective reporting of results
  - Results less likely to be quantified
Overall Aim

- To update previous reviews
- Provide guidance for future evaluations.
- Clarification of the models of clinical librarianship and how best to measure impact of services in relation to these? (Hill Report)
Objectives of Our Study

1. To determine which models of Clinical Librarian services have been evaluated

2. To determine whose perspective has been evaluated

3. To determine what outcome measures have been used

4. To determine the quality of the methods used
Methods 1- Searching

- Searched 20 databases from 2001 onwards
- Scanned references and hand searched 2 journals: HILJ, JMLA
- Google search
- Grey literature – mail lists, known contacts, CILIP Update etc.
- Bibliographies
Methods 2 – Filtering and Extraction

- Filtering and article selection
- Initial filter of irrelevant articles undertaken by 2 people.
- Scanned titles and abstracts (in pairs)
- Obtained full papers (checked in pairs)
- Developed and evaluated critical appraisal/data extraction tool
- Extracted relevant papers (in pairs)
- Data management tools: Refworks and Excel
Inclusion Criteria

- Studies that meet the Hill definition
- Studies which are described as outreach but the focus is to support patient care
- Studies which describe services providing patient information – evaluation outcome relating to patient care
- Published post 2001
- Reports evaluation methodology
- English language
Results 1

Potentially relevant citations identified
n=2040

Excluded
n = 857

Initial assessment of titles and abstracts
n = 456

Full text assessment – potentially relevant items
n = 91

Excluded
n = 62

Papers going forward to appraisal/ data extraction
n= 29

Final Inclusion
n = 21
<table>
<thead>
<tr>
<th>Country</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK</td>
<td>15</td>
</tr>
<tr>
<td>US</td>
<td>5</td>
</tr>
<tr>
<td>Holland</td>
<td>1</td>
</tr>
<tr>
<td>Study design</td>
<td>No. of papers</td>
</tr>
<tr>
<td>-------------------------------------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>Survey</td>
<td>16</td>
</tr>
<tr>
<td>Qualitative</td>
<td>10</td>
</tr>
<tr>
<td>Experimental (e.g. RCT)</td>
<td>1</td>
</tr>
<tr>
<td>Quasi-experimental (e.g. Pre-post test)</td>
<td>1</td>
</tr>
<tr>
<td>Service evaluation</td>
<td>13</td>
</tr>
<tr>
<td>Action Research</td>
<td>2</td>
</tr>
<tr>
<td>Case Study</td>
<td>7</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
</tr>
<tr>
<td>Unclear</td>
<td>0</td>
</tr>
<tr>
<td>Not stated</td>
<td>0</td>
</tr>
</tbody>
</table>
## Breakdown of Service Models

<table>
<thead>
<tr>
<th>Service Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information at the point of need</td>
<td>Information at the point of need plus critical appraisal and synthesis</td>
</tr>
<tr>
<td>Question and Answer service 1</td>
<td>Question and Answer service plus critical appraisal and synthesis</td>
</tr>
<tr>
<td>Outreach 14</td>
<td>Outreach plus critical appraisal and synthesis = informationist</td>
</tr>
</tbody>
</table>


Breakdown of Outcomes

**Outcome criteria**
- Usage statistics: 62%
- Use of information: 52%
- Relevance of results: 48%
- Usefulness of results: 48%
- Time saving: 48%
- General impact on patient care: 38%
- Time to respond: 33%
- Other: 24%
- Improvement in information literacy: 23%
- Improvement in confidence: 4%
- Cost: 0%
- Not stated: 0%
## Breakdown of Perspective

<table>
<thead>
<tr>
<th>Perspective</th>
<th>No. of papers</th>
</tr>
</thead>
<tbody>
<tr>
<td>User</td>
<td>16</td>
</tr>
<tr>
<td>Librarian</td>
<td>7</td>
</tr>
<tr>
<td>Library Service</td>
<td>11</td>
</tr>
<tr>
<td>Organisation</td>
<td>3</td>
</tr>
<tr>
<td>Unclear</td>
<td>1</td>
</tr>
</tbody>
</table>
# Breakdown of Quality

<table>
<thead>
<tr>
<th>Quality measure (Weightman et al)</th>
<th>no.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appoint researchers who are independent of the library service</td>
<td>5</td>
<td>23</td>
</tr>
<tr>
<td>Ensure that all respondents are anonymous and that they are aware of this.</td>
<td>4</td>
<td>19</td>
</tr>
<tr>
<td>Survey all members of chosen user group(s) or a random sample</td>
<td>12</td>
<td>57</td>
</tr>
<tr>
<td>Agree a set of questions that are objective, well used in previous research, and developed with input from library users.</td>
<td>9</td>
<td>42</td>
</tr>
<tr>
<td>Use the critical incident technique.</td>
<td>6</td>
<td>29</td>
</tr>
<tr>
<td>Combine a questionnaire survey with a smaller, but also random sample of follow-up interviews.</td>
<td>8</td>
<td>38</td>
</tr>
</tbody>
</table>
Conclusion

1. Models of Clinical Librarian Service – 4 models evaluated
2. Evaluation has been mainly from a service and service user perspective
3. A wide range of outcome measures have been used
4. Quality has improved, but needs to improve further
Thank You!

- Thank you for listening
- Thank you to the NW Clinical Librarian Systematic Review Group
- Thank you to North West Health Care Libraries Unit for funding

Any questions?

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References


Glossary

- CILIP - Charted Institute of Library and Information Professionals
- DH - Department of Health
- HCLU - North West Health Care Libraries Unit
- HILJ - Health information and Libraries Journal
- JMLA - Journal of the Medical Library Association
- LIHNN - Library and Information Health Network North West (England)
- NHS - National Health Service
- PCT - Primary Care Trust
- SHA - Strategic Health Authority