

A review and rationalisation of journal subscriptions undertaken by a library and information service in a Mental Health Trust in North-East England in 2009

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Abstract

Aim: To describe the methods and processes used in an evaluation of local journal subscriptions in a mental health trust and to suggest possible further areas of investigation were similar exercises to be undertaken again.

Method and Results: Results from a user questionnaire were analysed along with e-journal usage statistics and data from local document supply activity.

Conclusions: Journal reviews can yield surprising results. Carrying out a user survey is valuable in highlighting awareness of e-resources more generally and thus in providing evidence for marketing/information literacy initiatives. Future journal reviews should undertake impact analysis as potent evidence for continued expenditure on journals in this age of austerity.

Keywords: collection development, electronic journals, health care, health science, journals, librarianship, libraries, marketing and publicity.

Key Messages

Implications for Practice

- NHS Library/Knowledge Services should undertake regular analysis of journal subscriptions. This should comprise some solicitation of user feedback as well as measurements of usage. User feedback can often yield surprising results.
- Marketing of journal subscriptions and more targeted signposting of resources should be priorities.
- Library and Information Service (LIS) information skills training should consider more general interventions such as highlighting available online journals through link resolvers and A–Z lists as well as more advanced training in searching bibliographic databases.
- User surveys are an excellent way of raising the profile of the LIS and can themselves serve as a marketing tool.

Implications for Policy

- Library staff should not assume that users are fully aware of the range of journal subscriptions offered. Awareness is often less than we think.
- A future review should consider the value of journals more in quantifiable financial terms, e.g. by applying a return on investment (ROI) calculation. If it can be shown that having a LIS saves the organisation money through its subscriptions and inter-library loan service, this would be excellent evidence of the benefits of the LIS.
- Future journal evaluations should undertake impact analysis to find evidence of ‘how’ staff are using journals, rather than just ‘how many’ staff are accessing them. This may provide convincing evidence for continuing funding in this challenging financial climate.

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Background

Tees, Esk and Wear Valleys NHS Foundation Trust (TEWV) is a large specialist mental health and learning disability trust. It employs 5000 staff who work in over 200 sites across County Durham, the Tees Valley and North-East Yorkshire.

Because a significant number of LIS users rarely (or never) visit service points, and therefore do not give verbal feedback to LIS staff, the Trust LIS Committee requested that a thorough review should take place to determine whether current journal subscriptions were meeting the needs of users and potential users. Previously, decisions on journal subscriptions were taken by library staff using their expertise and experience, ad hoc methods such as personal recommendations from users, perusal of impact factors and reading lists from organisations such as the Royal College of Psychiatrists.

These methods are sound, but it was decided to undertake a thorough review of measurable data of actual use of subscriptions and to consult with users in a more coordinated way to formulate a more evidence-based future policy on journals. This fits in with external drivers such as SHALL's LQAF,¹ which argues that undertaking a journal review is appropriate evidence for demonstrating compliance to criterion 5.3c that 'The library/knowledge service's stock is provided, developed and circulated to meet the needs of customers'. The process of undertaking such a review is also consistent with evidence-based librarianship/information practice.

Literature review

All local NHS LIS collections are currently supported by the National Core Content (NCC) comprising e-journals from JAMA, the nine 'Archives' titles published by the AMA, the *BMJ* and the 22 titles in the *BMJ* online journals collection. This nationally available content is of great value, but the Core Content does not obviate the need for evidence-based local procurement. As Glover *et al.*² found, NCC resources were more heavily used in a general acute trust than in a specialist cancer trust, and local purchasing was still needed to complement the NCC. Likewise, Crudge and Hill³ concluded that local document supply schemes may be

compromised if increasing numbers of trusts rely on the same publishers' 'bundles' of electronic titles rather than individual subscriptions. These studies did not consider the import of the NCC and locally procured resources to mental health trusts, but their conclusions suggest that locally purchased resources are still necessary to support the specialised needs of the TEWV user base.

Hill⁴ also notes the increasing tendency for journals to be procured in bundles, both nationally and regionally. However, there is a discrepancy in access and long-term archiving between individual electronic or print + online subscriptions and content from an aggregators' full-text database. A frequent problem is that key titles are often subjected to a 1-year embargo as part of a package. Content acquired as part of a bundle is also more liable to change its scope/terms than a direct subscription.

Hill⁴ observes that in NHS libraries, 'there is a general move towards the electronic provision of journals' and while online access is preferable to print in a Trust as geographically large as TEWV, the provision of an increasing amount of online content has information literacy implications. These considerations are beyond the scope of this article but have been well-documented elsewhere. For example, Bond,⁵ Bertulis⁶ and Bertulis and Cheeseborough⁷ highlight the continuing need for information literacy training initiatives amongst nurses.

Journal impact factors are generally regarded as the 'gold standard' for assessing the citation rates of journals and as such are also taken by some as a measurement of a journal's quality. There is, however, debate as to the utility of using journal impact factors in local decisions. Garfield⁸ argues that the difficulties of reconciling peer review judgements make impact factors a more 'straightforward' and reliable indicator of quality. Chung⁹ agrees that impact factors can provide 'generally accepted objective viewpoints', but he also maintains that they must be used in conjunction with local context-specific data because 'each library has different users with different information needs'. Likewise, Crudge and Hill³ argue that 'the use of impact factors has proved popular for the identification of high-quality titles', but an expensive, high-quality title may be of 'limited use to a general hospital and consequently may not always be a cost-effective choice'. Crookes *et al.*¹⁰ contend that the use of

impact factors alone, without other more subjective means of assessing journal quality is flawed because 'what constitutes 'quality' research may not be equivalent in all fields of research, and this is particularly true for practical disciplines such as nursing'. Within the context of psychiatry, Jones *et al.*¹¹ concluded that '...the correlation between the perceived importance attributed by clinical practitioners and the journal impact factor is neither a simple nor a consistent relationship'.

Accordingly, this review focused on local data rather than journal impact factors because the rationale for the journal review was not to ensure the provision of the highest 'quality'/most cited journals that staff *should* be reading, but rather to ensure that the collection reflected the *actual* information needs of practitioners in a specific setting.

Objectives

The aim was to thoroughly review the TEWV LIS's existing journal subscriptions to ensure that the collection was meeting the needs of Trust staff and to ensure continued cost-effectiveness in this 'age of austerity'.

The main objectives were twofold. Firstly, LIS staff sought to determine actual usage of journal subscriptions and secondly to find out whether there were any new journals to which it would be of benefit to subscribe. Following pursuit of these two areas of investigation, the TEWV LIS had evidence on which to inform decisions on whether to:

1. continue an existing subscription in its current format
2. continue an existing subscription but change the format (for example, from print only to print + online)
3. cancel an under-used resource
4. take out a new subscription to a resource that users felt would add value to their CPD, research needs and lifelong learning

Methods

To determine actual usage of existing journal subscriptions in 2009, data from a user questionnaire were analysed along with online usage statistics derived from link-outs to journal titles via the LIS's two main access routes for e-journals – My

Journals via NHS Evidence and the local County Durham and Tees Valley (CDTV) Health Libraries Alliance EBSCO A–Z list of holdings. To identify possible future subscriptions, qualitative data from the online questionnaire as well as ILL statistics were analysed. The existing availability of possible new titles through publishers' bundles, the NCC and via SHA regional purchasing was also considered as was availability of titles via ILL networks. As many library users or potential users rarely visit service points, more traditional methods (such as asking users to initial every time they consult a print journal) were not appropriate data collection instruments.

Questionnaire

The areas of investigation in the questionnaire were research into the actual use of current subscriptions; general information on usage which may impact on the LIS's future policy such as how far back the service should keep old issues of print holdings; and an exploration of potential new subscriptions to meet the needs of TEWV staff. This final area of investigation was important because the use of resources follows availability. Furthermore, collecting usage statistics alone does not involve any engagement with users nor does it require them to know that an investigation of journal subscriptions is taking place. A questionnaire will also itself serve as a means of highlighting resources and journal subscriptions.

The questionnaire largely contained open questions designed to elicit rich qualitative data – such as questions to find out respondents' views on possible new subscriptions, which existing subscriptions were most useful to their work and whether there were any journals currently only available in embargoed form, which they felt would be worth subscribing to individually. A Likert scale was used to ask participants how often they used current subscriptions with the options 'weekly', 'monthly', 'occasionally', 'never' and 'don't know', and participants were asked via a closed question which method they usually used for finding e-journals.

Promoting the questionnaire

The main methods of promoting the questionnaire were electronically based; for example, by

including items in the weekly trust-wide e-bulletin from the questionnaire's launch until its close, emailing subscribers to the LIS current awareness bulletin and Athens account holders and sending emails to invite certain professional groups to complete the questionnaire.

Having a print counterpart questionnaire on display at LIS service points served to draw users' attention to the evaluation, even if not many used this medium to submit a response.

Response rate

Overall, the response rate to the questionnaire was very good. From an organisation with approximately 5000 staff in total, there were 337 responses to the online questionnaire and three completed print counterpart questionnaires were received.

Numerical measurements of usage of journals

A thorough analysis of ILL requests and online usage statistics was undertaken to produce quantifiable measurements of journal access to complement the customer-reported estimations of usage measured in the questionnaire.

Online usage statistics

The two main routes for users to access e-journals are My Journals via NHS Evidence or the shared CDTV Health Libraries Alliance EBSCO A-Z list of holdings.

My Journals and EBSCO A-Z holdings

Statistics from My Journals and the EBSCO A-Z list are not directly comparable. Because the A-Z is shared, it is not possible to conclusively determine which access attempts came specifically from TEWV staff. Statistics from shared collections were therefore omitted.

Publishers' websites

However, neither data from My Journals nor the EBSCO A-Z list can give a complete picture because 12% of questionnaire respondents

indicated that they go direct to publishers' websites to access e-content. Unfortunately, as a result of time constraints, the author was unable to incorporate this data into the final analyses.

Data from local document supply activity

In terms of document supply activity, the author considered the number of requests from TEWV users to other libraries for particular titles as well as data showing which titles were most requested from other libraries to TEWV. The latter results, however, had to be interpreted with caution because while a high number of requests for a particular title could indicate that it is 'core' because a lot of readers in other libraries are requiring content, it could also mean the opposite – namely that the journal is 'core' and consequently is held by many other libraries and so requests to TEWV would be reduced.

Qualitative interviews

The author intended to conduct semi-structured interviews with questionnaire respondents and users with specialised research needs as part of this evaluation. Unfortunately, it was not possible to do this because of time constraints. However, if this exercise were to be done again, the author would make contact with those with specific research needs. This would form potent evidence for compliance with LQAF¹ criterion 5.3i that the LIS should 'support the research activities of the organisation(s) served'.

Results and discussion

Responses to the questionnaire

The professional group that had the biggest response rate was nurses (35% of respondents) followed by allied health professionals (24%). Of slight disappointment was the fact that junior doctors made up only 5% of respondents.

Current subscriptions

Decisions on whether or not to continue with an existing subscription and whether to add online

access to a previously print only subscription were partly taken on the basis of questionnaire responses. In the analysis of questionnaire responses, the numbers of 'weekly' and 'monthly' use were grouped together. The 'weekly', 'monthly' and 'occasionally' responses then formed a second group of responses. The rationale behind the first collation was that if a title was used weekly or monthly, a hierarchical arrangement could show the titles that are consulted the most regularly. The rationale for the second collation was to group together all titles that at least have some use, even if only 'occasional'.

The top five titles weekly and monthly were as follows:

British Journal of Psychiatry
BMJ: Clinical Research Edition
Psychiatric Bulletin (now The Psychiatrist)
Clinical Psychology Forum
Advances in Psychiatric Treatment

The titles used least weekly and monthly (with the lowest usage first) were as follows:

Innovait
Resuscitation
International Psychogeriatrics
International Journal of Speech-Language Pathology
International Journal of Mental Health Promotion

The top five titles used weekly, monthly and occasionally were as follows:

British Journal of Psychiatry
American Journal of Psychiatry
BMJ: Clinical Research Edition
Age and Ageing
Behavioural and Cognitive Psychotherapy

The titles used least weekly, monthly and occasionally (with the lowest first) were as follows:

Innovait
Resuscitation
International Journal of Speech-Language Pathology
Dysphagia
International Psychogeriatrics

The five most requested titles by TEWV users as an inter-library loan were as follows:

Journal of Affective Disorders
Journal of ECT
Nursing Times

Biological Psychiatry
Journal of Addictive Diseases

The five most accessed online titles (either via the shared EBSCO A-Z List or My Journals) were as follows:

British Journal of Psychiatry
American Journal of Psychiatry
Journal of Psychiatric and Mental Health Nursing
Journal of Intellectual Disability Research
BMJ: Clinical Research Edition

As well as all these measurements, the LIS considered the availability of current subscriptions via a bundle and via the NCC as well as the availability of current titles via document supply networks and the cost of print, print + online and online only subscriptions, respectively. Some additional journals were also purchased following the cancellation of an SLA with a neighbouring acute trust.

Specific decisions taken as a result of the review

The following new subscriptions were instituted in 2010:

Advances in Dual Diagnosis (print + online)
American Journal of Psychotherapy (print)
British Journal of Occupational Therapy (online)
Clinical Psychology Review (online)
Intellectual and Developmental Disabilities (print + online)
Journal of ECT (online)
Journal of Family Therapy (print + online)
Journal of Mental Health Law (print)
Nurse Prescribing (print)

An online version was added to the following titles that were previously only available in print:

Archives of Psychiatric Nursing
Behavioural and Cognitive Psychotherapy
British Journal of Learning Disabilities
International Journal of Geriatric Psychiatry
Journal of Applied Research in Intellectual Disabilities
Journal of Intellectual Disability Research
Journal of the American Academy of Child and Adolescent Psychiatry

The following subscriptions were cancelled because of low usage or availability via 'bundles' or the NCC:

Alcohol and Alcoholism
American Journal of Psychiatry
Archives of General Psychiatry
BMJ
International Psychogeriatrics
Learning Disability Practice
Resuscitation
Innovait

Discussion

It was not an easy task to reconcile data from the user questionnaire with online usage statistics and ILL data. User-reported data of access to journals in some instances did not tally with usage statistics, and so some decisions were taken more on the basis of factors such as cost/availability via 'bundles'/NCC. Furthermore, some user feedback was somewhat unwieldy in that some participants merely recommended the general area in which they worked in response to the question of which journal subscriptions were most useful.

Marketing implications

As well as providing data for an evidence-based policy on journal subscriptions for 2010, the questionnaire was also extremely valuable as a marketing tool in publicising the subscriptions taken by the LIS. A number of questionnaire respondents indicated that it was the journal review itself rather than any other marketing or promotional activity, which brought to their attention the range of resources available to them.

LQAF¹ criterion 5.3b is that the library/knowledge service should 'enable customers to discover and locate library/knowledge resources'. The TEWV LIS signposts resources by maintaining link resolvers, user guides, intranet pages and by its information skills training programme. Many staff have already responded to this signposting. However, this marketing has not penetrated the consciousness of all staff, and it may be necessary to target staff groups more specifically, for example, by producing tailored e-resources guides for different professional groups.

The challenges of communicating fully to health professionals, the priorities and functions of modern NHS libraries, have been well documented.

For example, Seeley *et al.*¹² and Publicover *et al.*¹³ have found that many users are not aware of the range of professional competencies of LIS staff. However, results from this local context also suggest that the gap between what the library offers in its 'core' resources is somewhat at odds with the perceptions of some users. Thus, results from the journal survey have highlighted the need for more assertive marketing and continued provision of information skills training. The LIS has responded to this user feedback by creating a new Netvibes current awareness portal to link to current journals' tables of contents via RSS, and work is also beginning on a comprehensive marketing plan.

Confusion by users of how to access e-journals and Information Literacy Implications

Of respondents to the user survey, 20% stated that they did not know by what method they accessed e-journals (when given the choice between the national link resolver; a subregional A-Z list and publishers' websites). This figure suggests that a significant number of staff are confused about how to access e-journals. This finding, along with the more general lack of awareness about the range of journals available to them by some questionnaire respondents, has implications for the LIS's information skills training programme. Currently, most formal training concentrates on searching bibliographic databases. However, it may be necessary to offer some shorter sessions to develop more fundamental skills such as finding e-journals, requesting an ILL.

Generally, the increasing provision of journals and other information resources online requires an ongoing culture shift in many NHS organisations. Information professionals will have to continually grapple with the information literacy implications of this phenomenon and to continue to market their resources and professional competencies effectively in this time of financial restraint.

Cost-effectiveness

A key driver in undertaking this journal review was ensuring continued cost-effectiveness of the LIS's journal collection. Chung¹⁴ defines

cost-effectiveness as 'the least expensive way to meet the objective'. This study aimed to promote 'value for money' by eliminating journals that were no longer being used sufficiently to warrant continued expenditure on their subscriptions. However, the investigation of cost-effectiveness could have gone further.

A key concept in demonstrating the value and impact of a LIS in financial terms is ROI, which is defined by Ward and Wooller¹⁵ as 'A form of cost-benefit analysis. The money gained or returned on an investment over a defined time period compared with the initial value of the investment'. Daniels¹⁶ describes how a paediatric hospital LIS measured the number of online articles read by staff in 2008. With a modest estimation of the cost of individuals obtaining these articles directly from the publisher, the LIS was able to show that it would cost the hospital significantly more not to have a LIS. Likewise, Chung¹⁴ used a ROI type analysis of cost-per-use in which 'Cost is defined as the sum of journal subscription prices and administration fees...Use is defined as the sum of nationally collected citation score...and the locally collected citation score'. Such a quantifiable measurement of access to journal articles would be a useful measurement of the LIS's financial acumen. Accordingly, if a similar journal review was undertaken, this would be a significant part of the project. However, while ROI measurements are useful, they cannot measure the full 'benefit' or 'impact' of journal articles on the knowledge/practice of staff. For this to be realised, a more holistic definition of 'impact' should be considered.

Impact analysis

Although this review did not consider the impact of journal subscriptions on the professional practice of Trust staff/implications for patient care, best practice for future journal reviews should undertake impact analysis. The rationale for impact analysis is highlighted by LQAF¹ in criterion 1.3c – 'The positive impact of library/knowledge services can be demonstrated' – and is well supported by the literature (see, for example Weightman and Williamson¹⁷). While usage statistics show quantifiable measurements of value in financial terms,

qualitative data particularly when collected during interviews using the 'critical incident technique' provides a 'richer picture'.

Conclusions

The 2009 journal review was enormously useful in informing decisions about subscriptions taken in 2010. However, the utility of the data collected during the review is much wider than journal subscriptions alone. The journal review has highlighted much scope for future areas of work for the LIS, particularly in marketing and promotion. Hill⁴ argued that 'libraries should no longer be thought of as book repositories, but be seen as a modern and essential part of a service to support the NHS'. This does not just involve expanding the role of libraries beyond their traditional remit to areas such as e-learning and local care pathway development, but also libraries must highlight the range of resources that they can offer in their traditional 'core' remit. The journal review highlighted the range of subscriptions available to some users who were not previously aware of these resources. The LIS now needs to continue to promote resources through a sustained marketing plan.

The fact that the TEWV LIS has undertaken a thorough review of costs and expenditure in relation to journals is significant because it shows that the service is making sustained efforts to make savings in this challenging financial climate, although cost-effectiveness could have been explored more comprehensively through further cost-benefits analysis. However, to ensure continued funding, the LIS needs to engage in marketing to ensure that all staff are aware of available resources and to continue to engage with information literacy issues to ensure that staff can make use of these resources. Impact analysis should be a component of a similar future journal review, and it should be undertaken to inform strategic planning of the LIS more generally. If the LIS can point to potent and specific examples of when information accessed via its services and resources, informed staff's professional practice or impacted, on patient care, then the value of the LIS to the wider organisation can continue to be demonstrated.

Suggested MESH subject headings

Library Science
 Library Services
 Library Collection Development
 Library Surveys
 Library Administration
 Interlibrary Loans

References

- 1 NHS Strategic Health Authority Library Leads (SHALL). NHS Library Quality Assurance Framework (LQAF) England. Version 2.1, 2010. Accessible at: http://www.libraryservices.nhs.uk/document_uploads/LQAF/LQAF_Version%202.1_June_2010.pdf (accessed 24 July 2010).
- 2 Glover, S., Addison, J., Gleghorn, C. & Bramwell, J. Journal usage in NHS hospitals: a comparison report of total usage at an acute NHS Trust and a specialist NHS Trust in the North West of England. *Health Information and Libraries Journal* 2007, **24**, 193–199.
- 3 Crudge, S. E. & Hill, M. L. Electronic journal provision in a health-care library: insights from a consultation with NHS workers. *Health Information and Libraries Journal* 2006, **23**, 87–94.
- 4 Hill, P. *Report of a National Review of NHS Health Library Services in England: From Knowledge to Health in the 21st Century*. Warwick: National Institute for Innovation and Improvement, 2008. Accessible at: http://www.library.nhs.uk/nlhdocs/national_library_review_final_report_4feb_081.pdf (accessed 24 July 2010).
- 5 Bond, C. S. Surfing or still drowning? Student nurses' Internet skills. *Nurse Education Today* 2010, **30**, 485–488.
- 6 Bertulis, R. Barriers to accessing evidence-based information. *Nursing Standard* 2008, **22**, 35–39.
- 7 Bertulis, R. & Cheeseborough, J. The Royal College of Nursing's information needs survey of nurses and health professionals. *Health Information and Libraries Journal* 2008, **25**, 186–197.
- 8 Garfield, E. The Agony and the Ecstasy – The History and Meaning of the Journal Impact Factor, *International Congress on Peer Review and Biomedical Publication*. Chicago, 16 September, 2005. Accessible at: <http://garfield.library.upenn.edu/papers/jifchicago2005.pdf> (accessed 15 September 2010).
- 9 Chung, H.-K. An analysis model of creating a core journal collection for academic libraries. *Library Collections, Acquisitions and Technical Services* 2009, **33**, 17–24.
- 10 Crookes, P. A., Reis, S. L. & Jones, S. C. The development of a ranking tool for refereed journals in which nursing and midwifery researchers publish their work. *Nurse Education Today* 2010, **30**, 420–427.
- 11 Jones, T., Hanney, S., Buxton, M. & Burns, T. What British psychiatrists read: questionnaire survey of journal usage among clinicians. *The British Journal of Psychiatry* 2004, **185**, 251–257.
- 12 Seeley, H. M., Urquhart, C., Hutchinson, P. & Pickard, J. Developing the role of a health information professional in a clinical research setting. *Evidence-Based Library and Information Practice* 2010, **5**, 47–62. Accessible at: <http://ejournals.library.ualberta.ca/index.php/EBLIP/article/view/7415/6963> (accessed 24 July 2010).
- 13 Publicover, M., Giles, G., Bolton, B., Shemilt, C. & Urquhart, C. Listening to our clinical colleagues: how are they finding their evidence to support Trust clinical governance? *Health Information and Libraries Journal* 2006, **23**, 57–61.
- 14 Chung, H.-K. Evaluating academic journals using impact factor and local citation score. *The Journal of Academic Librarianship* 2007, **33**, 393–402.
- 15 Ward, S. & Wooler, I. Study Day for CILIP Health Libraries Group (HLG): Glossary of 'ROI' Language Terms and Definitions – Prepared by Sandra Ward and Ian Wooler, 2011. Accessible at: <http://www.cilip.org.uk/get-involved/special-interest-groups/health/events/training-events/archive/Documents/CILIP%20HLG%20%20Study%20Day%20-%20Post%20Course%20Glossary%20of%20Terms.pdf> (accessed 14 May 2011).
- 16 Daniels, K. Got Value? Journal collection analysis is worth the effort. *Medical Reference Services Quarterly* 2010, **29**, 275–285.
- 17 Weightman, A. L. & Williamson, J. The value and impact of information provided through library services for patient care: a systematic review. *Health Information and Libraries Journal* 2005, **22**, 4–25.

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