

THE GREYLIT PROJECT: INTERNATIONAL CO-OPERATIVE CHALLENGES IN CAPACITY AND RESOURCES

Glenda Myers¹, Danielle Aloia², and Phindile Bekwa³

¹University of the Witwatersrand, Johannesburg

glenda.myers@wits.ac.za

² New York Academy of Medicine

daloia@nyam.org

³University of the Witwatersrand, Johannesburg

phindile.bekwa@wits.ac.za

Presented at the 2nd International Conference on African Digital Libraries and Archives (ICADLA-2), University of Witwatersrand, Johannesburg, South Africa, 14th – 18th November, 2011

Abstract

The broadest definition of grey literature covers a body of literature that cannot easily be found by means of conventional published channels, and includes government research, non-profit reports and reports from other primary resource materials. In the digital age, the reputation of the source is of prime importance. As such, the Institutional Repository (IR) is able to play an important part in validation of the integrity of material. The New York Academy of Medicine (NYAM) has invited the Witwatersrand Health Sciences Library (WHSL) to partner with them in adding suitable South African public health and health policy documents to their *Grey Literature Report*. In order to co-operate, WHSL has had to formulate a strategy for digitization of the material that it wishes to contribute to the *Grey Literature Report*. This paper describes some of the challenges applicable to the digitization of healthcare material at WHSL.

Introduction

Grey literature, in the broadest sense, covers a body of literature that cannot easily be found by means of conventional published channels. It includes government research, non-profit reports and reports from other primary resource materials (Huffine, 2010). Grey literature has often been described as the “proverbial needle in the haystack” in terms of the difficulty normally experienced in finding and retrieving such information (Mathews, 2004). In the digital age however, the “findability” of such information is no longer the driving challenge, but has been replaced by the reputation of the source as a key factor. Trust in the source includes issues such as peer review (professional integrity), persistence of access (citability) and availability of metadata (identification) (Huffine, 2010). The Institutional Repository (IR) is able to play an important part in validation of the integrity of material (Banks, 2005). The explicit value of making grey literature freely available on the Web overrides many concerns regarding material published by means of traditional scholarly norms (Palmer, Tefteau & Newton, 2008).

The New York Academy of Medicine (NYAM) Library has invited the Witwatersrand Health Sciences Library (WHSL) to partner with them in adding suitable South African public health and

health policy documents to NYAM's *Grey Literature Report*. This online bi-monthly report serves a community of over 800 international subscribers. In the African context, grey literature is often ephemeral and extremely difficult to locate, but it is beginning to play an increasingly important part in conducting the comprehensive literature searching required for the publication of systematic reviews in evidence-based healthcare (Benzies, Premji, Hayden, & Serrett, 2006). It is envisaged that digitized grey literature healthcare policy documents will also play an extremely important role in the South African National Health Insurance (NHI) system over the coming years. Issues surrounding the reputation of these grey literature sources has been addressed by this partnership, as both institutions provide institutional credibility.

In order to participate in this project, WHSL has had to formulate a strategy for digitization of the material that it wishes to contribute to *The Grey Literature Report*, in line with the University of the Witwatersrand's institutional repository (IR) and archival policies, as well as the collection development policy of the NYAM. This paper considers some of the challenges applicable to the archiving ephemeral healthcare material within the constraints of broader institutional, national and international imperatives.

The New York Academy of Medicine and its Library

In the heart of New York City, adjacent to Central Park, the NYAM is an extremely prestigious independent medical organization, founded in 1847 with the advancement of urban health as its primary goal. NYAM addresses the health challenges facing the world's urban populations through interdisciplinary approaches to policy leadership, innovative research, evaluation, education, and community engagement. Drawing on the expertise of diverse partners worldwide and more than 2,000 elected Fellows from across the professions, current NYAM priorities include the creation of environments in cities that support healthy aging; the strengthening of systems that prevent disease and promote the public's health; and the elimination of health disparities (New York Academy of Medicine, [2011]).

The NYAM Library houses one of the largest medical collections open to the general public in the United States. The main collection consists of over 550,000 volumes, as well as current journal subscriptions and a wealth of electronic resources. These materials are available for use as part of NYAM's commitment to enhancing the health of the public and to promoting scholarship in the history of medicine and public health.

The Grey Literature Report

The Grey Literature Report, a bimonthly publication of NYAM Library, started in 1999 and was originally intended only as an internal research tool, with a primary focus on the United States. *The Grey Literature Report* now disseminates new grey literature publications in health services research and selected public health topics to an international audience, with a rapidly growing interest in an expanded global environment. In addition to this alerting service, all resources are added and indexed in NYAM Library's Online Catalog. Documents included in *The Grey*

Literature Report include case studies, conference proceedings, fact sheets, government documents, research reports and white papers (Internet Scout Project, 2011).

As a result of technological development, NYAM has a growing interest in expanding the global perspective of the report, motivated by the desire to increase capacity to identify information produced globally by non-governmental organizations (NGOs) and international agencies. The NYAM Library holds a common concern in sharing best practices and lessons learned via the dissemination of information that is often hard to find, and a recognition that the capture of this information and the preservation of it, whether print or digital, may, in many cases, be the only record of documents in the future. The NYAM Library believes that *The Grey Literature Report* is beneficial in developing transparency of grey literature as an "added value" to research in health. This is particularly so in the case of global urban, public, environmental, and social health (Kaplan, Myohanen & Taylor, 2011). In this context WHSL, along with various other African libraries, was approached and invited to contribute to *The Grey Literature Report*.

The Witwatersrand Health Sciences Library (WHSL)

As Johannesburg grew in size and stature, the need for local medical training became evident, and the University of the Witwatersrand Medical School (UWMS) opened its doors to students in 1917. Although separated from the main University (Braamfontein) campus by a few kilometres, the UWMS is not autonomous and remains committed to the aims and ideals of the University of the Witwatersrand (Daubenton, 1982). The UWMS was catapulted into the international scene in 1925 largely as a result of the work of world-renowned anthropologist Raymond Dart, whose discovery of the Taung skull, another piece in the chain of evidence for the evolutionary "missing link" theory, still sparks international debate (Medical School, University of the Witwatersrand, 1979). The Witwatersrand Medical Library was established in 1926 by Professor Dart with a collection of 600 books (Myers, 1995). In 1995, the name of the library was changed to that of the Witwatersrand Health Sciences Library (WHSL) to reflect the merge of the Faculties of Dentistry and Medicine into the Faculty of Health Sciences. WHSL, in the absence of either a national or continental collection of healthcare material, is now a major medical library on the continent of Africa. The UWMS is the home of a renowned School of Public Health, so that much grey literature is likely to be available already either in WHSL's collection, or in the School's resource centre. WHSL has both the human capacity and ability to acquire and manage the resources necessary for contribution to *The Grey Literature Report*. WHSL is supported in this capacity by the University's institutional repository on which relevant grey literature documents can be placed in order to link through to NYAM's *Grey Literature Report*. Issues surrounding the intellectual property of members of the Faculty of Health Sciences, in terms of scholarly output that is not formally published using commercial publication channels, are addressed by the fact that copyright of such documents already vests in the domain of the University.

The Institutional Repository

The concept of institutional repositories (IRs) became prominent in 2002, as a result of the DSpace initiative between Hewlett Packard and the Massachusetts Institute of Technology (Banks, 2005). IRs potentially shift the onus of the preservation of digital materials from individual faculty members and research entities to their parent institutions, and allow new strategies to emerge for the acceleration of change in the publication of scholarship and in scholarly communication. For institutional repositories which are components in larger national or international-scale systems, development of these systems has not been a local priority, but this venture could provide "fertile ground" for the future (Lynch & Lippincott, 2005). However, in general IRs still need to develop best practices and guiding principles, and there is no established route that can be followed, nor are there sufficient case studies from which to establish procedures, options or risks (Palmer, Tefteau & Newton, 2008).

Faculty uptake of IRs internationally has been less than enthusiastic, especially where perceived value is not explicit. Each discipline has a culture of scholarship, largely defined by its own reward system and traditions (Davis & Connolly, 2007). Many academics use alternatives to IRs such as their personal Web pages and disciplinary repositories (such as *PubMed Central*), which are perceived to have greater prominence in the respective subject community than the affiliate institution's IR. Reasons given for not using the IR include redundancy with other modes of disseminating information, the learning curve, confusion over copyright, fear of plagiarism and "having one's work scooped", associating one's work with material of inconsistent quality, and concerns about whether posting a manuscript constitutes "publishing" (Davis & Connolly, 2007).

Where submission to an open access repository has been mandated by law in the public interest, uptake has been far more successful. For example, the National Institutes of Health (NIH) Public Access Policy ensures that the published results of NIH-funded research will be freely available. This requires scientists to submit final peer-reviewed journal manuscripts that arise from NIH funds to the digital open access archive *PubMed Central* (PMC) **upon acceptance for publication**. To help advance science and improve human health, the NIH policy requires that these papers are accessible on PMC no later than 12 months after publication (National Institutes of Health, [2011]). PMC currently reports the total number of articles archived in this collection since 2008 as 2.2 million, with 917 contributing journals depositing all articles; 298 journals depositing NIH-funded articles; and 1534 journals depositing selected articles (National Centre for Biotechnological Information, PMC [2011]).

There can be said to be two opposing philosophies for the justification of institutional repositories: one that views IRs as *competition* for traditional publishing; and another that sees IRs as a *supplement* to traditional publishing (Davis & Connolly, 2007). Grey literature typically does not constitute a threat to traditional publishing, as it has never been commercially "published" in the accepted sense of the word. Institutional repositories may better serve to disseminate grey literature documents such as pamphlets, bulletins, visual conference presentations, and other materials that are typically ignored by traditional publishers (Correia & Neto, 2002).

The institutional repository, linked to the dissemination of material via *The Grey Literature Report*, therefore probably constitutes the most effective method for the management and dissemination of grey literature in the field of healthcare, especially for Africa.

Challenges Facing Africa

Uptake of institutional repositories and open access archives in Africa has been slow because of issues relating to acceptance of electronic information; absence of information management strategies and policies; inadequate technical infrastructure; copyright and intellectual property rights concerns; and most importantly lack of awareness and understanding of the concepts involved and a lack of funding (Chisenga, 2006).

In general, it is acknowledged that obtaining African healthcare documents is an almost impossible task. Initiatives such as the African Index Medicus (AIM), a collaborative effort by the World Health Organization (WHO) and the Association for Health Information and Libraries in Africa (AHILA) have been established in order to provide access to healthcare information published in or related to Africa. Despite acknowledgement that there is "a wealth" of untapped African health and biomedical sources of information to be found in "books, reports and studies from international development agencies, nongovernmental organizations and local institutions", the most frequently indexed material on AIM reflects published journal articles. Although abstracts are freely available via this channel, the full text documents still remain elusive, despite increased use of links to electronically available documents of late (AFRO Library and Documentation Centre, 2006).

The situation is improving, in terms of scholarly peer-reviewed published material, with the African Journals OnLine (AJOL) initiative. AJOL aims to make available electronically difficult-to-access African-published research papers, which are generally under-utilised, under-valued and under-cited in the international and African research arenas (African Journals OnLine, [2011]). Documents from AJOL are not free, however and, more importantly, there are gaps in this collection as there are in WHSL's own print collection, simply because orders never arrive, despite valiant efforts to claim these missing issues.

Thus most of these initiatives cover published material, while the grey literature remains for the most part unobtainable. In this respect, it is noted that African grey literature sources remain more prevalent in print than in electronic form (Muswazi, 2001). *The Grey Literature Report* material, freely available on the Web, has the potential to offer valuable content not only for researchers attached to the UWMS, but also for healthcare workers throughout Africa. This is especially the case if African material is added to *The Grey Literature Report*.

Strategy

NYAM has created a special collection module of its grey literature database in order to allow contributions from entities outside of the physical space of the Academy. This module is

proprietary with username and password access, which are given to the specific organizations offering to contribute grey literature materials. This system can be accessed at any time, accommodating the time differences between Africa and the United States. The collection process is seamless. WHSL, in particular, will be able to add a persistent link to an existing document in the appropriate format, such as HTML or PDF, and a title caption to the fields in the database. The items entered into the system by either external entities or internal collectors are captured by NYAM cataloguers, catalogued in MARC format and distributed through OCLC, the NYAM Library catalogue and *The Grey Literature Report*. Catalogued records are indexed using Medical Subject Headings (MeSH) from the National Library of Medicine (NLM).

WHSL has devised a workflow process for contributing to *The Grey Literature Report* that includes

- the identification and location of suitable grey literature
 - from WHSL's own collection (including what is already available on the University's IR);
 - from other collections within the Faculty; and
 - from organisations external to the UWMS, but with which WHSL has a close working relationship, such as the National Health Laboratory Service (formerly the South African Institute for Medical Research), the National Institute for Occupational Health, and the National Institute for Communicable Diseases;
- the acquisition of a suitable scanner and software for quality control;
- staff training
 - in the use of the scanning equipment and software;
 - in the use of the software for uploading onto *The Grey Literature Report* (to be achieved virtually with NYAM staff using Skype);
- organisation and filtering of material in accordance with NYAM's grey literature collection development policy
 - management of intellectual property rights, where necessary;
- scanning and digitization of material where necessary;
- uploading onto the University's IR in accordance with its digitization policies
 - tagging and assigning metadata to records;
- uploading documents to NYAM's *Grey Literature Report*.

Issues relating to document storage and preservation are dependent on the robustness of the University's IR server/s. However, an added advantage to WHSL in its collaboration with NYAM is the fact the documents will be backed up by NYAM in accordance with the latest international standards.

Challenges facing WHSL

One of the greatest challenges facing WHSL in terms of the digitization of its grey literature is that it is geographically isolated from the University's proposed Digitization Centre. There is little contact with staff in the Digitization Centre as it is not always feasible to attend meetings

physically on another campus, and the only scanning equipment suitable for digitization is located several kilometres away from WHSL. As WHSL is a busy academic library, fully integrated into the teaching, learning and research activities of an extremely large Faculty, it is also practically impossible to release WHSL staff from other duties in order to travel to another location to scan material. Many staff members do not have their own transport, and it is not always possible to rely on messenger services in order to transport both material and staff members to a different geographic location. Much of the identified and valuable print grey literature that is available in WHSL's collection has unfortunately been bound for preservation, and the paper sizes are in old pre-metric format, such as foolscap. Such material requires specialised digitization equipment.

While issues such as virtual collaboration, meetings and training can surely be overcome with the use of modern technologies, such as Skype, the practicalities of transporting valuable material to different campuses in order to share equipment remains. It is for this reason that the acquisition of a suitable scanner on the Medical School Campus is fundamental to the success of the collaborative project with NYAM. However, this project has received the full support of the University Librarian as well as the Faculty of Health Sciences, so it is to be hoped that these particular challenges will not prove insurmountable.

On the brighter side, staff capacity exists in that WHSL has been at the forefront of converting its print media collection to electronic format since 2002, so that considerable expertise in the development and management of an electronic collection has been gained. Owing to the rapid transition from print to electronic journals in particular and the subsequent growth in its journal collection, WHSL has seen the number of the Interlending (ILL) transactions it handles dwindle drastically, particularly as far as requests for material not available at WHSL are concerned. Researchers, academic staff and students have been quick to appreciate the advantages that electronic access has afforded a decentralised medical campus with many teaching hospitals covering a considerable geographic footprint. Staff from the ILL section at WHSL will be redeployed on the "GreyLit" project; job descriptions have already been changed; and the challenges afforded by new areas of responsibility are keenly awaited.

Conclusions

"It is fair to say that the ease of access to information is one measure of how much societies value that information" (Banks, 2005). During the era of the apartheid regime, South Africa simply ceased to exist in terms of many international healthcare organisations. In fact, a 1995 article on socio-economic grey literature in Southern Africa defines this particular region as "comprising Angola, Botswana, Lesotho, Malawi, Mozambique, Namibia, Swaziland, Zambia and Zimbabwe" (Kwafo-Akoto). South African healthcare grey literature of this period likewise is as inaccessible as if it had never existed, and the message about its value to society is very clear.

Institutional repositories could eliminate the need for the advocacy of grey literature, and make formerly unavailable material accessible to all by making use of proper metadata, as part of the

open access publishing movement (Banks, 2005). WHSL has been unsuccessful in locating any repository of grey literature relating to healthcare anywhere in Africa. Its contribution to the "GreyLit" project therefore will add significantly to the ability to access valuable "hidden" South African grey literature in the field of healthcare, and bring to the fore the potential role of grey literature in health services research, public policy, and critical decision making.

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