



Australian National E-Health Strategy

Submission from ALIA

The Australian Library and Information Association (ALIA) is the professional organisation for the Australian library and information services sector. It seeks to empower the profession in the development, promotion and delivery of quality library and information services to the nation, through leadership, advocacy and mutual support. ALIA represents 6000 members and over 12 million members of the public.

The Health Libraries Australia (HLA) group of ALIA is the peak body representing library and information staff and services in the health and biomedical sector; it has over 400 members, approximately 80% personal and 20% institutional.

ALIA values this opportunity to make a submission to the consultancy charged with developing a national e-health strategy. The submission is restricted to comments on the potential to improve knowledge support to Australia's health systems.

Introduction

Knowledge support is defined as “when knowledge is delivered to clinicians and patients at the point of knowledge need, either in the form of facts or the form of guidelines or protocols, or embedded in the pathway; in knowledge support a characteristic of the patient's condition, for example the diagnosis, is used to alert or remind the clinician, and if possible the patient, about the existence of relevant knowledge.” [1]

Health librarians are responsible for knowledge support to clinicians, managers, educators, researchers and some directly serve patients or health consumers. Knowledge support resources and services are increasingly delivered electronically. Within Australia coverage of knowledge support is patchy and inequitable with regard to both the availability of content to various groups and the means of accessing knowledge resources / services..

National e-health planning to date has focussed on the clinical decision support stream (systems designed to improve clinical decision making related to diagnostic or therapeutic processes of care; activities ranging from the selection of drugs or diagnostic tests to detailed support for optimal drug dosing and support for resolving diagnostic dilemmas [2]) without framing this in the context of the broader need for knowledge support. Clinical decision support resources need to be authoritative, current and integrated with clinical information systems. They must be kept up-to-date and clinicians would benefit from being able to search seamlessly from decision support information to the broadest range of evidence-based knowledge resources available to them.

True decision support information (integrated into clinical systems), like clinical guidelines, will be contested and not guaranteed to change behaviour unless implemented well.[3] A well-developed system within which decision support information is created, deployed and kept updated is essential to achieve clinician

acceptance. Additional support is needed for questions not answered by decision support systems.

What the health libraries sector looks like

- Health is a diverse sector covering hospitals and other clinical facilities, research institutes, pharmaceutical and biotechnology companies, government departments, regional health services, professional colleges, universities, cooperative research centres, not-for-profit and community organisations, and parts of public library services.
- The Australian Libraries Gateway on the National Library of Australia <http://www.nla.gov.au/apps/libraries> site shows 448 self described health/medical libraries.
- There is no policy direction for purchasing and providing access to health knowledge resources and services on a national scale; neither is there any coordination of services or resource provision although some cooperative agreements and networks do exist in a number of sectors to greater or lesser degrees in states and regions.

Lessons from other jurisdictions

A more wholistic approach to knowledge support has been in place in the US and the UK for some time.

The UK has the National Knowledge Service, of which the National Library for Health is an important component. The US has the National Library of Medicine, the National Network of Libraries of Medicine., and the National Institutes of Health Libraries.

Formation of a National Library for Health for Australia would be useful. A look at the types of information provided by the UK and US national libraries gives a picture of the type of capability that could be developed.

In the US, the National Library of Medicine (NLM) <http://www.nlm.nih.gov/> plays a critical role in support of clinical care, research, biotechnology advances, public health, basic research, and system effectiveness reviews. For instance:

- A national drug information portal <http://druginfo.nlm.nih.gov/drugportal/drugportal.jsp>
- Specific collections of resources and support for:
 - Human Genome Resources
 - Biomedical Research & Informatics
 - Environmental Health & Toxicology
 - Health Services Research & Public Health
 - Health Information Technology
 - Training & Outreach
 - Network of Medical Libraries
- NLM produces over 100 databases for specific purposes <http://www.nlm.nih.gov/databases/>

The National Institutes of Health (NIH) Library <http://nihlibrary.nih.gov/> is an open stacks biomedical research library whose collection and services are developed to support the programs of the National Institutes of Health and selected U.S. Department of Health and Human Services (HHS) agencies. The mission of the NIH Library is to support the biomedical and behavioural research needs of the NIH community with a comprehensive range of scientific, medical, and administrative information and support services. 'Informationist' librarians <http://nihlibrary.nih.gov/LibraryServices/Informationists.htm> provide 'a special liaison or librarian-in-context program'.

The UK has a National Knowledge Service (NKS) <http://www.nks.nhs.uk/> and a National Library for Health <http://www.library.nhs.uk/>. The NKS runs 3 work streams:

- The Best Current Knowledge Service, responsible for the production and procurement of the evidence that clinicians and patients need.
- The National Library for Health, responsible for the organisation and mobilisation of knowledge to meet the needs of users, and the National Knowledge Infrastructure, which will provide the technical standards and solutions to allow knowledge to be delivered where and when it is needed, either as a result of searching or as a prompt or as a message sent directly to the clinician, patient or healthcare professional, drawing their attention to new knowledge which is essential for their care.
- The National Decision Support Service.

In both the US and the UK knowledge support is provided to empower health consumers through NHS Choices <http://www.nhs.uk/Pages/homepage.aspx>, and NLM's Medline Plus <http://medlineplus.gov/>. In Australia, HealthInsite <http://www.healthinsite.gov.au/> and the Better Health Channel <http://www.betterhealth.vic.gov.au/> have similar roles though there remains tremendous potential to improve coordination in the production of quality best evidence guidelines for patients and health consumers.

The UK Council of Health Informatics Professionals (CHIP) notion of constituencies in health informatics is useful. It gives a picture of the many streams and different skill sets for those working in informatics. It is instructive to examine current e-health activities in Australia against this broader perspective.

UKCHIP Constituencies

<http://www.ukchip.man.ac.uk/About/Constituencies>

- Information and Communications Technology (ICT) - The development, management and support of the ICT infrastructure in a healthcare organisation.
- Health Records - The collating, organising, accessing and archiving of patient/client records.
- Information Management - The retrieval, analysis, interpretation and presentation of health data and information.
- Knowledge Management - Providing the knowledge to support health professionals and management staff in their education, training, development and professional practice.

- Senior Health Informatics Managers and Directors of Service - Senior Managers and Directors may come from any of the specialist areas, and Directors will report to, or be operating at, organisational Board level.
- Clinical Informatics - The capture, communication and use of patient data and clinical knowledge by doctors and other health professionals.
- Education, Training and Development (ETD) - The assessment of health informatics ETD needs and the planning, delivery and evaluation of ETD courses and programmes.
- Research - Research staff gather data, through both primary and secondary sources, which they evaluate objectively to provide evidence for best practice in health informatics.”

RECOMMENDATIONS

Australia needs a knowledge support service with the following capabilities:

1. Australia needs a strategic e-health framework that can drive change in policy and coordinate and integrate the efforts of disparate groups and a framework that looks beyond the overly narrow focus of work done to date.
2. A true national knowledge service is needed, not a focus simply on clinical decision support tools.
3. Infrastructure (such as a National Library for Health) to leverage the efforts of all involved in providing knowledge support.
4. A National Library for Health cannot be simply another website. The focus must be on improving integration of access to all resources available to clinicians and on producing (or coordinating the production of) best evidence within a process that has clinician endorsement.
5. A policy framework including a national information / knowledge resources, collection and access policy, that identifies how local and national efforts can be better coordinated and specifies selection guidelines and evaluation criteria to aid decision about the adoption of knowledge support products.
6. A national articulation for how knowledge (including decision support and clinical guidelines) is to be developed and deployed. The role of different agencies involved in some of this work also needs to be clarified (National Institute of Clinical Studies, National Health & Medical Research Council, Australian Commission on Safety & Quality in Health Care, National Health Call Centre Network, professional associations and other guideline developers).
7. Information standards based development of decision support resources so that integration with other online resources is enabled.
8. A structure that recognises and supports the knowledge requirements of the total health system (clinical, research, education, biotechnology, public health, biosecurity, consumer decision support).
9. Support for the existing network of health libraries to be able to deliver integrated access to electronic resources, those that may be identified as core national content (whether purchased or created), and those that are available at a local library level to a specific client group. Integration relies upon libraries

using National Information Standards Organization (NISO) <http://www.niso.org/home> and Web Services based development methodologies. Many libraries outside of the university sector struggle to deploy integrated access to electronic resources in a best practice manner. National support is needed to ensure health libraries are able to contribute effectively to the national e-health agenda.

10. National coordination of procurement and licensing for published electronic resources (in much the same way as it is done by the Council of Australian University Librarians) <http://www.caul.edu.au/datasets/>.
11. A mixed model of knowledge support is needed. Australia's health system is not unitary as it is in the UK. The majority of health libraries are in the publicly funded sector and have no capacity or agreed scope to provide knowledge support outside of the public sector. A level of national provision for resources and information deemed to be "in the public interest" will need to be identified and appropriately funded. An agreed policy framework is needed to identify the roles and responsibilities of different parts of the health system in delivering knowledge support.

Conclusion

The value of knowledge services is perhaps best summarised by the following quote from Professor Sir Muir Gray, Chief Knowledge Officer of Britain's National Health Service:

Knowledge is the enemy of disease. The application of what we know from research, from experience, and through the analysis of data will have a bigger impact on health and healthcare than any single drug or technology likely to be introduced in the next decade. The knowledge from these three sources can prevent and minimise the seven major problems encountered in every healthcare system:

- clinical errors;
- poor quality care;
- poor patient experience;
- waste;
- unknowing variation in policy and practice;
- failure to adopt high value innovations;
- over-enthusiastic adoption of low value innovation.[4]

The Health Libraries Australia group supports the development of a national e-health strategy while recommending knowledge support be included as an integral part of any such strategy. Health Libraries Australia is available to respond to any questions that Deloitte's would like to ask.

References

1. Muir Gray JA (2006) Appendix 2: Decision Support Programme – knowledge support, computer-based clinical decision support systems, and patient decision aids, p. 3. At: <http://www.nks.nhs.uk/decisionsupport.pdf>. (Accessed 8 June 2008).
2. Agency for Healthcare Research and Quality. *Glossary*. At: <http://psnet.ahrq.gov/glossary.aspx>. (Accessed 8 June 2008).
3. Sanson-Fisher RW, Grimshaw JM, Eccles MP The science of changing providers' behaviour: the missing link in evidence-based practice *MJA* 2004;180(5):205-206. http://www.mja.com.au/public/issues/180_05_010304/san10013_fm.pdf
4. Muir Gray JA (2006) *The National Knowledge Service Plan 2007-2010* <http://www.nks.nhs.uk/nksplan2007.pdf>. (Accessed 12 June 2008).

Additional Reading

Hamill C and Gilbert C. (2005) *Decisions, decisions: libraries bandwagons and clinical decision support systems (CDSSs)*. Paper presented at the 3rd International Evidence Based Librarianship Conference, Brisbane, 16-19 October 2005. At: <http://conferences.alia.org.au/eb2005/Hamill.pdf>. (Accessed 8 June 2008).

Submission prepared by:

Cheryl Hamill
Fremantle Hospital & Health Services Librarian
PO Box 480
Fremantle WA 6959
08 9431 2780
Cheryl.Hamill@health.wa.gov.au

Member: Executive of Health Libraries Australia, Australian Library and Information Association

Reviewed by:

- HLA Executive:
 - Heather Todd, Lisa Kruesi, Jenny Hall, all at University of Queensland
 - Melanie Kammermann (HLA News Editor)
 - Veronica Delafosse, Caulfield General Medical Centre
 - Mary Peterson, Royal Adelaide Hospital/Institute of Medical & Veterinary Science
 - Bronia Renison, Townsville Hospital
 - Sheelagh Noonan, Pfizer
- Lindsay Harris, Queen Elizabeth Hospital, South Australia
- Cecily Gilbert, Sir Charles Gairdner Hospital, Western Australia
- Garry Hall, Queensland Department of Health
- Tricia Brooks, South Australian Department of Health
- Kirsten Nekrews, Manager, Information Resources and Services, WA Department of Health
- Saroj Bhatia, Library Director, Canberra Hospital, ACT
- Ann Ritchie, Director Library Services, Northern Territory Department of Health
- Sue Hutley, ALIA Executive Director