Library services for health providers and related professionals in Delaware

Introduction

This paper focuses on the best practices for medical, public health, and academic libraries in the provision of information services to care providers, other professionals and students/trainees. Care providers include physicians and nurses as well as allied health staff. Other professionals include hospital administrators, researchers, safety officers, information specialists, etc. Information services for patients and other health consumers will be addressed elsewhere.

The primary components of the paper are:

- History of medical education and of medical/health libraries in Delaware
- Description of information needs and resources currently available with comparative data concerning resources and services
- Standards for hospital libraries
- Standards for public health libraries
- Best Practices with scenarios and examples
- Best Practices through networking
- Value-Added Services

History of medical education and of medical/health libraries in Delaware

Medical Education

Delaware has long had undergraduate programs to prepare students for medical school and other clinical professions, but no medical school. Medical education has consisted of in-hospital training of medical students and residents, and programs offered for the continuing education of physicians. The teaching hospitals in Delaware (Christiana Care Health System, Delaware Psychiatric Center, Dupont Hospital for Children, St. Francis Hospital, Veterans Administration Medical Center) have offered training for medical and nursing students, residents and fellows for decades.

In recent years, some hospitals began residency programs in additional fields such as dentistry, pharmacy and pastoral care. Beebe School of Nursing, originally one of many hospital-based nursing school, is the only remaining nursing school that is not part of a

larger college or university. The evolution of nursing education has led to the creation of bachelors, masters and doctoral nursing programs, also with in-hospital training. Attending physicians participate in hospital and association-based continuing education classes.

The Medical Society of Delaware was founded in 1789, and is one of the oldest medical societies in the United States. Its mission is to guide, serve and support Delaware physicians, and to promote the practice and profession of medicine to enhance the health of Delaware communities. Although continuing education programs are offered, education is not a focus of the Society. For many years, the Society was headquartered in the Delaware Academy of Medicine (DAM) building and the DAM took more responsibility for educational programs. The Delaware Academy of Medicine's mission has always included continuing medical education and until 2006, housed meeting rooms for educational programs.

Delaware Institute for Medical Education and Research (DIMER) was created in 1969 as an alternative to a state-supported medical school to provide opportunities for Delaware residents to obtain a high-quality medical education. Through DIMER, Delaware contracts with Jefferson Medical College to serve as Delaware's medical school. The state of Delaware pays Jefferson Medical College to reserve at least 20 admissions each year for Delaware residents. DIMER has a similar relationship with the Philadelphia College of Osteopathic Medicine for least 5 admissions each year for Delaware residents. ¹

Delaware has some undergraduate programs that prepare students for dental school and for careers in dental hygiene, but no dental school. The Delaware Institute For Dental Education And Research (DIDER) was established in 1981 to facilitate compliance with the law requiring dentists to complete a year of general practice residency training. DIDER used the model developed by the DIMER, to identify Temple University as a partner in dental education. DIDER's goals include postgraduate training programs.²

Medical Library Services

The Delaware Academy of Medicine was founded in 1930 by physicians and dentists whose goals included the provision of a professional library and a meeting place, and improvement of the quality of medical care in Delaware³. That professional library was the primary source of medical library services in Delaware until the later decades of the 20th century. For much of its history the DAM library served only physician members, and later opened library services to affiliated health professionals and health consumers.

During the second half of the 20th century, there was substantial, but uneven development in library services for health care professionals. For example, most of the hospital-based, diploma (RN) nursing schools in Delaware (and their libraries) closed. Many of the hospitals that had libraries offered services only to physicians, so the loss of the nursing schools represented a loss of information services to graduate nurses. Another example was the Wilmington Veterans Administration Medical Center, one of the first ten

Veterans Administration hospitals built after World War II, where there was an active library service for many years. Service activity was limited in the 1980s by a severe reduction in staff. Other hospital library services were lessened or eliminated by closures and mergers, such as the closing of Riverside Hospital as an independent hospital and the merger of Kent General and Milford Memorial into Bayhealth Medical Center.

The DAM responded to the downturn in library services by establishing, in 1982, a circuit riding librarian program that helped hospitals provide professional librarians, on a part-time basis, and services from the DAM to some Delaware hospitals, including Delaware Psychiatric Center (now DSAM), St Francis, Nanticoke, and others. Although there have been many positive developments, such as the return of full employment of a professionally trained librarian at the Dupont Hospital for Children, Delaware hospital librarians entered the current millennium with concerns for their libraries' very survival. Libraries, as non-revenue-generating hospital departments, were often seen as a soft targets for cost reductions. Only hospitals with residency programs were required by any agency to provide library services, and such requirements did not address the information needs of nurses, and non-clinical staff.

The only hospital in Delaware that consistently employed a team of professionally trained staff and supported full library services during the past 30 years was the Christiana Care Health System. Christiana Care staffs two clinical libraries in the hospitals, and consumer health section within the Wilmington Hospital Library, and a consumer health library in the Helen F. Graham Cancer Center. After a long history of cooperation between the Delaware Academy of Medicine (DAM) and Christiana Care, the DAM offices relocated to the Christiana Hospital campus in 2006. At that time the print collections of the Christiana Hospital Library and the DAM were merged, enhancing the resources available to both constituencies, and by interlibrary loan to all libraries in Delaware.

Health professionals who were not affiliated with the DAM, hospital, nursing school or other academic libraries, often had little access to medical information other than their small personal libraries. As noted above, even professionals affiliated with such institutions often lost library services through budget cuts, etc. Many health care professionals worked independently, like psychologists, or for small organizations like nursing home staff. While those individuals had limited access to the medical literature through public libraries, or by traveling to a library with medical holdings, they rarely could obtain literature searches or printed information from libraries in time to make decisions about patient care.

Public health professionals were another group whose access to medical literature was inconsistently supported. In Delaware, most public health professionals are employed by the Division of Public Health. The Division's work has included responsibility for responding to critical health issues and disasters, improvement of emergency medical services, and the management of three public nursing homes. In the past, the Division had provided a library for employees, but that was phased out. At other times, the Division contracted with the DAM to provide library services remotely.

Current information needs and resources available

Information Needs

Care providers and public health officials are expected to make decisions using appropriate resources based on searches of reliable evidence in the literature. The literature may be needed on a rush basis to support immediate patient care, or respond to an infectious disease outbreak. It may be needed in a timely manner to develop guidelines for treatment, to choose the best diagnostic equipment, or to support clinical education.

A recent study by Perley, et al., noted that, "...physicians wanted quick, efficient access to quality-filtered patient care information. Some physicians reported that they preferred to access information online, others preferred to access information in print form, and some reported that they were comfortable with both formats. Those who preferred to access information electronically wanted to be mobile as they did so. Some physicians expressed interest in working with the librarians to develop their online skills and organize their electronic documents."

In the inpatient environment, literature searches, journal articles and other resources are often requested on a same-day basis. Hospitals operate round-the-clock so care providers need access to online and print resources at all times; public health officials must respond to emergencies 24/7. As only one third of the medical literature is freely available on the Web, health professionals need services such as interlibrary loan to access materials from other libraries. Given the time pressures on clinicians, speedy and accurate information services are needed to save them time as well as to improve care.

Current Issues that Generate Information Requests: Patient Safety

Due to publicity about unfortunate medical errors, the public is currently aware that consequences of errors may be drastic. Hospitals throughout the country are developing programs to prevent errors, to respond to patients and families who have been harmed, and to fully examine the causes of errors. All three of these activities require that clinicians, managers and patients be well informed. In November 2007, hospitalized newborn twins were administered an enormous dose of a blood thinner (heparin). Due to the celebrity of the parents, this medical error was reported by news medial throughout the country. After one of the patients began to bleed, decisions were made to select the appropriate tests, and the appropriate treatment. Hospital administrators then notified the parents and answered their questions. Later, the hospital staff reviewed how the normal steps to prevent medical errors were not taken and how such an occurrence would be prevented in the future. The hospital then made changes to the handling and storage of heparin and required retraining of nurses and pharmacy staff. At each step there were urgent information needs to address.

Current Issues that Generate Information Requests: Evidenced-based practice

Information needs continue to grow as the amount of information produced in print, in the media, and online. Health care professionals need to find high quality studies and reports on which to base decisions. This effort of finding *reliable* information is called evidence-based medicine or evidence-based practice. Expert searchers know how to perform complex searches of a variety of databases and how to limit retrieval to high-quality studies in journal articles, books, and online texts. Once identified, the materials must be retrieved in print or online in time to inform decision makers. The Perley study also noted that physician

"...respondents acknowledged that their search strategies were not always effective and that "Googling" health information does not necessarily result in quality-filtered information... Taken as a whole, the findings suggest that the preference for print versus online resources was not necessarily tied to user age, clinical specialty, or degree of commitment. More often, the choice of format had to do with convenient access to available resources and the knowledge and skills necessary to negotiate existing information systems to find relevant, quality-filtered information in the time allowed. Information that was not available when it was needed was simply not useful..."

While the most frequent reason that clinicians give for seeking information is patient care, expert searching and document retrieval is also needed to support public health, research, development, clinical education and health care administration. In the public health arena, Delaware was ranked lower in 2007 than in 2006. The rankings, determined by the United Health Foundation, noted that Delaware has a high infant mortality, high incidence of infectious diseases, high incidence of binge drinking, and a high violent crime rate. Clinicians, public health officials, state government staff and the general public all need information to address these issues. There is a great deal of information available and people need assistance in finding comparative studies and in determining best practices in other states and countries where the issues have been more successfully addressed.

Resources currently available

The resources needed to deliver health information to providers are labor, facilities and materials (onsite, online or obtainable). In Delaware, a variety of medical institutions offer a range of resources, some with as little as a reading room, others with libraries staffed with trained professionals and skilled paraprofessionals. As noted above, hospital libraries and the DAM are the major providers of medical library services in Delaware. Those libraries will be the focus of this report with additional information provided about academic libraries in institutions with strong health science programs, and about services to public health professionals.

A list of twenty standard measures was developed to compare resources in Delaware hospital libraries [Appendix A]. These were derived from the "Standards for Hospital Libraries 2002 with 2004 Revisions" developed by the Hospital Library Standards Committee of the Medical Library Association.¹¹ The consultants visited each hospital

and spoke with the library director or administrator to determine which resources are currently available. The majority of resources are located in New Castle County where there are six hospitals with staffed libraries (the Christiana Care Health System has staffed libraries in its two acute care hospitals, Christiana and Wilmington).

In addition to their print and online resources, the health science libraries of New Castle County have a long history of cooperation so that the print collections of most of these libraries are available (through interlibrary loan) to the professional staff at the other institutions. In New Castle County all of the hospital libraries with the exception of St. Francis participate in DOCLINE, an automated system for routing interlibrary loan requests to libraries throughout the nation (and beyond). In Kent County, Bayhealth Medical Center Medical Library, and in Sussex, Beebe Medical Center Health Sciences Library participate in DOCLINE.

Standards for hospital libraries

The MLA standards referenced above are the most specific and the offer a broad perspective of all potential library users. Other sources of standards have been those of the Joint Commission on the Accreditation of Healthcare Organization, those of residency accreditation programs, and those of state or federally funded hospital libraries. The Joint Commission's standards migrated from specific library standards to more general standards for information management. This is a logical linkage of similar hospital activities such as management of medical records, information technology, and library services, but means that the Joint Commission no longer provides standard measures of specific library resources and services. In recent years, the Joint Commission has developed an applied tracer methodology for evaluating hospital performance. The methodology, which uses hospital records to follow actual patients through their care path, may not touch on library services during accreditation surveys.

In Delaware, as in most states, there are teaching hospitals with residency programs and close ties to medical schools, and there are non-teaching hospitals. Hospital residencies are one to five yearlong educational programs for graduates of medical or dental schools. At the completion of the programs, the physicians or dentists are eligible for accreditation as specialists. The residency programs receive accreditation from separate and independent organizations with varying expectations of library services. In general, most accrediting bodies require readily accessible library services for residents. The requirements focus only on residents, so these standards do not measure services to nurses, allied health professionals, other caregivers, or hospital administrators.

Standards for public health libraries

The Medical Library Association has no standards for public health library services. Given the different types of public health libraries, the Medical Library Association's Public Health and Health Administration section has focused on journal holdings in their work on standards. The current list of core journals for public health libraries is under revision, but is available online. ¹² There appears to be no national governing agency in the

United States that has assumed a coordinating policy, advocacy or information delivery role in this area. There is a U.S.-based organization, the Public Health Accreditation Board, establishing a voluntary national accreditation program for health departments. Through the group, Partners in Information Access for the Public Health Workforce, librarians are developing recommendations for the accreditation board. All of this is in the planning stages as of June 2008.

Most public health libraries are within the library systems of universities with schools of public health; some state and local government entities have public health libraries. Examples include the Centers for Disease Control, the Minnesota Department of Health, the Los Angeles County Department of Public Health, the Texas Department of State Health Services, and the Rhode Island Department of Health.

The William Hallock Park Memorial Public Health Library in New York City is another example of a full service, government-supported library. The collections include over 6000 books, approximately 800 videos and approximately 200 journal titles. These resources are available to all Department of Health and Mental Hygiene employees and the library is open to the public; the public is also served through the library's web site. Like many public health libraries, the Park Memorial Library is funded to provide full services to employees of the New York City Department of Health and Mental Hygiene, and only very limited services to other government departments or other public health professionals.

In Canada, there are currently 36 public health units in the province of Ontario. Sixteen of those health units have libraries and/or staff responsible for library services. The librarians who staff those units and other public health librarians formed the Ontario Public Health Libraries Association (OPHLA). The OPHLA mission is to build and promote library and information services for a strong public health system in Ontario. As part of that mission OPHLA has developed a set of core competencies for librarians in public health. OPHLA advocates for the inclusion of information services in standards for public health units. An example of their positions are posted in a letter to members of the Ontario Public Health Standards Technical Review Committee:

OPHLA members feel that one of the requirements for a successful KTE [Research and Knowledge Exchange] program is the presence of, or access to, accredited information services at the health unit level, and active participation of a trained Information Professional in the KTE team/program.

Collaboration with these professionals is essential to achieving optimal results in any research project. Many of our members have been providing research and reference services to Ontario public health unit staff for decades. At least three quarters of the health units in Ontario currently have access to library services, either through an onsite library professional or contracted library services. The provision of evidence-based research to staff is an integral component of the services that we provide. Public health librarians perform complex, comprehensive and systematic literature searches in support of staff projects, provide individual and team training sessions on evidence retrieval, and continuously develop materials to assist end users in their research efforts.

Basic knowledge of the principles of searching must not be considered a substitute for the expertise of a trained information professional. We recognize that not all health units have access to the services of a library professional, and we wholeheartedly believe that learning these skills will prove valuable for public health professionals. However, performing a literature search which meets Evidence-Based Medicine criteria is a complicated and lengthy undertaking requiring advanced information retrieval techniques and access to resources which are not necessarily available to individual public health professionals. Effective evidence-based decision making requires that decision makers have access to the entire body of evidence on a given topic. Decisions based upon incomplete or faulty literature reviews could have potentially detrimental consequences for public health practice.¹⁴

Best Practices in Hospital Library and Public Health Library Services

The library standards grid in Appendix A presents the elements of good library resources and services. To move from good to best requires more than having all of the elements in place. Best practice requires many additional aspects such as administrative support, librarians who seek out and evaluate new technologies and resources, library staff members who are knowledgeable about their customers work, the care services provided by the hospital, and future programs planned by the hospital. How the library staff, library resources, customers, and hospital administrators interact and support one another are more difficult to measure.

Public health professionals benefit from access to services similar to health professionals in clinical settings. In addition to access to the core journals developed by the Medical Library Association, public health professionals should have access to such services as expert literature searching, document delivery, and research support. Employees of the Division of Public Health are far from the only professionals needing library services. All government officials making decisions about the health and safety of the residents of Delaware should also have access to current and reliable health information. Given the need to respond to such threats as epidemics, terrorism, and disasters, all library services should be readily available and provided on a rush basis.

To illustrate how the staff and resources are applied to best provide library services, the following scenarios are presented.

Scenario 1 - Diagnosis of unusual and potentially fatal disease

A young woman has been sent to the hospital for her worsening condition, so far undiagnosed by her internist. She is emotionally unstable and experiencing joint pain. She also appears to have cirrhosis of the liver although she emphatically denies any history of more than occasional use of alcohol. She is a highly educated professional, newly engaged and until recently, was busy at work and with wedding plans. Although she was had no exposure to hepatitis of any kind, her symptoms are similar to hepatitis. The admitting physicians are alarmed as the patient seems to be entering liver failure. They need to quickly figure out what is causing her symptoms.

Best practice hospital library support for the physicians diagnosing and treating this patient would include immediately performed literature searches, and examination of print and online texts to investigate unusual causes of liver failure. Relevant articles and texts would be printed and hand delivered or emailed to the physicians. This would be followed by consultation with the physicians to identify which additional articles would be retrieved from other libraries that day and delivered to the treating physicians. [The patient had Wilson Disease and was successfully treated.]

Scenario 2 - Fire in the OR

There has been a fire in the operating room (OR). Apparently, new laser equipment has been used without safety training or written guidelines. The surgeons and OR nurses need to develop training materials and evidenced-based guidelines for use of the new equipment (fast).

Best practice hospital library support for the OR team would include literature searching and document delivery, supplemented by searches of databases of evidence-based care reports and of clinical guidelines and of teaching materials about laser safety.

Scenario 3 - Changing regulations for nurse midwives

State legislators are debating whether to change requirements for licensing of nurse-midwives. They need information about what is done in different states and about the health outcomes for mothers and babies according to the training of the midwives.

Best practice public health library support for the legislators would include an analysis of relevant regulations and policies in other states, literature searching to identify comparative information about maternal and fetal outcomes for patients in the care of nurse midwives with different levels of training and/or licensure, and provision of texts from the library's collections, and retrieval of documents from other libraries and agencies.

Scenario 4 – Determination if a series of propane gas substitution incidents rises to the level of a "health alert"

A public health director receives information that illegal manufacturers of methamphetamine are using propane tanks, easily accessible by the public. Public health officials require a review of the current literature concerning the safety and effectiveness of misuse of propane gases, particularly in cases when the tanks are drained of propane gas, and the propane is replaced with anhydrous ammonia that weakens the structure of the tank. The manufacturers then return the tank to place of rental, empty and weakened structurally. This may pose a hazard to future legitimate users of the tank. Do the incidents call for a structured "health alert"?

Best practice public health library support would include searching of evaluative clinical databases, literature searching for reliable documentation, and searching of existing

safety alerts and policies of other states and any relevant national propane gas associations. As in the scenarios described above, best practices would also include timely provision of literature from the collection and retrieval of documents from other agencies and libraries.

Examples of best practice hospital libraries

When hospital librarians want to learn how to improve and/or expand services, they often emulate the activities of some of the leading hospital librarians in the country. These librarians are generally known to the field due to publications, teaching, presentations, leadership in the Medical Library Association and due to insightful and helpful postings on the medical librarians listsery.

The Cleveland Clinic Alumni Library in Cleveland, Ohio, has a staff of eight professionally trained librarians and a support staff of six. They provide information to support patient care, research, education, and administration to all Cleveland Clinic employees. The library is staffed for an extended day (6:30 AM to 9:00 PM most weekdays with staffed hours on weekends. In addition to meeting and exceeding many of the standards listed in appendix A, the Alumni Library staff provides customized training in effective ways to search library resources, and provides such training online and at the library customers' sites.

The Sladen Library & Center for Health Information Resources at Henry Ford Hospital in Detroit, Michigan, has a staff of fourteen professionals and technicians. They provide similar services to those of the Alumni Library and they staff the Sladen Library for an extended day on most weekdays and on Saturdays. Some of the services offered (in addition to the standards) include provision of and support for clinical software for personal digital assistants (PDAs). The Sladen staff also manages the archives of the Henry Ford Hospital. The Archives contain approximately 10,000 photographs of which copies are available for purchase through the Sladen Library.

In Delaware, hospital librarians have looked to the staff of the Medical Libraries of the Christiana Care Health System (CCHS) for advice and examples of best practices. A staff of five professionals and five library assistants provide services at three CCHS locations, Christiana Hospital, Wilmington Hospital, and the Helen F. Graham Cancer Center. The largest CCHS library is the Lewis B. Flinn Library at the Christiana Hospital. This new library was opened in 2006 and houses the merged collections of the former Christiana Hospital Library and the Delaware Academy of Medicine. The CCHS librarians and assistants offer a full range of services while staffing three separate facilities. The professional staff is actively involved with residency education through a clinical librarian program that has the librarians attending morning rounds, participating in case reviews and teaching residents literature search skills.

Examples of best practices demonstrated by a solo librarian

Given adequate funding and support from strong library networks, it is possible for full-time solo librarians to provide best practice services. In such cases, the librarians meet many of the MLA standards, but generally cannot meet the recommended staffing ratio. One example is the library of the Vassar Brothers Medical Center in Poughkeepsie, New York. The library is managed by a solo professional librarian and assisted by a summer intern. Vassar Brothers is a regional Medical Center of over 1,500 employees and over 400 active medical staff; the library also processes article requests from two affiliated hospitals that do not have any library staff. The librarian provides search and reference services, interlibrary loan and document delivery using PDF, serves on several internal committees, and works closely with the CME department. The library has PCs for hospital staff access to resources such as PubMed with LinkOut, CINAHL+ Full Text, Harrison's Online, Cochrane Library, 75 e-books), OVID LWW 100 title package, ACP PIER, an online book catalog, and an E-Journal portal.

Best Practices through networking

History of medical library networking in Delaware

Hospital libraries throughout the country have long faced the challenges discussed earlier in this paper. One form of response has been cooperation among libraries. The National Library of Medicine's outreach program began encouraging library consortia in the 1970s and provided some consortia with sufficient funding for coordinators and educational programs. Most other consortia were self-funded, primarily to cover the costs of union lists of serials, the key resource to facilitate interlibrary loan of journal articles.

In Delaware, the outreach staff at the Regional Medical Library, helped start up three consortia, one in each county, which were all self-funded. In New Castle County, the consortium included two corporations that underwrote the costs of the union lists for the Wilmington Area Biomedical Library Consortium (WABLC). The libraries in WABLC were staffed by professional librarians committed to cooperation. In Kent and Sussex Counties, the consortia had no comparable financial support, and the participating libraries were sometimes unstaffed, or staffed by clerks whose managers were not committed to cooperation. Those consortia did not continue. WABLC encouraged nofee document delivery among members; this has continued long after other WABLC activities ceased.

As interlibrary loan was the primary purpose of most local hospital library consortia, the development of DOCLINE automated request routing and the development of regional and/or national reciprocal free borrowing, lessened the need for many consortia in the 1990s. This trend would be reversed in some regions by the rise of cooperative purchasing models for online resources, such as demonstrated by DelMIRA, the Delaware Medical Information Resource Alliance.

DelMIRA provides access to electronic databases, textbooks, and journals to all acute care hospitals (except CCHS) and the Division of Public Health. DelMIRA was created to address the disparity in access to biomedical information and health data that exists

statewide. It is hoped that having desktop access to this information will improves patient outcomes and provider productivity. DelMIRA may also help Delaware to be more competitive in recruitment and retention of healthcare professionals, particularly nurses, which is a goal of Healthy Delaware 2010. Curently, DelMIRA participants have online access to DynaMed, Health Business Elite Full Text, MDConsult, New England Journal of Medicine Online, NursingSkills, STAT!Ref, and to selected online journals. ¹⁵

In Delaware as in other states in which most hospital libraries are understaffed, challenges for networking and cooperation continue. Hospital administrators may lose interest in cooperative projects when the start-up costs include financial investments and support from internal information technology staff. Hospital librarians, especially solo librarians, may not be able to justify taking time from key services (reference, interlibrary loan and mediated searching) to spend on cooperative projects such as a state-wide book catalog. The success of future cooperative efforts may depend on how directly those efforts can be related to support of patient care and urgent hospital business. Initiatives that require involvement of hospital information technology staff may need the ongoing support of skilled intermediary, such as the DelMiRA Project Coordinator.

Example of a best practice network

In states such as Illinois, Maine, Massachusetts, New Jersey and Rhode Island, local consortia came together to form state-wide networks. One of these stands out as an example of promoting best practices: the Health Sciences Library Association of New Jersey (HSLANJ). With 77 institutional members, HSLANJ is large enough for economies of scale, and small enough to respond quickly to new developments. For example, in April 2002, HSLANJ members learned that they would no longer have access to free courier service for interlibrary loan. HSLANJ members responded immediately with the formation of a task force to investigate options for electronic document delivery. By the end of 2003, HSLANJ members had identified scanning equipment as the primary need, found state funding to subsidize the equipment costs, and conducted sessions to train members in use of the new hardware and software.

HSLANJ has been recognized as a model of networking for regional document delivery. In the 1980s, a HSLANJ member librarian took the initiative to expand lending outside New Jersey and, in cooperation with other consortia in the Northeast, created BHSL, the Basic Health Sciences Libraries Network. By 2005, BHSL had over 450 members in ten states. Its primary purpose is to increase the amount of *free* document delivery exchanged among participants resulting in substantial cost savings to member libraries.

HSLANJ determined that electronic document delivery would be the best practice format for interlibrary loan, and in 2003, the HSLANJ Board passed a resolution that 90% of document delivery between members should be digital by end of 2004. At about the same time, HSLANJ initiated another task force to investigate group licensing.¹⁷

HSLANJ also promotes best practices through continuing education, professional opportunities, awards for achievements, and communities of practice providing a

newsletter, listserv and committees. HSLANJ librarians actively publish in the literature, present at conferences and take leadership positions in regional and national library associations.

Value Added Services

In the hospital setting, library best practices are enhanced and facilitated by close cooperation among departments, such as those responsible for education, for information technology, and for safety and quality of care. Librarians are systems thinkers by aptitude and training; they serve the entire hospital and provide important linkages among departments and individuals.

When librarians are integrated into institutional planning and educational efforts, appropriate resources may be evaluated and made accessible while the new initiatives are being developed. Librarians add value to the planning process by providing literature about the new initiatives as well as by developing the online and print resources that will be needed when the new services or programs are implemented.

Similarly, librarians add value to the work of hospital committees, such as those coordinating non-clinical staff education, patient safety, family and patient education, and guidelines development. Librarians' best practices should include teaching both library and non-library skills in cooperation with the education departments. For example, librarians may serve on course development teams as resource providers and go on to teach non-clinical topics. Librarians are often best suited to evaluate support tools for research and writing, such as citation management programs, and to teach the use of such tools. Librarians may also be the most knowledgeable professionals in the hospital on issues such as copyright and software licensure agreements.

Hospitals with best practice libraries support the librarians' participation in local and national professional organizations, such as the Medical Library Association and its chapters. These organizations provide continuing education programs, leadership training, networking (in person and online), and opportunities to make presentations. The values added are professional development of the library staff, access to the expertise of hundreds of colleagues, and high visibility for the hospital when librarians take leadership positions, make presentations, teach classes, and win awards.

- 1. DIMER: http://dhcc.delaware.gov/information/dimer.shtml
 - 2. DIDER: http://dhcc.delaware.gov/information/dider.shtml
 - 3. http://www.delamed.org/history/index.htm accessed January 7, 2008
 - 4. Wolf DG, Chastain-Warheit CC, Easterby-Gannett S et al. Hospital librarianship in the United States: at the crossroads. J Med Libr Assoc. 2002 January; 90(1): 38–48.
 - http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=64756
 - 5. Perley CM, Gentry CA, Fleming AS, and Sen KM.

- Conducting a user-centered information needs assessment: the Via Christi Libraries' experience. J Med Libr Assoc. 2007 April; 95(2): 173-181. http://www.pubmedcentral.nih.gov/articlerender.fcgi?tool=pubmed&pubmedid=17443250
- 6. McVeigh ME, Pringle JK. Open access to the medical literature: how much content is available in published journals? Serials 2005 Mar; 18(1):45-49. [Cited in the MLA PowerPoint presentation, "Myths and truths about library services"]
- 7. Ornstein C. Dennis Quaid files suit over drug mishap. Los Angeles Times. December 5, 2007;B1.
- 8. http://www.cedars-sinai.edu/pdf/Statement-11-20-07-56659.pdf
- 9. Perley, op cit.
- 10. http://www.unitedhealthfoundation.org/ahr2007/states/Delaware.html
- 11. Standards for Hospital Libraries 2002 with 2004 Revisions. National Network 2005 January; 29(3)11-17.
- 12. http://publichealth.yale.edu/phlibrary/phjournals/v2/key/index.html
- 2. 13. http://www.nyc.gov/html/doh/html/library/lib1.shtml
 - 14.http://www.ophla.ca/pdf/Letter%20to%20OPHS%20tech%20review%20committee.pdf
 - 15. http://www.delmira.org/
 - 16. Moeller K, Regenberg PB, Cohn JS, et. al. "A Unique Approach to Multi-State Networking: BHSL," Special Libraries 1994 Summer;85(3):183-194.
 - 17. http://www.hslanj.org/hslanjhistory.html