

Health Sciences Library

Annual Report 2008-2009

Penny Logan, Manager Library Services

For the period April 2008 - March 2009

TABLE OF CONTENTS

EXECUTIVE SUMMARY	3
COLLECTIONS	4
BOOK COLLECTION	
Systems	
EQUIPMENT	4
SERVICES	5
TRAININGCIRCULATION	6
REFERENCE QUESTIONS	6
Consult hours	6
FACILITIES	6
DICKSON LIBRARYHALIFAX INFIRMARYNOVA SCOTIA HOSPITAL SITE	7
LIBRARY RESEARCH	8
PERSONNEL	8
INTERNAL/EXTERNAL COMMITTEES AND ACTIVITIES	9
HEALTH SCIENCES LIBRARY BUDGET FISCAL 2009	9
LOOKING AHEAD TO 2010	10
APPENDICES	11



Capital Health Health Sciences Library Annual Report 2008-2009

Executive Summary

This was a year of developing partnerships within Capital Health and in the broader community. From a display of Nova Scotia Hospital artifacts at the Dartmouth Heritage Museum, to working with MISA to find a way for foreign graduates to use the Capital Health Libraries, this has been a year of reaching out to the community.

One of the most significant activities is our partnership with the Metropolitan Immigrant Settlement Association (MISA). The Library was asked by Dr. Jila Shams, from the Association of International Physicians and Surgeons of Nova Scotia, to find a way that foreign graduates who are studying for their Canadian exams, can use the resources in the Capital Health Libraries. We worked with Jan Sheppard Kutcher, Employment Services Manager with MISA, to implement a process so that foreign graduates who register with MISA can borrow books from any Capital Health Library. We have also partnered with the IWK Health Sciences Library on this initiative. The result is that any foreign graduates in the health professions who register with MISA may borrow books from the Capital Health or the IWK Libraries.

Seana Collins, Librarian Educator, was asked to develop and present an online module titled "Systematic searching of the literature". This is an excellent partnership with Dalhousie because the university was able to take advantage of the Capital Health Library expertise, and Capital Health gained increased knowledge of online module software and processes.

Patrick Ellis, Associate University Library, Kellogg Library, Dalhousie University, Darlene Chapman, Manager Library and Audiovisual Services, IWK Health Centre, and Penny Logan, Manager Library Services, Capital Health, submitted a proposal to the Academic Health Council on September 25, 2008 regarding the "Maritimes Health Knowledge Partnership". The Council arranged for the proposal group to meet with Sandra Cascadden, Chief Information Officer, Nova Scotia Department of Health, in October, 2008. As a result of that meeting, Ruth Hart, Librarian at the Department of Health joined the team, and the Department of Health is investigating possible resources to hire a Librarian to conduct a feasibility study. A copy of the report is attached as Appendix 1

Two other significant projects should be mentioned in this executive summary:

- 1. The Nova Scotia Hospital Library moved in September of 2008 to new quarters in the Hugh Bell Building. This was necessary because of the demolition of Simpson Hall. This presented a wonderful opportunity for celebration with staff and 'alumni' of the Nova Scotia Hospital.
- 2. The Library undertook a survey of our users about their use of Personal Digital Assistant devices. The results of that survey have been published, and are informing our future training efforts. A copy of the survey is attached as Appendix 2.

All these activities have served to strengthen our partnerships with Dalhousie, MISA, the Nova Scotia Department of Health, the Dartmouth Heritage Museum, the IWK, our sister Libraries and many other internal and external communities.

Collections

Book collection

We continue to invest in electronic books wherever possible. Our current collection includes records for 1308 e-books. This format is efficient because the content is available to anyone at any of the Capital Health sites at any time. E-books are also cost-effective because they are, generally, reasonably priced, and only one copy needs to be purchased, rather than a copy for each Library. This is an emerging field for the publishers. We have purchased from several different vendors with different platforms and will monitor use to see if one platform is better used and/or more reliable than another. The evidence we gain from this monitoring will inform our future purchasing decisions.

Databases

As a result of the Library's participation in the New Brunswick Hospital Library consortium, we have access to Culture Vision – a database for healthcare professionals that provides information about culturally-appropriate care based on patients' values and culture. This became available at no additional cost to our subscription rate. This is a resource we had been asked to purchase, but had no budget increase to do so. Our users are very grateful that this 'bonus' is now available to all Capital Health users. The Library presented a demonstration of the features of Culture Vision to the Diversity and Inclusion Committee.

We were very excited to purchase Refworks this year. For several years the Library has been asked to support a variety of different brands of reference management software. We completed an environmental scan to obtain and assess the evidence about these products. The decision to purchase Refworks is based on these elements: it is a web-based product, so is available at anytime; references can be shared with others; and it is the reference management software used by Dalhousie and most other universities. Research and Academic Affairs found the resources to pay for this product. The Library 'launched' Refworks in each of the Libraries on May 20 and 21. A copy of the Refworks launch invitation is attached as Appendix 3

Systems

We continue to advocate for some way to allow offsite access to Library resources. This is the one great pressure we hear about from all our users in every field. We are continuing to discuss this with the Information Technology Services (ITS), and hope that this move will move up the ITS priority list.

Equipment

A new circulation desk was purchased to suit the re-located Nova Scotia Hospital Library. This provides room for staff to be in closer proximity to users when they enter the Library, and has a lowered section for wheelchair access.

When the NSH Library was housed in Simpson Hall, most of the stacks were not readily accessible to the public. Staff used ladders to reach closed stack material, and much of the shelving was stable only so long as it was attached to a wall. In the new quarters in the Hugh

Bell Building, all the shelving is in the public area and the space at the Hugh Bell Building does not allow for shelving to be attached to the walls. From a safety point of view, use of ladders to reach Library materials is not a safe practice for the public. We were able to re-allocate some shelving from the Dickson Library, and with the help of the Nova Scotia Hospital Maintenance Department, we located some warehouse-type shelving that can be used as free-standing shelves. We hope to replace the warehouse shelving with Library shelving as funds allow.

Services

For several reasons, the C@p computers have been withdrawn from public areas throughout Capital Health sites in Halifax and Dartmouth. The Library is feeling the pressure as patients and families are coming to the Library for Internet access. At a meeting on April 15, 2008 between Information Technology Services (ITS), Library Services and other interested parties, it was agreed that the computers that were considered C@p computers will be placed in the Libraries. They will be called HealthLink computers and will be meant for patients and families, and for staff who need to connect to Internet sites not viewable on the Intranet. In November, 2008, Joey Chisholm from ITS, was appointed to lead the effort to install these computers into the Libraries. The result will be a supervised area where patients and families can connect with the Internet and with e-mail. This is a vital service for our patients and families who need to communicate with their home communities when a family member is in hospital.

Training

Library Training Program						
Year	Number trained	Increase over previous year				
2003-2004	95	n/a				
2004-2005	183	88				
2005-2006	253	70				
2006-2007	257	4				
2007-2008	887	630				
2008-2009	829	-58*				

^{*} Due to staffing issues, the training program was suspended from December 2008 through April 2009. These figures represent training statistics for 8 months of the fiscal year.

Outreach

The Library supplied a booth for the Nursing Expo on May 13, 2008, and a booth for Research Day, September 24, 2008 in the Bethune Ballroom. We were fortunate to have an iPod that was used as a prize at the Research Expo. The iPod was won by Sandra Cook, Project Manager, Cancer Care Nova Scotia. The idea of having a prize draw was very popular and we hope to continue to make such a draw possible for these kinds of venues.

The Library was highlighted in the Volunteer Newsletter. We work with Volunteer services to ensure that volunteers have access to the Library's material. A copy of the Newsletter is attached as Appendix 4.

Capital Health Library Services 2008-2009					
Circulation	18,175				
Reference Questions	11,483				
InterLibrary Loans	14,767				
Online Searches	339				
Consult hours	61				
Traffic - # of visitors (count ÷2)	151,488				

Highlights

Traffic into the newly-moved Nova Scotia Hospital Library increased by nearly 750 visits - up from 1650 visitors in 2007-2008 to 2388 visitors in 2008-2009. All the Library sites continue to attract remarkable 'through the door' traffic as users continue to need access to computers, to meeting rooms and to quiet study areas.

The amount of InterLibrary Loan transactions increased nearly 50% in this period. As Capital Health focuses on some of the social science areas like diversity and inclusion, the information needs are moving beyond the strictly clinical databases. There is, therefore, an increasing need for access to one of the social science databases like ABI Inform or EBSCO Business. We will be investigating the costs for a social science database in the coming year.

There was a 22% increase in reference questions during this period. Part of this increase can be attributed to better statistics-gathering. Because users contact the Library using e-mail as their primary method of communication, the Library is now including e-mail queries in this statistic grouping. Even with that change, however, this is a remarkable increase in workload and shows the continued reliance on access to Library staff.

Facilities

Dickson Library

Some shelving was removed, opening up the space and lighting was improved throughout the Library. The staff at the Dickson Library are working on a plan to re-arrange the library, to create a more welcome journal reading area, and better visibility for the Reference collection.

Halifax Infirmary

Two Patient/Family Internet computers were installed in the Infirmary Library. This is a great benefit to patients and families because the C@p computers were removed from other public areas in the hospitals. These computers have full access to the Internet so that patients and families can communicate with collaborative sites like Facebook and which are blocked on the secure hospital computers. We expect the other Libraries will receive HealthLink computers in the next few months.

Nova Scotia Hospital Site

The Nova Scotia Hospital Library was moved to the former cafeteria space in the Hugh Bell Building on September 2-5, 2008, and was open for business on September 8. Many thanks to the hospital maintenance and housekeeping staff who took such pride in ensuring the new facility was in tip-top shape for the opening. And special mention to the moving crew who successfully moved the large curved couch to the new site.

The Library staff took the opportunity to welcome people to the new facility with an Open House on October 10. Many retired and current staff of the Nova Scotia Hospital celebrated both the new Library location and the 150-year anniversary of the Nova Scotia Hospital. "Harry Poulos, former medical director, joined Syed Akhtar, psychiatrist, to cut one of two cakes decorated with an image of an original Nova Scotia Hospital building." A special book signing event was part of the festivities and Dr. Judith Fingard and Dr. John Rutherford signed their book <u>Protect</u>, befriend, respect - Nova Scotia's mental health movement, 1908-2008.

Artifacts from the Nova Scotia Hospital (NSH) Library were loaned to the Dartmouth Heritage Museum from June to September, 2008. The museum created a display titled "150 Years of Hope" that included many items from the former NSH Nursing School as well as equipment and photographs collected by the NSH Library staff.

During this year the Artifacts Committee made up of representatives of the Library, the Mental Health Program, Dartmouth Heritage Museum, community members, alumni of the NSH Nursing School, the Medical History Museum of Nova Scotia and the Museum of Health Care (Kingston, Ontario), circulated a list of the available artifacts and selected items for their collections. Investigations are underway to ensure that correct legal pathways are followed in order to transfer the artifacts to the museums.

An official Grand Opening was held in the NSH Library on December 16. Greetings and remarks were brought by Dr. Ray LeBlanc, Vice President Research and Academic Affairs, and Dr. Nick Delva, Chief of Psychiatry.

The move has been beneficial for the NSH Library - traffic through the door has increased by 45%!

¹ Capital Health Update Oct. 17, 2008, page 7.

Library Research

Several of the Library's databases are available in a Personal Digital Assistant (PDA) format, and we are getting many questions about how to download to a PDA. We would like to develop training programs, and wanted to get some statistics about how many PDAs are in use and which brand of PDA is the most-used. The Library conducted a survey of Personal Digital Assistant (PDA) use. The results of that survey have been published in the *Journal of the Canadian Health Libraries Association*. A copy of the article, and the data results are attached as Appendix 2.

Personnel

On April 22, 2008, Bev Boon was honoured with her 20-year pin at the Volunteer breakfast at the Westin Hotel. Bev started as a volunteer with the hospital Libraries at the old Camp Hill Hospital. Bev currently works at the Infirmary Library two days a week and is an essential part of the Library team.

The Library hosted two students in this period. Kathleen Randall, a student of the Dalhousie School of Information Management worked from May – June, 2008. Anna Story, a High School student volunteer worked at the Dickson Library from January through April 2009. Student workers accomplish much for the Library and we are happy to cultivate these community contacts.

Carrie Burke, Library Technician from the Dickson Library, led a team that put in a Healthy Workplace Grant and a Library team ran a Food Bank drive from September 8 to October 31, 2008.

Myrna Lawson, Library Technician at the Nova Scotia Hospital was asked to be the resource person to support the Learning Management System (LMS) for the onsite hand hygiene training. The first session was held in the computer lab within the Nova Scotia Hospital Library on March 30, 2009.

Several staff were involved in organizing the Canadian Health Libraries Association conference "Navigating the seas of change" held in Halifax, May 26-30, 2008. All Library staff had the opportunity to attend the conference and learn about the latest trends in health information management.

Library Staff, April 2009: David Barteaux, Library Technician – Dickson

Joan Briand, Library Clerk – Nova Scotia Hospital

Carrie Burke, Library Technician – Dickson Seana Collins, Librarian Educator – Dickson Kristina Holman, Library Technician – Infirmary

Diane Lawson, Library Clerk – Infirmary

Myrna Lawson, Library Technician – Nova Scotia Hospital

Verona Leslie, Library Technician – Infirmary Penny Logan, Manager Library Services

Internal/External Committees and Activities

Several Library staff provided a booth for the Nursing Expo on May 13, 2008 in Dartmouth, and a booth for Research Day September 24, 2008 in the Bethune Ballroom. These are excellent opportunities for the Library to showcase new products, and advertise our training programs.

Seana Collins was asked to develop a module as part of the "Developing Research Literacy in Academic Medical Research Institutions" project by Professor Mohamed Abdolell of the Department of Diagnostic Radiology at Dalhousie University. http://researchmethods.dal.ca/RMCdesc/index.html Seana's module is called "Systematic searching of the literature" and is a wonderful opportunity to showcase Seana's considerable knowledge in this area. This module is freely available on the Internet and is a great addition to the Evidence informed body of material.

The Library was asked by Sylvia Wist, Policy Coordinator and Mike Thibodeau, Project Manager to assist in the transition to online-only policies. The Library has agreed to ensure there are hard copies of all policy manuals at each of the four Capital Health Libraries. This will ensure they are available if access to the online versions should be interrupted.

Penny Logan was invited to attend National Cancer Patient Education Consensus Workshop March 2-3, 2009 in Montreal. This meeting brought together groups from across Canada to discuss "The Strategy For Achieving Excellence in Cancer Patient Education in Canada". The Capital Health Library has done some work with Cancer Care Nova Scotia in helping develop standards for patient education materials. These standards were used as a model for development of national standards for patient education materials.

The Library continues to contribute to the Nova Scotia Cancer Patient Education Committee, the Information Management Accreditation Team, the Atlantic Health Knowledge Partnership and the Dalhousie Library Committee. Seana Collins joined the Nova Scotia Hospital Mental Health Research Committee, and was invited to participate in the Capital Health Educators Committee.

Health Sciences Library Budget Fiscal 2009

2008-2009	DGH	Dickson &	Nova Scotia	Libraries outside	Total
		Infirmary	Hospital	metro	
Salaries & Benefits	\$0	\$409,572	\$96,982	0	\$506,554.00
Books	12,360	52,246	11,606	569	76,781
Journals	47,080	481,525	103,728	0	632,333
Supplies	2,917	58,694	16,183	815	78,609
Total	62,357	\$1,002,037	\$228,499	\$1,384	\$1,294,277

Looking Ahead to 2010

We are optimistic about developing online training modules especially for introductory material. This will allow our users to get an introduction to the Library and to the major databases in an online format, and at a time that suits their individual schedules. Time saved with not having to instruct the basic courses will allow the Library to develop training in other areas like RefWorks and the basics of evidence informed decision making.

The next phase for the Library is to connect the Library sites to the Wireless network. That will allow patients and families with laptops better access and will help mitigate the increasing demand for access to the computer work stations. In the 2009-2010 year, we will continue to work towards offsite access. This is a continuing request from all our users.

We look forward to the Department of Health supporting a needs assessment for the Maritimes Health Knowledge Partnership. Such a consortium will be a cost-saving to the province and will be beneficial for all healthcare workers throughout Nova Scotia.

Penny Logan, Manager Library Services, Capital Health

Appendices

Appendix 1: Martimes Health Knowledge Partnership

Appendix 2: PDA Survey

Appendix 3: Refworks launch invitation

Appendix 4: Volunteer Newsletter, Vol. 1(3) Fall, 1998

		12
Арј	pendix 1	
Ma	pendix 1 ritimes Health Knowledge Partnership proposal	

Maritimes Health Knowledge Partnership Proposal for a Dalhousie Libraries and Teaching Hospital Libraries Partnership – December 2007

Maritimes Health Knowledge Partnership will offer access through a single website to electronic databases, e-journals and e-books. This approach keeps the cost for providing information service as low as possible, while providing access to a variety of quality resources and services and supporting local collections and services. Members of the partnership will be the Teaching Hospital Libraries and the Kellogg Health Sciences Library at Dalhousie. The Partnership will produce equitable, easy to use, barrier-free access to knowledge-based health information to support decision-making and best practice. It will reduce the redundancies and duplicated expenses associated with various institutions subscribing to the same products.

Preamble

The expansion of the medical curriculum into New Brunswick, raises the opportunity to address gaps in library resources and services delivered to the Maritimes Teaching Hospitals and to review the library support model that has been in place for Dalhousie and the Teaching Hospitals for several generations.

Health sciences libraries in the region have had successes networking and sharing some resources. The need to support the New Brunswick Medical curriculum provides a great opportunity to build on this experience and fill some of the collections gaps common across our constituency. This is similar to how the University of Sherbrooke has managed resources in support of the French language medical school in New Brunswick.

This proposal focuses on cooperative collection development to provide more electronic resources at the clinical "coalface" by building upon Dalhousie's and the Teaching Hospital Libraries' digital collections. The user group for this proposal encompasses the staff and students at the Teaching Hospitals of Nova Scotia, New Brunswick and Prince Edward Island:

- Saint John Regional Hospital
- Moncton General Hospital
- Dr Everett Chalmers Regional Hospital
- Queen Elizabeth Hospital (Charlottetown)
- IWK Health Centre
- Capital Health Libraries
- Cape Breton Regional Hospital.

This proposal does not recommend any changes in individual library administrative structure or governance.

Currently Teaching Hospital libraries and Dalhousie libraries can only cooperate informally owing to our institutional affiliations, lack of infrastructure and the absence of a pool of shared collections funds.

This proposal is a first step toward integrated, seamless, 24/7 remote access to Library collections for clinicians within and without the health authorities throughout the region.

This proposal includes:

- Providing infrastructure for licensing and administration
- Identifying common e-collection targets
- Creating a co-operative decision-making forum
- Providing remote access to library resources via web based authentication

Consortial licensing makes sense to publishers since they negotiate one contract and thus deal with a single account. This makes sense to libraries and universities because negotiations are for the total user group – and they are no longer paying twice for the same groups.

There are many successful digital health library networks groups active in other parts of the country. Saskatchewan has developed SHIRP - electronic access to health information for healthcare workers and to the broader citizenry

The U.K. has developed the National Electronic Library for Health "The NeLH is based around a central website featuring core resources and links to commissioned specialist collections. Over 70 information resources, including bibliographic databases and full text publications, are accessible via the NeLH, which aims to act as a one-stop shop to support evidence-based decision-making. Much work has been undertaken on national procurement and licensing, particularly in partnership with National Health Service (NHS) libraries. Partnerships as a whole are crucial to ensure true seamless access for health information for all".

A table of models in Canadian jurisdictions is appended.

_

¹ Turner, A. et al. (2002) "A First Class Knowledge Service: Developing the National Electronic Library for Health" Health Info Libr J. 19 p.133-145

Challenges and Opportunities

<u>First Challenge – overlap in subscriptions</u>

In Nova Scotia, the Teaching Hospitals and Dalhousie are maintaining several subscriptions to the same resources drawn from different budgets yet serving the same group of users. Libraries and universities have recognized this redundancy and have been successful in negotiating Nova Scotia-wide licenses to:

- MD Consult,
- The *Cochrane Library*
- Stat!Ref

In the current situation the Kellogg Library and Capital Health Libraries are donating the time and staff to handle contracts and administration for *MD Consult, Cochrane* and *Stat!Ref.* To move forward by including more participants and more products, a Project Office with administrative staff is required.

Opportunity

The Nova Scotia-wide licenses can be re-negotiated to include the New Brunswick Teaching Hospital Libraries. A single electronic subscription for each product could be available for all users for less cost. With cooperation, we can manage larger negotiations, user groups and collections, thus ensuring that users have access to more resources throughout the region.

<u>Second Challenge – different resources depending work sites</u>

There are different resources available depending on the institution in which people are working. This results in users having access to one set of resources in one work site and a different set of resources in another. In addition, there are continual demands to purchase heavily marketed products like UpToDate and Dynamed. However, there is no coordinating body looking at evaluating products to ensure appropriate purchases.

Opportunity

The *Maritimes Health Knowledge Partnership* will create a committee of clinicians and librarians charged with evaluating resources and suggesting purchases based on curriculum and institutional needs and the best evidence. This will result in equitable access across the constituency

Third Challenge – including non-Dalhousie users in licenses

Dalhousie is under pressure to open electronic library access to non-affiliates. However, Dalhousie can neither pay for nor provide access for non-Dalhousie personnel without a formal contractual agreement and collection moneys to support non-affiliated users.

Opportunity

The *Maritimes Health Knowledge Partnership* will provide a contractual agreement and collection moneys so that non-affiliated users can access selected Dalhousie resources and Dalhousie's users can access the Teaching Hospital services.

Fourth Challenge – remote access to materials

Libraries in every teaching hospital have collections and staff, but do not have the facility to allow remote access. Healthcare workers need expeditious, user-friendly access to information no matter from where they are 'dialing in'.

Opportunity

Web portal access to library services will provide remote access to library resources. A single sign-on web portal will provide user-friendly access to all the *Maritimes Health Knowledge Partnership* resources 24/7.

<u>Fifth Challenge</u> – facilitating end-user training in health knowledge resources as a facet of life-long learning.

Opportunity

The existing network of hospital libraries supports end-user training at the work site. If all the Teaching Hospitals have similar resources to supplement their specialized and local collections, then end-users will see familiar resources on familiar platforms with a common interface. End-user training and shared resources can be coordinated and enhanced across the constituency. This is also an opportunity to enhance recruitment and retention initiatives as staff in the hospitals will have uniform access to life-long learning resources.

How it will work

The *Maritimes Health Knowledge Partnership* will provide a platform for collaborating in the development of shared digital library resources and the delivery of health knowledge. The primary aim is to support the common information needs of our shared constituency. Secondary aim will be to build further partnerships where appropriate. Provider Agencies will be:

- Kellogg Library, Dalhousie University,
- Capital District Health Authority Library,
- IWK Library,
- Cape Breton Regional Library,
- Teaching Hospital Libraries in N.B. and P.E.I.,

Second stage Partners can be

- Other Health Authorities in N.S. and N.B.
- Memorial University Health Sciences Library
- Regional Public libraries
- Government departments
- Other Academic Institutions e.g. UNB, St. F.X., CBU.
- Professional Healthcare Organizations e.g. DoctorsNS, Pharmacy Association of Nova Scotia

Maritimes Health Knowledge Partnership will handle the management and administration of large scale negotiations with a Librarian Project Manager experienced in license negotiation. In the current situation the Kellogg Library and Capital Health Libraries are donating the time and staff to handle contracts and administration for MD Consult, Cochrane and Stat!Ref. To move forward a Project Office with administrative staff is required.

Teaching Hospital Librarians will take responsibility for training their user groups. Shared resources mean shared training modules and the ability for the libraries to work cooperatively to create online user training materials.

Maritimes Health Knowledge Partnership will increase the current Teaching Hospital library resources.

Maritimes Health Knowledge Partnership will provide an Internet Web portal to permit user-friendly, equitable, barrier-free electronic access to the best decision-making and evidence-based literature for all healthcare workers in the Teaching Hospitals.

Objectives

The Maritimes Health Knowledge Partnership will:

- Effectively network library-based health knowledge resources for delivery to our common constituency.
- Provide appropriate infrastructure for resource sharing and cost effective delivery of health information
- Develop and implement end user training programs for accessing health information
- Support and enhance existing health library services in Nova Scotia.
- Build a model for future cooperation
- Build upon the opportunities of electronic publication and our proven experience in joint licensing and cooperation in order to deliver library resources
- Increase the use of the electronic services and resources by healthcare professionals
- Provide evidence-based information and knowledge that contributes to or influences positive outcomes of the health system
- Better support the academic needs of hospital-based clinicians, students and staff

Program Description

Maritimes Health Knowledge Partnership will be supervised by a Board with representatives from the Teaching Hospitals and Dalhousie University.

Phase I: In Phase I, the emphasis will be to extend current subscriptions to all Teaching Hospitals. A Librarian Project Manager will negotiate licenses

- Set up the Board
- Establish a Task Force
- Determine costing
- Hire Project Manager
- License the titles for all sites

Phase II In Phase II a content evaluation team will identify required resources

- Establish content evaluation team
- Create list of core resources
- Negotiate licenses
- Implement access

Phase III In Phase III a proposal for web portal access will be developed.

- Investigate costing for web portal access
- Develop proposal
- Bring web portal proposal to Task Force

Phase IV In Phase IV the web portal will be implemented

- Assess and implement network infrastructure
- Assess needs and plan training program including online training.
- Develop evaluation component.
- Using web portal technology, create username/password database and distribute passwords to all healthcare workers
- Access to the web portal shall be from any computer station in the region, not institution-based.
- Evaluate product rollout, access, usage and training programs

Phase V Phase V will deliver products to all citizens of N.S., N.B. and P.E.I.

- Initiate citizen access to the web portal
- Purchase electronic consumer health resources for all citizens of Nova Scotia
- Launch citizen access to Maritimes Health Knowledge Partnership portal
- Provide train-the-trainer via the Public Library staff on how to use the resources.
- Evaluate first five phases
- Develop long-term strategy based on evaluation

Outcomes/Results

Improved patient care
Improved policy and decision-making
Recruitment and retention of healthcare professionals
Research support
Informed consumers

The citizens of Nova Scotia, New Brunswick and P.E.I. will have access to health information in a manner similar to that available in Saskatchewan, British Columbia and other jurisdictions.

Evaluation

A variety of methods² to measure the success of the program will be used. Indicators are based on Equinox Library Performance Measurement and Quality Management System Performance Indicators for Electronic Library Services^{3,4}

System outputs:

- % of target population reached by electronic knowledge/information service To establish the success of *Maritimes Health Knowledge Partnership* in reaching its users by calculating the %age of the population who are using the electronic service using a random sampling of target population
 - Number of log-ins to each electronic library service per member of the target population

To establish the success of *Maritimes Health Knowledge Partnership* in reaching its users by calculating the %age of the total population who are using each electronic library service, and to determine the use made of each electronic service by the target population by examining Vendor statistics.

• Cost per log in to each electronic library service

To determine the cost of each electronic service by ascertaining the costs for each login during a specified period of time. Vendor statistics in relation to cost.

 Number of persons at formal electronic service training sessions or online sessions per member of the target population

To assess the success of *Maritimes Health Knowledge Partnership* in reaching its users through training sessions on electronic services and resources. Evaluate training statistics.

• Number of broken links on website

To assess the success of *Maritimes Health Knowledge Partnership's* website in providing access to electronic resources

² Cullen, R. (2003) "Evaluating digital libraries in the health sector: Part 1 Measuring inputs and outputs" Health Info Libr J. 20 p.195-204

³ Brophy,P. et al. (2000) Equinox: Library Performance Measurement and Quality Management System http://equinox.dcu.ie/reports/pilist.html

⁴ Clarke, Z. (2004) Equinox: Library Performance Measurement and Quality Management System

System outcomes:

• Target population satisfaction with the electronic services and resources of Maritimes Health Knowledge Partnership

To determine client level of satisfaction and areas for improvement using surveys of target population and focus groups.

• How electronic information acquired through *Maritimes Health Knowledge Partnership* contributes to outcomes of the healthcare system

To determine how electronic health information impacts on the healthcare system using surveys, telephone calls, e-mail, questionnaires and interviews.

Impact on other Services

Maritimes Health Knowledge Partnership will assist in the equitable access to electronic resources that support evidence-based decision-making and that is required at all levels of the healthcare system.

The *Maritimes Health Knowledge Partnership* web portal will provide access to electronic resources that have been funded through other areas of the healthcare system. This can eliminate the need for the development of multiple websites.

Information Technology

Access to electronic information will be through registered user access through a web portal. This will require appropriate portal software running via a server. Open Source software like currently in use at Dalhousie, can be used, so that the project can draw on local expertise.

Submitted by:

Patrick Ellis Health Sciences Librarian W. K. Kellogg Health Sciences Library 5850 College St. Halifax, Nova Scotia, B3H 1X5

phone: 902-494-1669 fax: 902-494-3750 patrick.ellis@dal.ca Penny Logan Manager Library Services Capital Health 1796 Summer St. Halifax, Nova Scotia B3H 1A7

phone: 902-473-4383 fax: 902-473-8651

penny.logan@cdha.nshealth.ca

Appendix A

Examples of license costs			
Resource	Year one	Year two	Year three
ELECTRONIC RESOURCES e-CPS* Stat!Ref* (e-books) CINAHL* EBSCO Databases* * typically 10% annual increase in subscription costs	\$17,000 \$50,000 \$60,305 \$163,182	\$11,485 \$55,000 \$66,340 \$176,236	\$12,403 \$60,500 \$72,794 \$190,334
Total	\$290,487.	\$309,061.	\$336,031.

<u>Name</u>	Mission/Goal	<u>Services</u>	Databases/Resources	Members/Clients	Funding Support	Bundle information (databases, journals, full text)
Consortium of Ontario Libraries (COOL) http://www.sols.org/resou rcesharing/coolcpa/whati scool.htm	negotiate license agreements and investigate Funding Support opportunities			Ontario non-profit libraries (public, schools, colleges, universities)		Health & Wellness Resource Center Gale Group http://www.galegroup.com/pdf/ facts/hwrc.pdf http://www.sols.org/resourcesh aring/coolcpa/cooldata/product .asp?ProductID=6 75% full text of 700 heath/medical journals Health Source Consumer Edition Ebsco - http://www.sols.org/resourcesh aring/coolcpa/cooldata/product .asp?ProductID=7 nearly 300 full text periodicals netLibrary/COOL E-Book Shared Collection OCLC Canada http://www.sols.org/resourcesh aring/coolcpa/cooldata/product .asp?ProductID=47 includes some e-books on medicine
<u>Name</u>	Mission/Goal	<u>Services</u>	<u>Databases/Resources</u>	Members/Clients	Funding Support	
Consortium of Ontario Academic Health Libraries (COAHL) http://www.coahl.ca/	to serve the students and faculty at all of the Ontario medical schools and to extend information access to the broader health care community affiliated with each institution.	Consortial licensing with major vendors, development of OHeLP		McMaster University (Hamilton), Lakehead University (NOSM) (Thunder Bay), Laurentian University (NOSM) (Sudbury), University of Ottawa, Queen's University (Kingston), University of Toronto, University of Western Ontario (London)	Associated Medical Services Inc. of Ontario (AMS).	N/A

<u>Name</u>	Mission/Goal	<u>Services</u>	<u>Databases/Resources</u>	Members/Clients	Funding Support	
Hamilton & District Health Library Network http://www-hsl.mcmaster.ca/network/ Janette Hatton Chair, Hamilton & District Health Library Network, c/o Joseph Brant Memorial Hospital, 1230 North Shore Boulevard East Burlington, ON Tel: 905-632-3737, ext. 5515 Fax: 905-681-4871 jhatton@jbmh.com	to enhance the ability of each member to provide quality library and information services to the health care community it serves through resource sharing and other cooperative efforts	MORRIS, the online catalogue of McMaster University includes the journal holdings of Hamilton Health Library Network members	Books and journals in electronic format OVID - Medline, CINAHL, PsycINFO, Cochrane Library, HAPI (Health and Psychosocial Instruments), Available resources vary by site.	City Of Hamilton Public Health & Community Services Hamilton District Health Council Hamilton Health Sciences Joseph Brant Memorial Hospital Juravinski Cancer Centre, Mcmaster University Mohawk College St. Joseph's Healthcare Hamilton St. Peters Hospital	by members on a cost-sharing basis.	Network libraries provide access to quality resources that may include: Electronic Databases OVID - Medline, CINAHL, PsycINFO, Cochrane Library, HAPI (Health and Psychosocial Instruments), AARP Ageline Books and journals in electronic format
Name	Mission/Goal	<u>Services</u>	Databases/Resources	Members/Clients	Funding Support	
Health Science Information Consortium of Toronto c/o Gerstein Science Information Centre University of Toronto 9 King's College Circle Toronto, ON M5S 1A5 416-978-6359 Fax: 416-971-2637 http://www.library.utoronto.ca/hsict Laurie Scott Executive Director	to promote advances in health care through optimal use of information resources, technologies and our collective expertise	Consortial Licensing, union catalogue	Ovid: Medline, CINAHL, Evidence Based Medicine Reviews (EBMR) and PsycInfo, ProQuest: full-text nursing journals EBSCO: Nursing and Allied Health, Biomedical Reference, Health Business and Psychology/Behavioral Sciences collections., New England Journal of Medicine, eCPS	University of Toronto Libraries & Libraries in health care institutions affiliated with the Faculty of Medicine (teaching hospitals, community hospitals, health laboratories and public health departments) Including Baycrest Centre for Geriatric Care, MOHLTC	Annual fees	Journal List http://www.library.utoronto.ca/ hsict/union_list/ Ovid - Medline, CINAHL, Evidence Based Medicine Reviews (EBMR) and PsycInfo ProQuest - full-text nursing journals EBSCO - Nursing and Allied Health, Biomedical Reference, Health Business and Psychology/Behavioral Sciences collections. New England Journal of Medicine eCPS

Name_	Mission/Goal	<u>Services</u>	<u>Databases/Resources</u>	Members/Clients	Funding Support	
MOHLTC Public Health Portal				Public Health Units in Ontario		
<u>Name</u>	Mission/Goal	<u>Services</u>	Databases/Resources	Members/Clients	Funding Support	
Northern Ontario Virtual Library operated by Northern Academic Health Sciences Network (NAHSN), Health Sciences North, 955 Oliver Road, Thunder Bay Ontario, Canada, P7B 5E1, Tel: 807-343- 2144, Toll Free: 800-279- 4859, Fax: 807-343- 2104; E-Mail: novl@hscn.on.ca Alexander Lyubechansky, Director, www.novl.ca	The Northern Ontario Virtual Library (NOVL.CA) is committed to providing northern Ontario health practitioners who do not have access to biomedical information resources locally with efficient and equitable access to quality information at the point of need	Links: CE, EBM tutorials, Professional Librarians, Document delivery, Mediated Literature searches Library collection	OVID dbases: Clinical Evidence Evidence Based Medicine Reviews (EBMR) - (Inc Cochrane, Dare, ACP Journal Club) CINAHL, MEDLINE and OldMEDLINE, PsycINFO, Stat!Ref Text Books (87), OVID FT journals (350) & books	free-of-charge to all Northern Ontario health professionals who are members of the health professions regulated by the MOHLTC, plus other regulated health professions that clearly provide patient care: MDs, RNs, OTs, pharmacists, PTs, psychologists, social workers, and other health care professionals	MOHLTC	List of full text journals: http://www.novl.ca/images/NO VLFullTextJournalsupdatedMa y05.pdf list of full text books: http://www.novl.ca/images/NO VLFullTextBooksupdatedMay1 305.pdf list of digital resources: http://www.novl.ca/templates/ main_template.asp?page_id=1 73§ion_id=1

<u>Name</u>	Mission/Goal	Services	Databases/Resources	Members/Clients	Funding Support	
OHELP (by COAHL) Ontario Health Link for Practitioners http://www- hsl.mcmaster.ca:8080/oh elp/OHeLPmain.jsp	COAHL (Consortium of Ontario Academic Health Libraries) vision to provide all health care practitioners in Ontario with a source of health information resource and services	search engine (at McMaster) directs health practitioners to sources of health information services, including health libraries, private information brokers, and professional organizations	Freely accessible dbases (or those the searcher already has right to use by proxy access)	Ontario Health Practitioners		
	Mission/Goal	Services	Databases/Resources	Members/Clients	Funding Support	
OntarioMD http://www.ontariomd.co m/en/company/index.jsp	online access to medical information		MD consult, Ovid, Medline, SKOLAR MD, eCPS, Epocrates, Med Tools, EFacts	Free - for Ontario's physicians, medical students and interns	OMA with support from the MOHLTC	Services http://www.ontariomd.com/en/s ervices/ontariomd.jsp
<u>Name</u>	Mission/Goal	<u>Services</u>	<u>Databases/Resources</u>	Members/Clients	Funding Support	
TriUniversity Group of Libraries (TUG)	Easy access to each others collections and services	Combined catalogue		University of Guelph, University of Waterloo, Wilfrid Laurier University		
<u>Name</u>	Mission/Goal	<u>Services</u>	<u>Databases/Resources</u>	Members/Clients	Funding Support	
PROPOSED Regional Learning Portal for Healthcare in Eastern Ontario http://www.medicine.uotta wa.ca/pdf/AccreditationR eports/LCMEProgressRe portAugust2005.doc	"to provide access to the current literature to healthcare providers across the Champlain and North Simcoe- Muskoka LHINs " Talking mostly about nfrastructure					

<u>Name</u>	Mission/Goal	<u>Services</u>	<u>Databases/Resources</u>	Members/Clients	Funding Support	
PROPOSED Ontario Digital Library - Ontario Library Association	To coordinate the purchase and delivery of electronic information and virtual services on behalf of Ontario public, school, college, academic libraries					

OTHER PROVINCIAL/REGIONAL EXAMPLES

<u>Name</u>	Mission/Goal	<u>Services</u>	<u>Databases/Resources</u>	Members/Clients	Funding Support
Alberta Health Knowledge Network (HKN) http://www.ucalgary.ca/HKN/index.html University of Calgary, University of Alberta	Delivers databases to desktops of members of University community and health care professionals in Alberta, Canadian Territories and Saskatchewan	Continuing education Professional Librarians at both universities Document delivery: Library collection	OVID Medline & Cinahl = basic package that must be purchased first before taking advantage of other dbase offerings: AMED, API, EMBASE, HAPI, PsycINFO OVID FT Journals, Ebsco FT, STAT!Ref, Access medicine	Affiliates of Universities of Calgary and Alberta and Health Professionals by paid subscription (employed by or affiliated with a provincial Health Authority, university, college or professional health care organization or association.)	
<u>Name</u>	Mission/Goal	<u>Services</u>	<u>Databases/Resources</u>	Members/Clients	Funding Support
Atlantic Health Knowledge Partnership (AHKP) c/o WKK Health Sciences Library Dalhousie University Halifax, N.S. B3H 4H7	Facilitate resource sharing of electronic products in the Atlantic (NS & NL) through consortial purchasing	None by the partnership. services provided to clientele of each partner's institution.	MD Consult for 6 NS regional health authorities, DoctorsNS, Memorial and NLHIN access to Cochrane through NS professional associations (COTNS, CCRNS, DoctorsNS, NSCP, NSDA, PANS investigating EMBASE with NB	NLHKIN, DoctorsNS.com, WKK Health Sciences Library, IWK Health Centre and the Western & Capital District Health Authorities	
Name	Mission/Goal	<u>Services</u>	<u>Databases/Resources</u>	Members/Clients	Funding Support
College of Physicians & Surgeons of British Columbia's College Library https://www.cpsbc.ca/cps/college_library 400- 878 Beatty Street Vancouver, B.C. V6B 1C1 Phone: 604-733-6671 Fax: 604-737-8582	Professional association full library service	Professional Librarians, Document delivery, Mediated Literature searches, Document Delivery, Table of Content Services, Bibliographies, Library services for community hospitals, Library collection	Ebsco Biomedical reference collection: 1000 FT ejournals Medline, Cochrane, StatRef	Association Members/Clients, or contractual arrangement	
Name	Mission/Goal	<u>Services</u>	<u>Databases/Resources</u>	Members/Clients	Funding Support
DoctorsNS.com Medical Society of Nova Scotia	represent NS doctors, provide public education on	Links Access to databases	MD Consult NEJM Dxplain (Decision support system),	Consumer Health (access to free resources)	

https://www.doctorsns.com/ 5 Spectacle Lake Drive Dartmouth, NS B3B 1X7	healthy lifestyles	Support and training Continuing education Professional Librarian	Infotrac Drugs and Therapeutics for Maritime Practitioners (print)	Professional Health Information (Society Members/Clients)	
<u>Name</u>	Mission/Goal	Services	<u>Databases/Resources</u>	Members/Clients	Funding Support
Health Information Network, Calgary Region (6 month transition period new services to be in place January 2006) Head of the Health Sciences Library at the University, Dr. John Cole, 220-6858 Elizabeth Aitken, Acting Manager, Library Services, Calgary Health Region 943-0192. Elizabeth.Aitken@CalgaryHealthRegion.ca Lori Van Rooijen, Interim Project Manager at 620-5448	Calgary Health Region and	provide comprehensive access to electronic health sciences resources, along with expert help in finding and retrieving information, and finding outreach programs and training.	Access via HKN for a fee As a result of the Agreement with the Calgary Health Region four new professional librarian positions will be available as well as seven new library technician and administrative positions.	University of Calgary Health Sciences Library, with four initial Knowledge Centres at the Peter Lougheed Centre, the Rockyview General Hospital, the Alberta Children's Hospital and the Grace Women's Health Centre; moving library services from the Foothills Medical Centre and Southport locations to the Knowledge Centres	for a fee
Name	Mission/Goal	Services	<u>Databases/Resources</u>	Members/Clients	Funding Support
Newfoundland and Labrador Health Knowledge Information Network (NLHKIN) http://www.med.mun.ca/nlhkn/ Health Sciences Library Memorial University, Saint Johns, Nfld. A1B 3V6 709-777-6672 hslinfo@mun.ca	Deliver health information resources needed by physicians, nurses and health professionals across the province	Access to databases Support and training Continuing education Professional Librarians Document delivery: Library collection	Medline, CINAHL, Pscyhlnfo, Social Services Abs, Cochrane Database, STAT! Ref., 1600 journals	Fee based Members/Clients: corporate, associate (through organizations designated librarian), & personal	Members/Clients fee & support from Memorial University

<u>Name</u>	Mission/Goal	<u>Services</u>	<u>Databases/Resources</u>	Members/Clients	
Outreach Services Neil John Maclean Health Sciences Library University of Manitoba Libraries 70 Bannatyne Ave., Winnipeg, MB, R3E 0W3	Extends access to library resources to individuals across Manitoba	Links Continuing education Tutorials Professional Librarians Document delivery, Mediated Literature searches Library collection	Full range	Individuals, and/or contractual basis, within Manitoba	Fee based service
Name	Mission/Goal	Services	<u>Databases/Resources</u>	Members/Clients	Funding Support
Saskatchewan Health Information Resources Partnership SHIRP	University of SK Library, SK Academic Health Sciences Network (SAHSN) and the SK Health Libraries Association (SHLA) province- wide access to library health resources	Professional librarian at University of SK ,online resources	OVID Medline, CIONAHL, PsychInfo, EBMR (Cochrane, DARE, ACP Journal Club), Natural Medicines StatREf, Books @ Ovid, OVID & Ebsco FT journals (Partnered with Alberta Health Knowledge Network to extend license agreements to Saskatchewan (SHIRP)	Phases 2: extend online resources to selected health regions Phase 3: to all heath regions Phase 4 to remaining healthcare practitioners	SK Government

NATIONAL MODELS

<u>Name</u>	Mission/Goal	<u>Services</u>	<u>Databases/Resources</u>	Members/Clients	Funding Support
Canada Institute for Scientific and Technical Information (CISTI) http://www.nrc.ca/cisti/services_e.shtml National Research Council Canada Building M-55, Montreal Road Ottawa, Ont K1A 0S2 (800) 668-1222 or (613) 993-1600 Fax: (613) 952-9112 info.cisti@nrc-cnrc.gc.ca		Professional Librarians Mediated Lit searches Document Delivery Tables of Content Services Bibliographies Library collection Services to health libraries	National Collection: Science, technology, medicine Full range	Fee based	
<u>Name</u>	Mission/Goal	<u>Services</u>	<u>Databases/Resources</u>	Members/Clients	Funding Support
Canadian Library of Family Medicine The College of Family Physicians of Canada	Professional national voluntary organization of family physicians	Professional Librarian, Document delivery: 5 free Mediated	Full family of databases available at UWO's Taylor Library (https://www.lib.uwo.ca/database/	Members of the College of Family Physicians of Canada plus service	

University of Western Ontario, Natural Sciences Centre Rm. 70D London, ON N6A 5B7 CANADA 519-661-3170 FAX 519-661-3880 cflm@uwo.ca http://www.cfpc.ca/English/CFPC/CLFM/services/default.asp?s=1	that makes continuing medical education of its members mandatory	Literature searches /yr, Document Delivery : 25 free articles/re, priority service for fee, Tables of Content Services ,Library collection	secure/jumpstart.shtml)	charges	
--	--	---	-------------------------	---------	--

<u>Name</u>	Mission/Goal	<u>Services</u>	<u>Databases/Resources</u>	Members/Clients	Funding Support
Canadian Association of Occupational Therapists (CAOT) http://www.caot.ca/ CTTC Building, Suite 3400 1125 Colonel By Drive Ottawa, ON K1S 5R1	Professional Association	Support: Professional Occupational Therapist Document Delivery: No	OTDBase Can.J Occup Ther (FT) Occup Ther NOW (FT)	Association Members/Clients	
Name	Mission/Goal	<u>Services</u>	<u>Databases/Resources</u>	Members/Clients	Funding Support
Canadian Dental Association Resource Centre http://www.cda-adc.ca/public/frames/eng_index.html	Professional Association	Continuing Education Professional Librarians Mediated Lit searches Document Delivery Bibliographies Library collection	Lexi-Drugs® On-Line and Lexi- Natural ProductsTM	Association Members/Clients	
Canadian Nurses Portal Canadian Nurses Association http://www.cna-nurses.ca/CNA/nursing/portal/default_e.aspx	bilingual online portal to help nurses in Canada and around the world manage their careers, connect with colleagues and health- care experts, and care for their patients	The "nurses' communities" section of the portal will provide a meeting place for diverse networks of nurses. Support: Professional Nurse, 1 library technician, Document Delivery: No	CINAHL, MEDLINE, Cochrane, Ebsco Biomedical Reference Collection: Corporate Edition (600 full-text journals) e-CPS, STAT!Ref	Association Members/Clients	funded by Health Canada's First Nations and Inuit Health Branch \$3.98 million
Name	Mission/Goal	<u>Services</u>	<u>Databases/Resources</u>	Members/Clients	Funding Support
Canadian Research Knowledge Network (CRKN) http://www.researchknowledge.ca/ continues to work of the Canadian National Site Licensing Project (CNSLP) 3-year demonstration project supported by the Canada Foundation for Innovation (CFI)	to expand content available to Canada's academic research community; to speed the transition of access to digital materials and value-added forms of content; to leverage the buying power and	to license electronic publications primarily in the fields of science, technology, environment and medicine to multiple universities, at a national level	Elsevier ScienceDirect journals, Web of Science (Institute for Scientific Information - ISI), American Chemical Society (ACS) Journals, Royal Society of Chemistry (RSC) Journals, Institute of Physics (IOP) Journals, SpringerLink - Springer-Verlag Journals, MathSciNet - American	Canadian universities and colleges	

	influence of Canadian universities		Mathematical Society		
<u>Name</u>	Mission/Goal	<u>Services</u>	<u>Databases/Resources</u>	Members/Clients	Funding Support
Osler Service Canadian Medical Association http://www.cma.ca/osler/index.asp 1867 Alta Vista Drive Ottawa ON K1G 3Y6	Professional Association	Professional Librarians	Association publications Lexi-Online drug database, MDConsult, Clinical Practice Guidelines, InfoPOEMs, OVID Medline, EbscoHost Journals Cochrane	Association Members/Clients	

Evidence Based Medicine Reviews (EBMR): Suit of four databases: Cochrane, ACP Journal club, DARE, controlled TRials

Appendix 2 PDA survey of Medical Residents

FEATURE / MANCHETTE

PDA survey of medical residents: e-books before e-mail

Penny Logan and Seana Collins

Abstract: Introduction – Increasingly, database vendors are allowing downloads of their products to personal digital assistants (PDAs). The Hospital Library at Capital Health in Halifax, Nova Scotia, has the opportunity to provide PDA versions of resources to our users. The purpose of this survey is to find out the current environment of PDA use among the medical residents as a basis for developing library training and support for this technology. Question - Are medical residents using PDAs, and if yes, what type of PDA are they using, what experience do they have using them, how do they think they will use them in a clinical setting, and what products do they think they will find valuable in their practice? Methods - A Web-based survey was developed using PollDaddy software. A message was sent to all the medical residents on rotation at Capital Health on 12 November 2008; the survey closed 12 December 2008. Setting -The survey was developed by the Health Sciences Library of Capital Health. Capital Health is an academic health centre in Nova Scotia, Canada. The medical residents are affiliated with Dalhousie University Medical School. Participants - The participants were medical residents currently working in Capital Health hospitals. There were 55 respondents. Results - The majority of respondents own a PDA and have more than 1 year of experience using the device. They use PDAs to look up drug information, for messaging, and to consult e-books. More than 90% of those surveyed use PDAs in their clinical practice. The Palm platform is used by 64% of respondents while the iPhone is used by 24%. Conclusion - Medical residents are using PDAs with a preference for the Palm platform. They are used for clinical decision making, and 61 different sources were listed as currently used by the medical residents. Implications for the library are to provide training for the Palm and to concentrate on resource-specific training, rather than basic training on how to use a PDA. Limitations - There are approximately 300 medical residents on rotation at any one time. We received 55 responses. We realized, too late, that people could select only one item for question 7 ("Which resources do you use?"). However, most respondents provided lists of titles of PDA resources for question 8.

Summary of survey results

Medical students are early-adopters of technology, and the use of personal digital assistants (PDAs), especially by medical residents, has been increasing [1]. Medical schools are encouraging students to use PDAs:

70% of all U.S. Medical Schools are currently enrolled in the ePocrates student discount program which enables students to obtain 50% off a 1 yr. subscription to ePocrates Rx Pro [2].

PDAs fit in your coat pocket, go wherever you go, and can be personalized with the programs you like to use and information you frequently need [3].

Of the 57 who answered the question² "Do you own a PDA?", 51 respondents or 89% said "yes". Of the 51 medi-

cal residents who own a PDA, 96% of them have owned their device for longer than 12 months.

Eighty-five percent of users owned a PDA before they started their residency, and 91% agreed that they will use the PDA in a clinical setting.

Sixty-four percent of users are using a Palm device. Considering the relatively high cost of the iPhone and its only recent availability in Canada, the authors were surprised to find that 24% of respondents used iPhones. We speculate that there will be more iPhone users as this technology increases in availability and prices decline.

We were interested to find that 6% used BlackBerry and 6% used "other" smart phones. Combined with the number of respondents using the iPhone, 36% of users had some kind of smart phone.

- **P. Logan.** Health Sciences Library, Capital Health, 1796 Summer Street, Room 2212, Halifax, NS B3H 3A7, Canada (e-mail: penny.logan@cdha.nshealth.ca).
- S. Collins. Health Sciences Library, Capital Health, 1276 South Park Street, Room 5107, Halifax, NS B3H 2Y9, Canada (e-mail: seana.collins@cdha.nshealth.ca).

¹Corresponding author.

²Two of the respondents were library staff testing the survey.

The Palm Pilot (Palm) platform is still the leader for the number of available medical software programs [4]. However, although Palm currently has the majority of downloadable databases, there are challengers to its prominence. Both the basic version of Epocrates, Epocrates Rx (the free drug software), and the RxPro (priced) version are now available for the BlackBerry (see http://www.epocrates.com/products/ rxpro/blackberry.html), as are several e-books including Current Consult Medicine (see http://www.usbmis.com/store/ home.php?cat=24). Epocrates Rx is available for the iPhone (http:// www.epocrates.com/gomobile/find-your-perfect-device.html) Skyscape supports the iPhone (http://www.skyscape.com/ intro/iphoneintro.aspx) and several medical textbooks are now available for the iPhone (see http://www. unboundmedicine.com/store/iphone).

Some schools are supporting the iPod Touch as the PDA of choice for medical students: "The Ohio State University College of Medicine is the only college currently using the iPod Touch to give to all its students for educational purposes" [5].

PDAs were most often consulted for drug information and doses (49 users or 65.3%). This may relate to the availability of Epocrates Rx as a free resource. We note that electronic text books were rated as being used more often than e-mail, contrary to our expectation that messaging features such as calendar, telephone, and e-mail would be cited as the most-used features.

The fact that drug information ranked highest, and electronic text books came in fifth place and ahead of e-mail strengthens the hypothesis that medical residents rely on PDA resources as a clinical tool (Table 1).

Respondents listed 61 different resources that they currently use on their PDAs. Products named more than once are shown in Table 2. Epocrates is the most used, followed by several versions of Lexi-Comp. These survey results show that drug information is the most-used PDA software, followed by medical calculators.

Future surveys should ask the respondents which software products they get for free and for which they pay. Full comments from those surveyed are shown under question 8 in Appendix A, but two quotes show that cost is a factor for this user group:

I used to have Lexi Comp, which was excellent as it contained a dictionary as well as a great drug program, but it's very expensive.

I would have more if they were less expensive.

The survey asked about three products that the library currently has the ability to support: Natural Standard (a complementary medicine database), Pocket Consult (via MD Consult), and ACP's Pier (via Stat! Ref).

The majority of medical residents (85.7%) said they would use both Pocket Consult and ACP's Pier. Only about half that number, 45.8%, said they would use Natural Standard. This is a new product for the Capital Health Library, so this may reflect a lack of familiarity with this product. Also, residency training focuses predominantly on the procedures of conventional medicine, so a different cohort—perhaps practicing family physicians who will have more patients using complementary preparations—may find greater uses for a complementary medicine product.

Table 1. PDA features most used.

	Features most used
Function	by respondents (%)
Drug database	65.3 (49)
Calendar	52.1 (48)
Contacts	43.8 (48)
Text/telephone	40.4 (47)
E-textbook	31.9 (47)
E-mail	29.5 (44)

Note: Values in parentheses are the number of respondents (n = 51).

Table 2. PDA products currently used.

Products named more than once	No. of times product
by respondents	named $(n = 36)$
Epocrates	26
Lexi-Comp/Drugs/Interact/Suite	11
Medical calculator	10
5-Minute Clinical Consult	7
PEPID	7
Harrison's	6
Stedman's Medical Dictionary	6
Washington Manual	5
DSM-IV	3
Taber's	3
Tarascon	3
UpToDate	3
PalmEKG	2
Skyscape applications	2
Toronto Notes	2

Implications for library training

- (i) Medical residents will not need basic PDA training because they have owned a PDA for some time and will be accustomed to the features of their PDAs.
- (ii) The library should emphasize training using Palm software to meet the needs of the largest numbers of users.
- (iii) Smart phone technologies are the tools of choice for 36% of these medical residents. Future training should include smart phone technologies, and regular surveys should be delivered to see which type of technology is the preferred one.

Full survey results follow in Appendix A.

Directions for further research

More research needs to be conducted on evaluating skills levels before and after training in the use of PDA software products.

Acknowledgement

The authors wish to acknowledge the technical help of Verona Leslie, library technician, in the development and implementation of the survey.

Logan and Collins 5

References

- Garritty C, El Emam K. Who's Using PDAs? Estimates of PDA use by health care providers: a systematic review of surveys. J Med Internet Res. 2006;8(2):e7.
- American Medical Student Association [homepage on the Internet]. Reston (Va.): American Medical Student Association [accessed 31 Dec 2008]. AMSA overview of handheld devises. Available from: http://www.amsa.org/resource/pda.cfm.
- 3. Hurt A. How PDAs are changing the clinic and classroom. *New Physician*. 2007 Sept [accessed 5 Jan 2009];56(6). Available from: http://www.amsa.org/tnp/articles/article.cfx?id=387.
- 4. iPod Touch a replacement for your PDA? *The Palmdoc Chronicles*. Palmdoc [accessed 18 Dec 2008]. Available from: http://palmdoc.net/?p=1672.
- 5. An iPod Touch for every medical student. *The Palmdoc Chronicles*. [posted 14 Dec 2008; accessed 5 Jan 2009] Available from: http://palmdoc.net/?p=2078.

Appendix A begins on the following page.

Appendix A. Survey results

Survey Title: PDA

Q.1 Do you own a PDA?		
Answer		Count
No		6 (11%)
Yes		51 (89%)
	People who answered question:	57 (100%)
	People who skipped question:	0 (0%)

Q.2 How long have you ha	d your PDA?	
Answer		Count
> 12 months		49 (96%)
6 months		2 (4%)
12 months		0 (0%)
	People who answered question:	51 (89.5%)
	People who skipped question:	6 (10.5%)

Q.3 What type of PDA do	you use?	
Answer		Count
Palm		32 (64%)
Other smartphone		3 (6%)
Blackberry		3 (6%)
iPhone		12 (24%)
	People who answered question:	50 (87.7%)
	People who skipped question:	7 (12.3%)

Q.4 Did you own a PDA before commencing your residency?		
Answer		Count
No		8 (15%)
Yes		47 (85%)

Logan and Collins 7

Q.4 Did you own a PDA be				
N/A		0 (0%)		
	People who answered question:			
	2 (3.5%)			

Q.5 Do you use OR intend	to use your PDA in a clinical setting?	
Answer		Count
Yes		50 (91%)
No		5 (9%)
	People who answered question:	55 (96.5%)
	People who skipped question:	2 (3.5%)

lease rank your use of the PDA where 1 is the feature:	most often used	d feature a	and 5 is th	e least of	iten	
	1 (most)	2	3	4	5 (least)	Count
As a calculator	5 (10.6%)	13 (27.7%)	11 (23.4%)	13 (27.7%)	5 (10.6%)	47
As a medical calculator	9 (19.1%)	18 (38.3%)	9 (19.1%)	9 (19.1%)	2 (4.3%)	47
Calendar	25 (52.1%)	4 (8.3%)	9 (18.8%)	5 (10.4%)	5 (10.4%)	48
Track patient information (log)	2 (4 .4%)	3 (6.7%)	5 (11.1%)	6 (13.3%)	29 (64.4%)	45
Drug information and doses	32 (65.3%)	8 (16.3%)	0 (%)	4 (8.2%)	5 (10.2%)	49
Electronic text book	15 (31.9%)	13 (27.7%)	6 (12.8%)	8 (17%)	5 (10.6%)	47
As procedure log	4 (9.3%)	3 (7%)	6 (14%)	7 (16.3%)	23 (53.5%)	43
As MP3 player	7 (15.9%)	3 (6.8%)	8 (18.2%)	4 (9.1%)	22 (50%)	44
Web searching	7 (15.6%)	9 (20%)	4 (8.9%)	3 (6.7%)	22 (48.9%)	45
Text message, telephone	19 (40.4%)	4 (8.5%)	2 (4.3%)	3 (6.4%)	19 (40.4%)	47
Email	13 (29.5%)	5 (11.4%)	3 (6.8%)	3 (6.8%)	20 (45.5%)	44
Other uses (entertainment/games)	2 (4.5%)	6 (13.6%)	13 (29.5%)	1 (2.3%)	22 (50%)	44
Contacts	21 (43.8%)	11 (22.9%)	7 (14.6%)	2 (4.2%)	7 (14.6%)	48
	·	F	eople who	answered	question:	52 (91.2%)
People who skipped question:				5 (8.8%)		

Q.7 What resources are in	estalled on your PDA?	
Answer		Count
5 Minute Clinical Consult		4 (9%)
Medical Dictionary		4 (9%)
Epocrates		20 (43%)
Harrison's		2 (4%)
Other (please list below)		16 (35%)
	People who answered question:	46 (80.7%)
	People who skipped question:	11 (19.3%)

Q.8 What other resources are installed on your PDA that are not listed above and what resource do you use most often via your PDA?	
People who answered question:	36 (63.2%)
People who skipped question:	21 (36.8%)

Other: resources:

Pepid

5 Minute Clinical Consult (I need a drug reference!)

Tabers, Harrisons, medical calculator, Toronto Notes

lexidrugs and lexi suite (5 minute clinical consult, infectious dis, etc)

I used to have Lexi Comp, which was excellent as it contained a dictionary as well as a great drug program, but it's very expensive

PEPID, MedCalc, MedRules, Eponyms

medcalc, ABG, I would have more if they were less expensive

All of the above and much more.

Pepid, Emergency Medicine, Med Calc

Lexi, John hopkins Abx, Calculators

UpToDate, Lexi-Drugs, Sanford, 5 min ID, Critical Care Handbook, Vaccine Handbook

Taber's, Tarascon, PepID, CinciACS, CinciStroke, PalmEKG, others

Why does the previous question only allow one answer? Most people have multiple medical apps installed. I have epocrates, harrison's, stedman's dictionary, medmath, lexicomp

Skyscape applications

all of the above, also DSM-IV

tarascon

Logan and Collins 9

harrisons, PEPID CRC and dictionary, trying to get uptodate (not working well on palm tx, though),tarascon, torontonotes

skyscape, epocrtes, med calculators, netter msk

Lexidrug, lexi interact. DrDrug, A-Z drugs, Washingtom manual

Lexi-comp

Anatomy interactive, Drug dosing guide,

Pepid

Stedmans, Tabers

med calc and lexi drugs

Netter's Anatomy Flashcards

Medical calculator, uptodate, toronto notes, tarascon

HB fracture, gamuts, stedmans dictionary, 5 min ortho/emerg/sports, washington manual, peds drugs, OCM, anaesthesia drugs -- use epocrates the most

Air Sharing - allows to view almost any document type on iTouch

Lexidrugs

Evidence Medicine calculator, Mobile Differential Diagnosis (MGH), The Washington Manual - Psychiatry Survival Guide

StatRef

I use Epocrates the most. I also have med calc and a series of oncology nomograms, diagnosaurus and an epononym program

Washington manual of surgery

Up to Date, Pepid

Epocrates, MedCalc, Wikipedia

epocrates, lexi drugs, dsm-iv, 5mcc, ferri guide, washington m anual, med lab ref, palmekg, psychpharm, i use dsmiv most i think

Q.9 Are you interested in having free access to the following Capital Health Library PDA			
	Yes	No	Count
Natural Standard (free one year subscription) Collection of systematic reviews of alternative and complementary medicine for clinicians; evidence-based, peer reviewed: Palm, PocketPC formats.	22 (45.8%)	26 (54.2%)	48
MD Consult / POCKETConsult (free unlimited timeframe subscription) Access to selected journals in full-text, daily news updates, clinical updates, weekly drug updates, calculators and medical textbook	42 (85.7%)	7 (14.3%)	49
STAT!REF PDA:Pier (ACP Pier's) (free unlimited ti meframe subscription) Physician's Information and Education Resource (PIER) evidence-based disease modules, provide quick access to authoritative an	42 (85.7%)	7 (14.3%)	49
People who a	50 (87.7%)		
People who	question:	7 (12.3%)	

Q.10 Please Identify Yours	elf:	
Answer		Count
Resident		51 (77%)

Q.10 Please Identify Yours	self:	
"other"		13 (20%)
Allied Health Professional		1 (2%)
Physician		1 (2%)
Clinical Clerk		0 (0%)
Nurse		0 (0%)
Pharmacist		0 (0%)
	People who answered question:	54 (94.7%)
	People who skipped question:	3 (5.3%)

Appendix 3
Refworks launch invitation

Get started with Refworks today!

Capital Health Libraries RefWorks launch!

Dickson Health Sciences Library	Tuesday, May 20th	10am - 12pm
Infirmary Health Sciences Library	Tuesday, May 20th	Ipm - 3pm
Dartmouth General Health Sciences Library	Wednesday May 21st	10am - 12pm

NSH Health Sciences Library Wednesday, May 21st Ipm - 3pr

Coffee, tea and snacks provided

REFWORKS can be your LIFESAVER

You are invited!

Capital Health Libraries RefWorks launch!



Come out to the Capital Health Libraries Refworks Launch

Appendix 4 Volunteer Newsletter, Vol 1(3) Fall 1998





Volunteer Newsletter

Volunteer Services Vol. 1, Issue 3 Fall 2008

Manager's Message

Capital Health is on a journey to become a world-leading haven for people-centered health, healing and learning. As a volunteer and a member of the Capital Health community, you are part of this journey and everyday you help us move closer to achieving this goal.

The time that volunteers choose to spend in supporting patients, residents, clients and families has a huge impact on the people we serve. Whether it's giving back to the community where you live, showing gratitude for services received, or exploring a career for the future, volunteers play a significant role in our organization.

We hope you enjoy your volunteer time with us and that you'll be proud to share your volunteer experiences with your families, friends, and colleagues. Learning about the benefits of volunteering at Capital Health may encourage them to join our journey too!

Michele McDonald Manager, Volunteer Services



Have you been to the library lately?

We're not talking about any library; we mean one of Capital Health's Health Sciences Libraries.

Did you know that Capital Health has four libraries? Did you know that as a volunteer you have access to those libraries to borrow books, A/V materials, and journals? Did you know that our library has a training and education program for those interested in learning more about the library's resources and services?

In addition to their vast collection of books and A/V materials, our libraries also provide links to a number of databases including, PubMed/Medline, PsycInfo, Adverse Drug Reactions, e-CPS and

more. Other services include interlibrary loans, literature search assistance, reference assistance, and use of the library computers for checking emails and searching information.

The Health Sciences Libraries are located at the Dickson Building (room 5106, 5th floor), Halifax Infirmary (room 2201, 2nd floor), Nova Scotia Hospital (room 200 Hugh Bell Building) and Dartmouth General Hospital (room 2205, 2nd floor). Hours of operation are Monday to Friday, 8:30 am to 4:30 pm. For more information, please visit the website of the Health Sciences Libraries at http://www.cdha.nshealth.ca/default.aspx?Page=SubPage&category.Categories.1=91¢erContent.ld.0=34423

The next generation of health care workers

ne high school student has discovered a love of occupational therapy. Another is now interested in a career in psychology and yet another wants to be a physiotherapist. For many students, Capital Health's cooperative education volunteer program is a journey of self-discovery.

"Students walk in the first day scared and nervous," says Berni Duda, co-ordinator, Volunteer Services. "After a couple of months, they're more confident – they blossom."

This program, offered through Volunteer Services, provides volunteer placements at the QEII, Cobequid Community Health Centre, The Nova Scotia Hospital and Hants Community Hospital, and will soon expand to include Eastern Shore Memorial Hospital. Students receive a high school credit after completing 25 hours of classroom studies and 100 hours of volunteer work.

Volunteer opportunities are as varied as the students themselves. Placements at the QEII allow students to experience many facets of the medical environment, while The Nova Scotia Hospital (NSH) gives students the opportunity to get to know clients on a deeper level. "Students stay on one unit, so they build

strong relationships with clients," explains
Dachia Joudrey, co-ordinator, Volunteer
Services at NSH.

Students at Hants Community Hospital explore opportunities in Pharmacy, Acute Care, Transitional Care and Long-term Care, while those at Cobequid Community Health Centre volunteer in the Emergency Department, Diagnostic Imaging and Pharmacy.

Dave Strickland, co-operative education coordinator, Sackville High School, sees the strong impact of the program on his students. "It really is a maturing process," he says. "In addition to learning about career options in health care, students learn to take responsibility for meeting the expectations of a workplace."

The benefits of the program to students are matched by the benefits to the organization. "With looming shortages in health care, it's important for youth considering a career in health care to feel comfortable in a hospital setting," says Gordon Spurrell, co-ordinator, Volunteer Services. The program seems to be meeting this objective – many participants have gone on to pursue careers in health care.

Reprinted with permission of Margaret Angus, Communications and Marketing

The Ambassador Volunteer Program

The newly created Ambassador Volunteer Program at designated buildings at the QEII provides a unique quality service to patients, their families and visitors to the hospital. The "Ambassador" greets people when they enter the building and asks how they can be of assistance. The uniqueness of the Ambassador Program is that the volunteer actually takes the person directly to where they need to go. If the person is going to a clinic, the volunteer even ensures the patient is settled in the waiting room for their appointment (which includes checking in at registration) before leaving to provide assistance to another patient, family member or visitor.



The volunteers in the Ambassador Volunteer Program enjoy their role immensely. They report the feedback they receive from the people they assist keeps them well motivated and enthusiastic about what they are doing. Building on the success of the QEII program, the role of Ambassador Volunteer has now expanded to the Cobequid Community Health Centre. Volunteers will assist the public in finding their way to the various clinics and services located in this facility, plus they will assist in the waiting room.

If you know of a friend or family member who might be interested in becoming an Ambassador Volunteer at either the QEII or Cobequid Community Health Centre, please encourage them to contact QEII Volunteer Services 473-5420 or Cobequid Volunteer Services 869-6544 for more information.



he East Coast Forensic Hospital (ECFH) in Burnside is a unique setting within the Capital Health district in that it directly serves clients from the judicial system. The hospital has two rehabilitation units (each has 30 beds) and adheres to a rehabilitation model of service delivery using the principles of the Psycho-social model of care.

Currently, volunteers are needed to fulfill roles such as recreation, pet visitation, music appreciation and companionship. These volunteer positions provide opportunities to develop relationships with staff and residents at the hospital, and provide much needed services to the residents there. It is also a great opportunity for anyone studying in the field of forensics, psychology, social work, occupational therapy, psychiatric nursing; to name a few.

Volunteers must be friendly, warm and sincere, bring a positive attitude and exhibit a genuine interest in the work of this hospital. They also must possess a non-judgmental attitude and be reliable and committed to the role that they undertake. Please note that volunteers going to the ECFH must agree to have a Canadian Police Information Check completed prior to placement. For more information on volunteering at ECFH, please contact Shelley Peterson (464-3163) or Dachia Joudrey (464-4805).

Volunteer Training Day

Volunteers at the Hants Community Hospital in Windsor took part in an informative and fun training day on August 20th. Volunteers attended a number of different training sessions including body mechanics, nutrition, meal assistance, infectious control, and enhancing quality care for patients. The evaluation from the day was a tremendous success and we are grateful to Claudia Rafuse, Lynn Campbell, Carla Scholten, Pam Christopherson, Amanda Burgess and Cynthia Stilwell for taking time out of their busy schedules to help train our dedicated volunteers. It is people like you who make such a wonderful difference to enhance the skills of our volunteers, which in turn provides better care to our patients.

Thank you so much,

Jennifer Skuffham Volunteer Coordinator

Time to Know More: Seasonal Affective Disorder

Wednesday, November 19, 2008 7 – 9pm Cole Harbour Library

This education session is presented by the Cole Harbour Library and the Cole Harbour Eastern HRM Mental Health Services and is open to anyone who wishes to attend. In the case of inclement weather and/or if schools have been cancelled, the session will be cancelled. For further information, please call 434-7228.

Building A Better Tomorrow Sessions

- Nov 17 Facilitating Adult Learning
- Dec 3 Team Building
- Dec 10 Facilitating Adult Learning

Volunteers are welcome to register for any of these workshops by contacting:
Julie Harrington
Coordinator, Building a Better Tomorrow
470-7351
julie.harrington@iwk.nshealth.ca

Beating the Flu Bug

With fall upon us and winter approaching, it's time to think about flu season. When Health Care workers and volunteers get immunized against influenza, they protect themselves, their families and the patients/residents in their care. Volunteers are welcome to get a flu shot, free of charge, through a clinic in the facility where you volunteer, or by appointment through Occupational Health. Please contact Volunteer Services for more information.

We'd also like to take this opportunity to remind you not to come in for your volunteer shift if you are feeling unwell; have active gastrointestinal illness (diarrhea or vomiting), fever or other illness. Let's do everything we can to reduce the spread of germs within our facilities!