

e-HLbc User Survey Analysis

e-HLbc Evaluation Subcommittee:

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Introduction

Evaluation of the benefits of e-HLbc for both the health and academic sectors was identified early in the project as essential for developing the project in line with user needs and wants. The Evaluation Subcommittee of e-HLbc with the help of then e-HLbc Coordinator, Jo Anne Newyear-Ramirez, created and ran a user survey (Appendix A) to evaluate the impact of e-HLbc on practice, education and research in health care and sciences.

Methodology

Guiding principles in the development of the survey questions (Appendix A) were brevity and the addressing of key points in the logic model presented in the 2005 [e-HLbc Business Case](#) (Appendix B). In particular, the survey addressed the selection of licensed resources (questions 9, 12, 13) and training/support issues (questions 4, 6, 12k, 13). In regards to e-HLbc effectiveness the survey addressed 'convenient access for all health care providers (questions 8f,j, 12a-l); 'increased and equitable access for all Faculty and students' (questions 11, 12a-i11); 'evidence based practice' (questions 8c,e,g,h); 'improved research and education' (questions 8a,e,h,k, l, 11); 'improved health outcomes' (questions 8d, 10, 11), and 'improved recruitment and retention of health professionals' (question 8b). In order to increase the response rate there was a prize incentive of an iPod Nano.

The survey was designed with UCCASS software and was pre-tested on 6 people in both the academic and health sectors. Because of the diversity in e-HLbc resource access methods it was impossible to directly email all e-HLbc end users to solicit survey response. Instead, we sent all Steering Committee members the survey, along with an email inviting people to take the survey, for distribution as each member deemed appropriate to his/her user group. Ethics approval was not sought as these results are meant to help decision making within e-HLbc only and will not be published. The survey was launched on April 1, 2008 and ran for a month closing May 2, 2008. Reminders to complete the survey were sent out at the discretion of each Steering Committee member.

Evaluation

Full results of the survey are available as an appendix in members-only. Key results are summarized here.

Demographics

The survey had 959 respondents representing all sectors of the consortium including health professionals, students, researchers, administrators, educators and librarians. The majority of respondents, 38%, self-identified as health practitioners and 73% of the respondents reported affiliation with a health authority.

e-HLbc Resources

In relation to licensed resources, answers to question #9 revealed that users value resources that support patient care, professional development and work related issues. In particular, 45% and 43% of users expect current e-HLbc resources to address work related issues and professional development issues respectively. 38% of users were motivated to use e-HLbc resources to answer patient care issues. 42% of respondents indicated that they expect e-HLbc resources to address 'personal research'. Unfortunately this term was not explicitly defined and, therefore, only limited conclusions can be made about what the response rate might mean. Any future surveys must better define 'personal research' if it is felt that this factor is worth investigating.

Responses to question 12 revealed more specifics about what e-HLbc users value in resources. The highest rated value was accessibility, followed by ease of use and access to full text articles. Answers to questions 13 and 14 emphasize the importance to our project's users of access to full text resources. In question 13. 21% of respondents said that e-HLbc doesn't have enough full text resources.

Convenient access to resources was valued by 61% of respondents (question 8) and, as the graph in Appendix C shows, eHLbc provides increased and more equitable access to health information throughout the province, especially in rural areas.

Marketing/Promotion

In regard to the marketing of e-HLbc, interestingly, library staff are the most significant bridge between the resources and users. Least effective in promotion were brochures and flyers as only 4% of respondents learned about e-HLbc resources this way.

Improved recruitment and retention of health professionals was one of the outcomes by which we hoped to measure the success of e-HLbc but results of our survey indicate that e-HLbc does not yet play a major role in recruitment (question 8b).

Training

Roughly $\frac{3}{4}$ of respondents have never attended training sessions on e-HLbc resources (question 6) and only about 10% of respondents indicated that they want more training (question 13).

Value

Evidence based practice is a core principle of modern health care as it supports improved patient care by integration of new knowledge into clinical practice. One of the goals of the BC Ministry of Health is “improved health and wellness for British Columbians” ([Ministry 2002/03 Annual Service Plan Report](#))

(http://www.bcbudget.gov.bc.ca/Annual_Reports/2002_2003/hp/hp_performance_link2.htm). Furthermore, evidence based practice is a stated objective of the BC Ministry of Health’s 2008/09–2010/11 Service Plan (<http://www.bcbudget.gov.bc.ca/2008/sp/hlth/default.aspx?hash=4>):.

Making the right investments in information management systems and new technologies will support the health system in meeting the goals and objectives set out in this service plan. Technology can improve system integration and efficiency, improve access to services across the province, assist managers and practitioners to make evidence-based decisions, and help the public access valuable health information in a timely and convenient manner.

eHLbc resources clearly support evidence-based practice. An overwhelming 94% of survey respondents said that they believe that e-HLbc resources have the potential to improve patient care. There was a clear indication of the value of eHLbc resources in improving patient care, health research and education as evidenced in over 100 experiences shared by respondents (question 11). Here are a few specific examples:

- “able to access many articles needed in a lit (sic) search to support a local research project on the early aggressive treatment of sepsis”
- “changed how I treated back patients with traction”
- “On-line access to medical journals, actually helped me save a patients life. Hospital nurse asked me to look at a patients leg wound I had never seen necrotizing facicitis before, but felt that is what was happening I went back to my office, quickly looked up the condition through e-HLbc and found out by hunch was correct I notified the patients doctor and she was sent for immediate surgery” (sic)
- “I was able to access ventilator education modules to assist wit ICU staff in caring for an intubated ventilated patient” (sic)

Discussion

Survey responses were representative of all e-HLbc jurisdictions. The results strongly support the fact that all sectors of e-HLbc (academics, students, and

health professionals) find value in the project, and demonstrate that eHLbc has achieved success according to several measures within the project's logic model.

Convenient, expanded, and equitable access has been significantly increased throughout the province to users in both rural and urban areas. 70% of survey respondents find what they need using e-HLbc resources. Evidence-based practice is supported as evidenced by subjective feedback on the potential of eHLbc resources to improve patient care and objective anecdotes on real-life examples of the application of the resources to clinical, research, and educational situations. Respondents have sent a clear message that the use of e-HLbc resources has led to improved patient care.

Respondents have clearly told us that they want more full text and easier to use resources. The process of gathering suggestions from eHLbc members for new information products, that is, the Suggestion Box and Ranking Survey, are, in part, addressing this stated need. Many respondents expressed frustration with e-HLbc resource interfaces so, accordingly, ease of use should influence the licensing of new products. A significant issue learned from survey results is the lack of effectiveness of print promotional resources. The considerable time and financial investment in print material should be reassessed in the light of these findings. Another illuminating finding was the low uptake of training. $\frac{3}{4}$ of respondents have not chosen to have any training and only 10% of 269 respondents indicated that they needed training. Consideration should be given to careful needs assessment and post-instruction evaluation or future training endeavors. The survey indicates that e-HLbc is not yet a factor in recruitment so perhaps the project needs to encourage librarians to better market e-HLbc resources to human resources administrators, particularly in the health authorities. Librarians have, to date, been the strongest promoters/marketers of e-HLbc but recruitment appears to be an area that still requires promotional targeting.

Conclusion

Survey results clearly indicate that e-HLbc is valuable to both the academic and health care sectors and does lead to improved patient care. Issues most in need of addressing, according to survey results, include the fact that e-HLbc users want more full text resources, and that more marketing of e-HLbc needs to be done, especially to human resources administrators in health authorities.

The Evaluation Subcommittee considers this survey as part of a continuous evaluation process to ensure that e-HLbc develops as a strong partnership among the health and academic sectors. Other ongoing evaluation methods by the Subcommittee consist of measuring the scope of access (Appendix C), database usage data and literature searches measuring the value and impact of health libraries and resources (available at <http://ehlbc.ca/>). The Evaluation Subcommittee's will continue to assess and evaluate e-HLBC.

Appendix A

Survey #39: Health Database User Survey

This survey should take just a few minutes to complete. Once you have completed the survey you will be taken to a page that will let you put your contact information for a chance to win an iPod nano. Your contact information will not be associated with your survey answers. These are completely anonymous.

This survey is being conducted by Electronic Health Library of British Columbia (e-HLbc). e-HLbc provides the academic and health care community of British Columbia with easy access to a suite of online health library resources. This survey is designed to evaluate the impact of e-HLbc on practice, education, and research in the health sciences.

The e-HLbc suite of electronic resources includes a number of databases from Ebsco and Ovid, including 3 indexes, Medline, CINAHL and PsycINFO, as well as several full text journal bundles including the Biomedical Reference Collection, LWW Total Access, PsycARTICLES, and EBMR (including the Cochrane Collection).

Member organizations include all public BC post-secondary institutions providing health education courses, the BC Ministry of Advanced Education, the BC Ministry of Health, the BC Ministry of Children and Family Development, all BC Health Authorities, and the College of Physicians and Surgeons of BC.

Please let us know more about you. You are a...

Please check all that apply

- Administrator
- Educator
- Faculty Member
- Health Practitioner
- Librarian/Information Professional
- Researcher
- Resident
- Student
- Other

If Other, please explain:

Which of the following are you affiliated with?

Please check all that apply

- Health Association
- Health Authority
- Post-Secondary Institution
- Private Practice

How did you hear about e-HLbc (Electronic Health Library of British Columbia)?
Please check all that apply

- Brochure or promotional flyer
- Colleague or classmate
- Educator or Faculty
- From librarian/library staff/library presentation
- Library web page
- Word of mouth
- Never heard of it
- Other

If Other, please explain:

Have you ever attended library training on any of the e-HLbc resources?

- No
- Yes

How often do you find the information you want using e-HLbc resources?
Please check all that apply

- All of the time
- Most of the time
- Some of the time
- Rarely
- Never

Does having access to the e-HLbc resources make a difference to you in any of the following areas?
Please check all that apply

- Enhance educational programmes
- Enhance recruitment at your institution
- Help change hospital-wide policies, procedures, and guidelines
- Help you make better choices in treating your patient(s)
- Improve your awareness about current issues in health care
- Provide you with easy and convenient access to information resources
- Provide you with information on best practices

- Provide you with new knowledge or substantiate prior knowledge about clinical practice
- Reduce your frustration and stress with information overload
- Save you time
- Support your academic or clinical research related needs
- Support your professional development

What motivates you to use e-HLbc online resources?

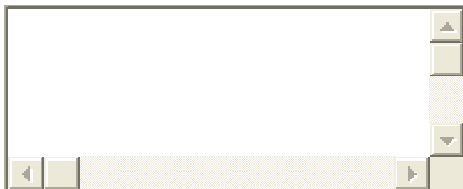
Please check all that apply

- Administrative/Planning
- Course assignment
- Current awareness
- Educating other staff
- Educating patients
- Educating students
- Hospital project
- Patient care
- Personal research
- Presentation
- Professional development
- Scholarly research
- Work related issues

Do you believe e-HLbc online resources have the potential to improve patient care?

- No
- Yes

If you have any specific instances when using e-HLbc resources improved patient care, or health research, please tell us about your experience.



What do you like most about e-HLbc online resources?

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What do you like least about e-HLbc resources?

An empty text input field with a light beige background and a thin black border. It features a vertical scrollbar on the right side and a horizontal scrollbar at the bottom, both with small triangular arrowheads.

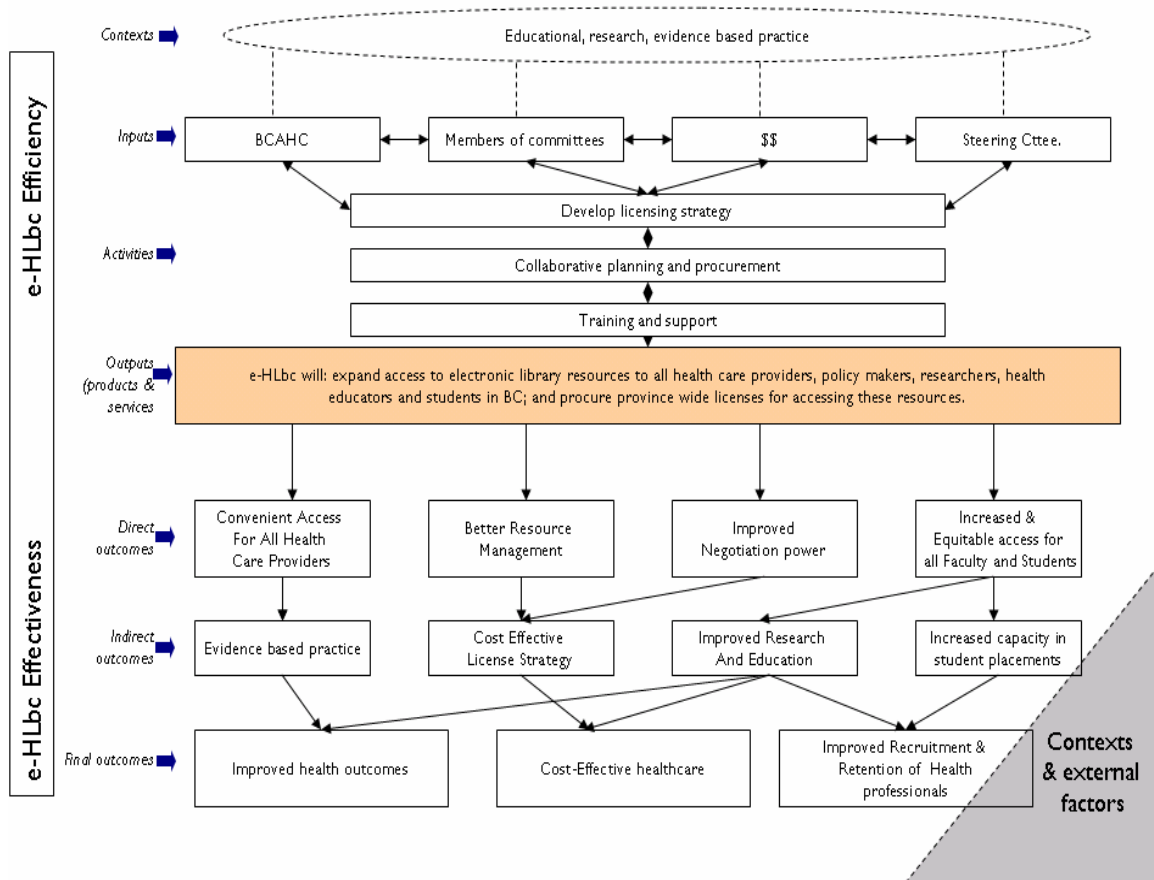
Any suggestions for other resources e-HLbc should make available for healthcare practitioners, researchers, and learners?

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Once you select FINISH you will be taken to a page that you can put in your contact information for a chance to win an iPod nano.

Appendix B

Results-based Logic Model for the Electronic Health Library of BC (e-HLbc)

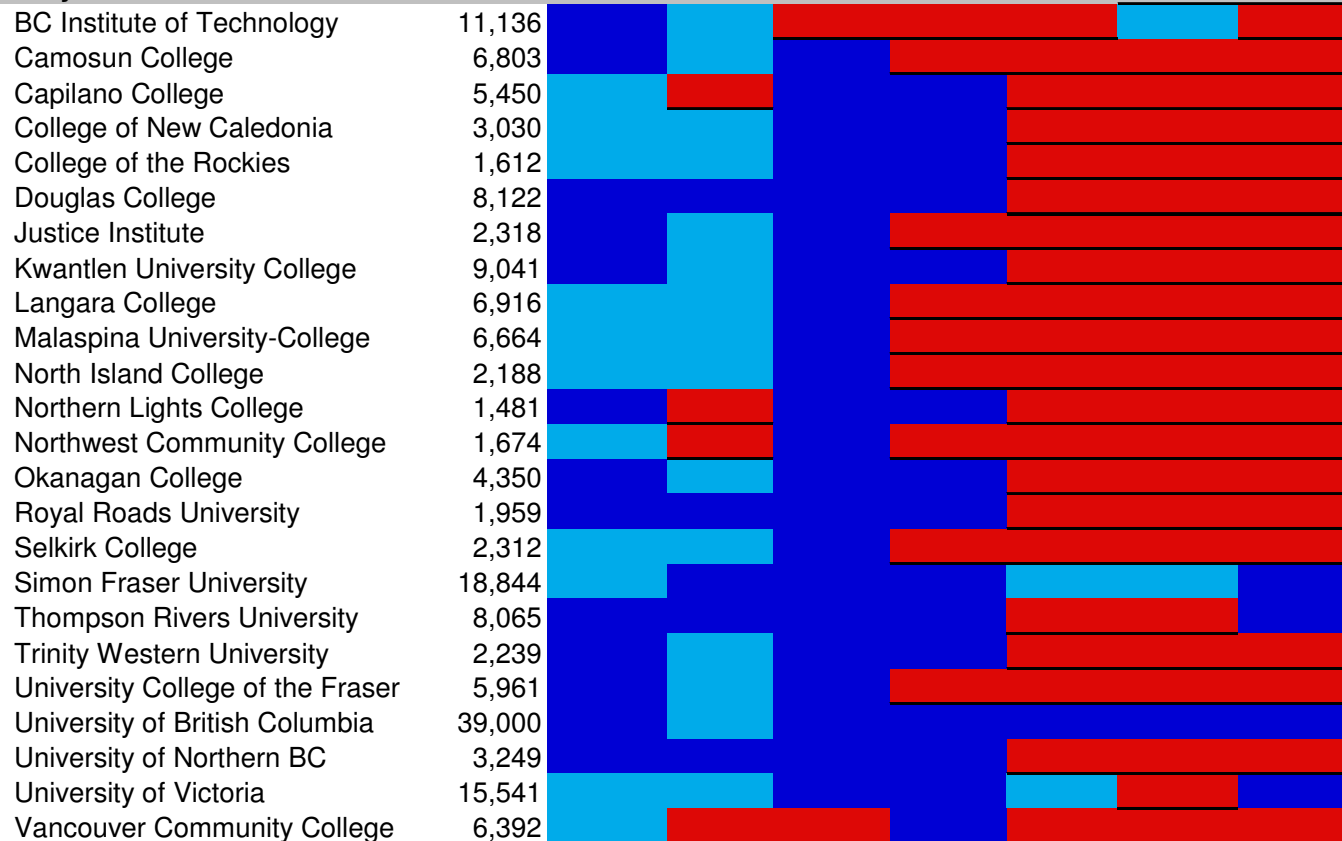


APPENDIX C

Do More people have access to more resources?

Health Authorities	FTE	Resources							Average
		Biomedical Reference Collection	Cinahl with Full Text	PsycInfo	PsycArticles	EBMR	LWW Total Access	Medline	
Ministries of Health	2,000	Blue	Light Blue	Red	Light Blue	Blue	Light Blue	Light Blue	
College of Physicians & Surgeon	8,780	Red	Light Blue	Red	Light Blue	Light Blue	Light Blue	Light Blue	
Fraser Health Authority	22,500	Red	Light Blue	Blue	Red	Blue	Blue	Blue	
Interior Health Authority	12,422	Light Blue	Light Blue	Red	Light Blue	Light Blue	Red	Light Blue	
Northern Health Authority	4,000	Red	Light Blue	Red	Light Blue	Light Blue	Blue	Light Blue	
Provincial Health Services Authc	6,963	Red	Light Blue	Red	Light Blue	Light Blue	Light Blue	Light Blue	
Vancouver Coastal Health Authc	24,900	Red	Light Blue	Red	Light Blue	Light Blue	Red	Light Blue	
Vancouver Island Health Author	16,000	Red	Light Blue	Red	Light Blue	Light Blue	Red	Light Blue	
More Access (none before)		74,363	49,680	43,202	88,602	8,780	62,102	16,000	Average 48,961
More Access (partial before)		8712	72,785	31,863	8,963	64,285	12,963	55,065	Average 36,377

Post Secondary Institutions



More Access (none before)	0	14,997	17,528	45,972	100,962	105,367	92,897	Average	53,960
More Access (partial before)	70,623	119,111	0	0	34,385	29,980	0	Average	36,300
Combined Totals	More Access (none before)	74,363	64,677	60,730	134,574	109,742	167,469	Average	102,922
	More Access (partial before)	79,335	191,896	31,863	8,963	98,670	42,943	Average	72,676

