



Report on the National Network of Libraries for Health (NNLH) Meeting Held on Monday, February 26, 2007 in Ottawa

This meeting was organized by the Canadian Health Libraries Association's NNLH Task Group. Invitations were sent to representatives from the organizations that funded the *NNLH Concept of Operations* document. These organizations were the Canadian Medical Association (CMA), the Canadian Nurses Association (CNA), CISTI (Canada Institute for Scientific and Technical Information) and the Public Health Agency of Canada (PHAC). Canada Health Infoway was also invited to the meeting as a follow-up to a meeting that they hosted and at which the NNLH initiative was represented.

The meeting objectives were the following:

- discuss the *Concept of Operations*,
- review some exciting new developments,
- advise on a meeting with the broader community of stakeholders in May 2007, and
- move the NNLH initiative forward.

The co-chairs of the NNLH Task Group, Jessie McGowan and Patrick Ellis, welcomed the attendees and thanked everyone in advance for their valuable contributions to the day's meeting. Wayne Glover, President of AssociationsFirst, facilitated the meeting.

Attendees' Expectations for Meeting [see Attendees list]

- Would like to know what the NNLH will look like
- Would like to see new ideas adopted to accelerate the adoption of electronic health records
- Take back information to home organization about what NNLH would be like
- See practical implementation of ideas behind NNLH
- Know how other provincial and federal initiatives and resources will fit with the NNLH
- Rescue libraries from being cut
- Fit of NNLH with the Office of Public Health Practice of the Public Health Agency of Canada and public health issues and the needs of public health practitioners
- Know how CISTI can facilitate the NNLH since NNLH is a good fit with CISTI's strategic focus, and fits with CISTI's national role to provide support to underserved areas among others
- Prepare plans for the May meeting – who should be involved in planning to move the NNLH initiative ahead
- See NNLH deliver information better than is currently being done
- Improve services to underserved constituencies

Presentations

- NNLH Task Group members Jessie McGowan and Judy Inglis gave a progress report on the NNLH initiative and an overview of the *Concept of Operations* document. [see PowerPoint slides]
- NNLH Task Group member Jim Henderson gave an environmental scan presentation on recent relevant initiatives in other countries and in Canada. He also mentioned the recent meeting convened by Canada Health Infoway. [see PowerPoint slides]

- Micheline Jaworski, NNLH Task Group member and representative for the Canadian Nurses Association, gave a presentation on the CNA's NurseONE portal (<http://www.nurseone-inf-fusion.ca/splash.html>). Micheline sees considerable value in the implementation of the NNLH in order to complement and supplement what is available through the CNA portal. She spoke of the potential to create a partnership between NurseONE and the NNLH. She suggested the group evaluate utilizing the NurseONE platform as the portal prototype for the NNLH as it is already built and tested. This would benefit both parties as it would save valuable time and resources which would otherwise be needed to build a portal for the NNLH while enabling CNA's capacity to offer library services to its membership.

Facilitated Discussions

The following facilitated questions were answered in plenary:

1. What do you like about the Concept of Operations (CoO)?

- There is a collaborative feel to the option laid out in the CoO
- The focus is on evidence based medicine
- There is a Canadian focus
- There is a broad group being consulted
- The concept goes beyond the library
- It is realistic
- It is based on other models so can draw on their experience
- It is a good document on which to base funding decisions
- There is now a visual of what the network might look like
- It addresses the concerns of the small libraries
- It addresses the need to support centrally and deliver locally
- It looks at the bundling of services and access
- The collaborative approach

2. What might be missing from the CoO?

- An outline of the long term funding issues
- How is this concept different from other networks?
- Are there other options that we should understand?
- What is the sustainability of this option?
- Where is the evaluation piece for the program and outcomes?
- What are the results of evaluations done in other jurisdictions?
- What is the return on investment?
- What linkages exist to other initiatives?

3. What are the strengths of the CoO?

- It addresses a huge demand
- It identifies a lack of coherence in the current initiatives
- Being housed at CISTI

4. What are the challenges that we can see with what has been outlined?

- Funding, identifying the return on investment
- Getting buy in from all stakeholders – overcoming the turf wars
- Need to work with existing initiatives to find common ground
- There needs to be education around the impact on individuals
- How does NNLH impact on funding at a local level?
- Getting the resources to implement the network past the first two years
- Need to build in opportunities to evaluate following each phase
- Clarify the mandate
- Jurisdictional structure
- Infrastructure

5. What opportunities do we have?

- Can use others' experiences
- Can build on the interest that has been shown
- Can partner with others who have indicated interest
- Can change the education of the users
- To get the mandate legislated
- Bring in perspectives from other stakeholders (healthcare providers)
- Can bring all potential funders into the project
- Clarify how funding and access works at all levels

Discussion

Lively discussions took place during the presentations and the facilitated question sessions.

These discussions centred around several key points:

1. Environmental and funding issues
2. Governmental support issues
3. Integrating with existing initiatives and impact on local resources
4. Services the NNLH would provide
5. Stakeholder input
6. Adoption issues
7. Measuring success
8. Technology and support issues
9. Next Steps Suggestions

1. Environmental and Funding Issues

Some basic concerns were expressed about comparing the situation in Canada with the UK or Germany. Is the situation in Canada comparable, or is it so complex that it will be difficult to get agreement on basic services, and to get sustainable funding?

- Evidence based health care is entailed in legislation in UK. Is that possible here?
- Canada has a complex funding system with provincial and federal involvement, and many local agencies. Is it possible to create a national health library that will be sustainable with funding from all responsible agencies, and that will still meet the diverse needs of local groups?
- Australia might be a better example.
- It was not clear in these other situations if there was "new" money for these initiatives.

Funding issues and the need for sustainable funding were discussed several times. There was a strong feeling that issues of sustainability should be addressed right away, and that efforts to fund beyond the initial phase of the project be started now. It was sometimes unclear whether the discussion was on funding for national site licenses only or for running the NNLH itself. Often, the focus was on who would pay for national site licenses to electronic resources, and how the cost of these licenses could be equitably distributed.

Funding for licenses

- Comparisons to New Zealand might be fruitful. In the New Zealand model there are 9 bands or levels of membership.
- A differential funding model based on size was suggested. This would include sponsorship for groups that could not meet the minimum requirements for contributions.
- It is difficult to say what the ongoing licensing costs will be because we don't know what is currently being spent on duplicate licenses (more than one group paying for access for a specific item for a specific individual). An inventory of current licenses is required.
- Some funds will be required to fill in gaps in licenses.

- Everyone should be aware that publishers won't want to make less money by agreeing to a national site license, and that additional funding may be required as coverage goes up.
- COUNTER usage data will likely be necessary to provide the data both librarians and publishers need to work out equitable costs for licenses and cost sharing.
- Local organizations worry about losing ground if the NNLH is not sustainable. In the UK some groups held on to their own licenses, afraid that if the larger initiative failed they would have lost the funding for their own licenses forever.

Funding for NNLH services

- Sustainability – what will the operating costs for NNHL be, and how will they be funded? The first two years of operation should supply information about the costs of sustainability.
- One suggestion was to obtain money from the existing groups and initiatives but this could feed fears of losing resources at the local level.
- Many models for membership and funding should be looked at.
- It might be possible to offer a core suite of services that can be funded nationally and offer more specialized value-added services, perhaps with a local or discipline specific focus, for additional charges to local funding agencies with more resources.
- The next step should be to look at potential funding sources and cycles, and at tailoring the approach taken with the different funding agencies.

National Site License Issues

While everyone recognized that the NNLH was not just about providing access to electronic publications, offering access to e-resources under a national site license was considered important.

- It is unclear where the gaps in coverage are now. One of the first steps should be to create an inventory of what is available now through the various health associations and government libraries. Duplicate coverage and gaps in coverage should be identified.
- Addressing gaps in coverage in the short term could be a good first step in developing a national plan.
- There was some debate on how difficult it would be to create an inventory. While libraries are good about sharing collection information, CISTI's experience with the Federal Science e-Library and other initiatives indicates it may be difficult to get a clear picture of who offers what to whom, for how much, and under what terms.
- In looking ahead there was some concern expressed about procuring national site licenses, and coordinating and complying with various provincial requirements. These issues would have to be resolved.

There was some debate about whether there would be support for a NNLH and national site licenses from publishers. In the past some publishers have not seen any advantage in this, preferring to sell to multiple organizations at the most advantageous prices. Now some aggregators/publishers seem quite willing to talk about national licenses (e.g. Ebsco, Ovid, Nature and Wiley). Advantages to the publishers include lowered administrative and trouble-shooting costs. Publishers also see an advantage to dealing with librarians rather than department administrators, and could be very supportive of a National Network of Health Libraries. Some questions were raised about working with aggregators.

2. Governmental Support Issues

Several people noted that there did not seem to be any direct interest on the part of the provincial health authorities in the NNLH initiative. This was attributed to a lack of funds, and wanting to put efforts into the policy level. Often funds and responsibilities are split between several local branches, making it difficult to participate. Some effort was made to get the Quebec government to coordinate with the various RUIS (Réseau universitaire intégré de santé <http://www.medicine.mcgill.ca/ruis/>) in Quebec, but this did not lead to concrete support for the NNLH.

The question of the role of Library and Archives Canada (LAC) and Health Canada in this initiative was also raised. It was explained that LAC concentrates on Canadiana. Health Canada looked at the NNLH concept, and participated in the early stages. However, after they did a health care provider survey they made a clear distinction between the information needs of the health professional and the requirements concerning patient information (covered by the Canada Health Act). They decided not to pursue work in the health knowledge side of things.

3. Integrating with existing initiatives and impact on local resources

Quite a lot of discussion revolved around the idea of working with the existing initiatives, organizations and libraries that already provide some access and services to diverse user groups. There was strong consensus that the goal of the NNLH was not to replace existing initiatives and libraries, but to coordinate activities to everyone's advantage and to offer additional services to the local groups. Not to reduce variability, but to incorporate variety.

- E.g. while Dynamed is funded through the UK National Health Service, the local libraries act as nodes to provide support and access.
- Partnerships need to be up and down as well as horizontal.
- Building on existing local centres of excellence is important, and technology should be used to make integration as good as possible. Want to see more sharing between networks – to build on existing initiatives to improve the system as a whole.
- There are now six National Collaborative Centres (see Public Health Agency of Canada Website), all specialized, with a goal to translate knowledge research into practice. How can these be incorporated into the NNLH?
- Other health information consortia are forming, e.g. in the cancer domain and the Ontario Public Health Libraries Association (<http://www.ophla.ca/>). How can the NNLH work with these groups?
- How will NNLH interact with the LHINs (Local Health Information Networks in Ontario <http://www.lhins.on.ca/english/main/home.asp>), and RUIS in Quebec, and with similar organizations in other provinces?

Several people expressed concern that the NNLH could be seen as a threat to local groups and initiatives. This perception could damage the progress of the NNLH.

- Local health libraries may worry that a national initiative will take their funding, and that they will be perceived as being unnecessary and will be “wiped out,” leading to an erosion of services rather than helping.
- The NNLH need for people “on the ground” needs to be emphasized, and the NNLH must demonstrate how they will build on local resources. Need to stress the idea of “support centrally, deliver locally.”

- Related to this is the worry about loss of branding. This has to be raised when talking to funding agencies, but also when seeking buy-in from local groups. These local groups need to know that the users will still see that they are providing the service, and that the NNLH is only supporting the local groups. E.g. access to the Cochrane Library provided by the Atlantic Health Knowledge Partnership. Understanding the local organizations' branding needs is necessary to the success of the NNLH initiative.
- People need to see themselves in the NNLH. They need to understand how important they are to its success.

4. Services the NNLH would provide

There was a strong feeling in the group that the NNLH should not simply be just another portal to electronic resources, should not be just another organization handing out Medline accounts to a bigger group of end-users. Extending the availability and range of electronic resources in an equitable and sustainable manner through negotiations for national site licenses would definitely be an important part of the NNLH, but the NNLH should provide a suite of value added tools and library-type services (library facilitated services – bundling services with access). It is difficult to develop value added tools in the current environment where resources are scattered and funding is concentrated on supplying the basics and on duplicating services.

- The NNLH should be Access + People + Services + Tools!
- The NNLH should support everyone in the health care environment, from policy makers to people working on the front lines, including nurses, physiotherapists, etc.
- Develop and offer a suite of value added tools. It should be possible to tailor services to local needs.
- Provide a portal with various options shown to different user groups - Here is what you get if you are an MD, Here is what you get if you are a nurse. (E.g. VON portal, the Grand River portal, NurseONE portal)
- Provide some kind of Google-like searching and federated searching to pull together information from diverse sources.
- Provide contact points to local and more distant centres of expertise, and to experts to support the generalists in smaller hospitals.
- The ability to focus on Canadian content and issues. Provide access to key Canadian studies and information that can be hard to find and obtain.
- Make clinical practice guidelines more available, including the CMA Clinical Practice Database.
- Allow local needs to be addressed by providing ways to tailor services to specific subject domains or topics, or to geographic areas (e.g. provide French PubMed interface). This would serve to enrich the resources at the local level.
- Provide tools to enhance decision support.
- Provide training to allow people to use the tools effectively.
- Service to librarians and local information providers. Play a role in their continuing education. In smaller one-person libraries there may be no budget for either continuing education or conference attendance. NNLH could provide a way to allow these librarians to keep up and improve their skills.
- Provide services to nurses to help them upgrade their skills while working.
- Services tailored to health administrators.
- Provide support for people not associated with an org/hospital with a library, perhaps through the local centres of excellence. Students often lose access to resources they obtained through their school, and would like to retain access.
- Have the NNLH provide Canadian wide access to the Cochrane Library.
- Build on what already exists, but people want one-stop-shopping, i.e. easy centralized access

Some people see this initiative as being too library oriented, but others say the library model for delivering services has value. Are there other models to consider? There is proof that when services are offered by a library, rather than through an unsupported Web site, usage goes up.

The issue of linking patient medical records to the services supplied through the NNLH was mentioned several times. It was unclear what this link should be. E.g. Should there be a specific link between patient records and health information? If so, how would this be done?

- E.g. relationship to something like Dr. Rob Hayward and the Physicians Office Systems Program the POSP “Practice-Based Evidence Desktop – PSOPPBE (single-sign-on, single point-of-access for various stuff).
http://www.cche.net/communications/files/ebhc_v22_p11.pdf
- Systems already exist that tie together electronic medical records with local pharmacies and hospitals. Should there also be ties to NNLH?

5. Stakeholder input

Everyone agreed that the NNLH must be user centric, and work for the user. It has to be coherent to the user, and offer them ways to work more efficiently. Local initiatives are clearly driven by user needs and we don't want to lose this.

- The opportunity for a lot of stakeholder input has been built into the NNLH. It is hoped that getting lots of good input from doctors and other users on the front lines can be used to influence publishers, potential partners and funders.
- Has the CMA done a user needs assessments? Yes, the CMA does a survey every two years. It was noted that not all doctors are members of CMA.
- There have been some negative studies, but all these initiatives failed because the end-users were not involved enough.
- There was a brief discussion on membership in medical associations at various levels, intended to identify ways to get user input.
- Some concern was again expressed about the library model of services. There was a fear that librarians will dictate what should be provided rather than gathering information from users about what is appropriate, and about determining what is best to include, rather than what is most familiar to users already.
- Usability testing – whatever is built has to be visible, usable and accessible, and this means involving stakeholders and users very heavily.

6. Adoption issues

Currently, associations provide wide access to some resources, but the issue is one of adoption, not availability.

- Everyone agrees that the technology is not the issue, it's the marketing and training, and adoption issues. Change management will be an important aspect of implementing the NNLH. Sometimes people may not even realize what they have access to. For example, access to the Cochrane Library is now available in Nova Scotia, but without marketing and training its full worth is not realized.
- Currently, duplicate access to some services is causing confusion about how someone should access something. E.g. May have access through 3 or 4 channels, but someone may only use one. If that one is taken away they may not realize that they still have access through other channels.
- The “build it and they will come” philosophy may not be true. Doctors, nurses, etc. have their own busy daily routines, and the NNLH will need to integrate into their workflow, rather than enforcing a new workflow. The NNLH will have to educate users in the advantages of the services provided in order to convince them of the benefits of changing their usual routine. It was pointed out that there is a hurdle to overcoming peoples' tendency to use what they are familiar with and like, rather than what may be best for evidence based health care.

Adoption of the NNLH will be aided by early buy-in from existing initiatives and stakeholders. These stakeholders need to see themselves in the NNLH. They want to understand what the impact of the NNLH will be at the local level, how it will affect what they do, and how it will affect the people they serve. They need to be convinced that the NNLH values their knowledge, and that the NNLH will allow them to offer better services, and to reduce the time spent on duplication of effort.

7. Measuring success

Much concern was expressed about how to measure the effectiveness of the NNLH. One suggestion was to ask potential funding agencies what they would consider as good measurements of success and return on investment, and incorporate these. Other suggestions included

- Measuring direct impact on mortality (possibly through links with patient records)
- Measuring physician time saved per patient based on self-reporting
- Getting feedback on user group satisfaction (various groups)
- Measuring the reduction in the number of diagnostic tests performed
- Evaluating increased job satisfaction (e.g. retention of doctors in rural areas if they feel they are not so isolated, and have increased support)
- Showing health care consumers have better access to care because equal access to health information is in place
- Measuring satisfaction with clinical answering services
- COUNTER usage data
- Is it possible to identify five key advantages to focus on to prove the worth of the NNLH?

Some benchmarking would need to be done at the start of the process to allow comparisons after a certain period of time, and evaluations would have to be done at predetermined points in time or when additional functionality was added (at each step in building the NNLH). At a minimum an evaluation would be needed at the two-year point.

Several studies were cited to support the idea that offering library-type services improved clinical outcomes:

- Marshall Joanne G. The impact of the hospital library on clinical decision making: the Rochester study. **Bulletin of the Medical Library Association** 1992; 80(2):270-309). This report gave proof that providing these services saved lives (20 were reported), but others criticized this figure as probably being too high, and that 5% is probably more correct.
- An article in the *Canadian Journal of Public Health* May-June 2005 which gave strong support for evidence based medicine: http://www.phac-aspc.gc.ca/php-ppsp/pdf/cdn_journal_ph_fostering_evidence_based.e.pdf
- There is other information, but it is based on physicians' perceptions of health outcomes rather than making a direct relationship with information on the clients' charts.
- In a recent Seattle study, the impact of one literature search was an annual savings of US\$167,500!
- Further studies can be found on the CHLA/ABSC page "Librarians, Knowledge, and Clinical Practice – a Select Bibliography": <http://www.chla-absc.ca/news/clinicalpractice.html>

8. Technology and support issues

- Infrastructure and broad-band pipeline concerns?
- Issues of 24/7 provision of services if centrally located (at CISTI or elsewhere) rather than having distributed support for services. This comment applied both to technology support and user service support. It was suggested that partnering with similar services in other countries could support 24/7 service. Another model could be the creation of Centres of Excellence.

9. Next Steps Suggestions

- Take a more balanced approach in developing the *Concept of Operations* further (e.g. more information about the challenges, and more from the point of view of users (i.e. health care providers themselves), as well as representatives of successful provincial models and provincial governments.
- Managing the system development lifecycle is not enough. There needs to be a product lifecycle description to get the bigger picture.
- Take a look at the idea of the phase-gate product development approach to see if it could be successfully applied to the NNLH development.
- Start addressing adoption issues by creating scenarios to show people on the ground how their work and role will change, and the impact on the people they serve.
- Develop a plan to work with individual groups (funders, other initiatives, etc.) to further the NNLH idea. Tailor the approach as necessary.
- Take a closer look at the National Libraries of Medicine in the US to see if there is anything we can learn about funding, dealing with local groups and service provision.
- Bring together existing successful regional groups to learn about complementarities, challenges and lessons learned will be valuable.
- Planning and stakeholder buy-in must be concurrent activities.

Action Items for Moving Forward

The *Concept of Operations* was endorsed during this meeting. With respect to concrete next steps, there was agreement that the NNLH business plan is needed, that champions should be identified to support the NNLH initiative, and that a broader advisory group be created to represent librarians as well as other stakeholders. Specific action items were identified as the following:

1. CISTI, PHAC, CNA and Canada Health Infoway will determine how much they can contribute towards the NNLH business plan. They will notify Jessie McGowan of their answer by March 9.
2. A letter of request for funding support will be sent to all stakeholders present at the June 2005 meeting plus others identified at the February 26 meeting. Jessie McGowan will forward a draft to the Task Force for input by March 5. Task Force members will respond by March 9.
3. Jessie McGowan will inform Lorna Adcock of new funders and they will coordinate the request to CMA together.
4. Judy Inglis will take the original RFP, remove the CoO pieces, send it to the Task Force for input by March 2, forward the revised RFP to TDV Global for a firm quote to build the business plan. Task Force members will get back to Judy by March 9.
5. Judy Inglis will determine if she has internal support to manage the contract with TDV Global.
6. Seek champion sponsorship from Health Canada. Michael Goddard will follow up by March 9. All others to submit names of other potential champions to Jessie McGowan.
7. A Project Advisory Group (PAG) will be established with a core group from the Task Force and a representative from each funding groups.
8. The Task Force will meet in the next couple of weeks to identify the members for the PAG. In addition, the role and existence of the Task Force will be discussed.
9. The agenda for the May 29, 2007 meeting will be determined as the work on the business plan progresses. It was felt that a discussion paper may be presented in May and that TDV Global may use the opportunity to get focus group feedback from the group.