

Knowledge Management Strategy Forum Summary Report: a synopsis of the November 5th, 2008, discussion

Prepared for the
National Collaborating Centre for Methods and Tools
by Nancy Dubois and Tricia Wilkerson, DU B FIT Consulting

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Executive Summary

This report describes the purpose and process of the invitational Knowledge Management (KM) Strategy Forum hosted by the National Collaborating Centre for Methods and Tools (NCCMT) on November 5th, 2008 in Hamilton, Ontario. The Knowledge Management Strategy Forum was held to explore the need for a knowledge management strategy for public health in Canada and to formulate recommendations related to the development of the strategy. More specifically, relevant information from the Knowledge Management Background Paper and the Knowledge Management Conference held the previous day were to be integrated into the discussions as to whether or not there was consensus on a need for a knowledge management strategy for public health in Canada. Were this to be the case, additional discussions would generate specific recommendations for action necessary to develop this knowledge management strategy. The involvement of Forum participants in the next steps was to be considered as well, one element of which could be the building of a network of professionals interested in the KM field.

Fifty participants addressed KM using the themes of Content, Process, Technology and Culture, around which both the Background Paper and Conference were also organized. They explored what a Knowledge Management Strategy for public health in Canada might or should look like, what the necessary elements of it would be, what it would look like, and what it would take to get there.

There was a general feeling that steps forward had been made albeit not to the full extent of a knowledge management strategy. In retrospect, expecting participants to develop a comprehensive strategy for public health in Canada was felt to have been an unrealistic outcome for a one-day event. Nevertheless, Forum participants generated many recommendations that ranged from the concrete to the conceptual.

1.0 Background to the Knowledge Management Strategy Forum

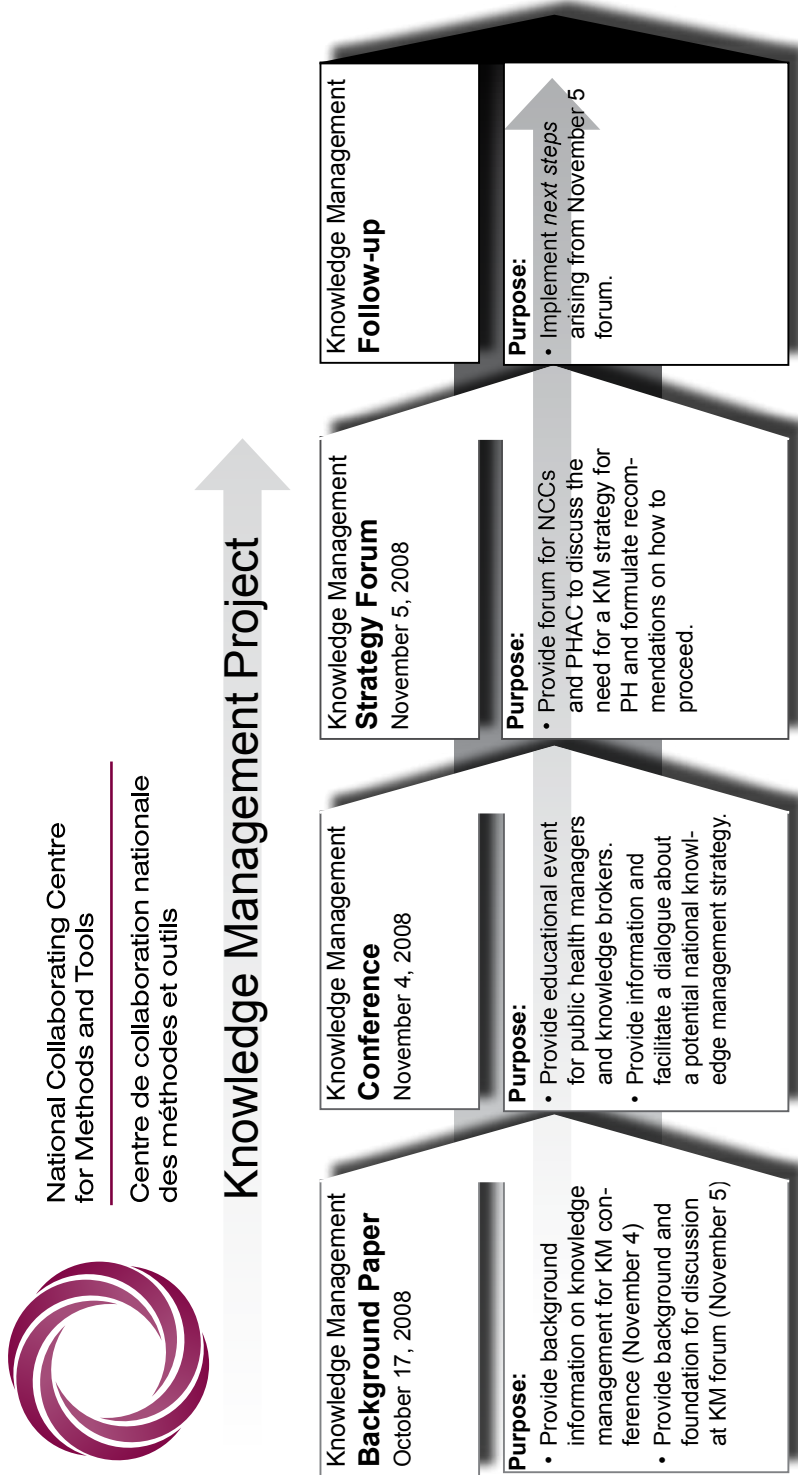
Knowledge Management (KM) is a relatively new term to public health professionals in Canada. As a result there is very little formalized and documented work regarding a planned approach to the management of explicit and tacit knowledge within public health in Canada. “The increased emphasis on the use of evidence in decision-making, accountability frameworks, increased use of technology in many program areas, and the significant turnover rates associated with an aging workforce” set the stage for discussions about KM within public health in Canada. (Dubois & Wilkerson, 2008, p. 19) KM also resonates with the growing emphasis on Core Competencies in Canadian public health practice. KM is relevant to each of the 36 identified Core Competencies across the seven categories of public health science: assessment and analysis; policy and program planning; implementation and evaluation; partnerships, collaboration and advocacy; diversity and inclusiveness; communication; and leadership (Public Health Agency of Canada, 2008).

Public health organizations across the country are already engaged in a variety of efforts related to KM, often without an identified focus or plan of action. “Although they may not use the term, many organizations regularly and creatively engage in knowledge management: Every meeting that brings staff together to share and learn from each other; every database created to organize data; every orientation session held for new or re-positioned staff reinforces a KM approach.” (Dubois & Wilkerson, 2008, p.44) The emphasis on using evidence in decision-making, the demands from various accountability frameworks, and the significant turnover rates associated with an aging workforce, all increase the need for focused KM efforts in public health.

Canadian public health organizations are in the business of knowledge management and their efforts would benefit from a planned approach to managing both explicit and tacit knowledge. With this rationale in mind, a few influential interested and concerned parties encouraged the National Collaborating Centre for Methods and Tools (NCCMT) to explore the need for coordinated Knowledge Management efforts for public health in Canada.

A summary of the KM literature was compiled into a background paper – *Knowledge Management: Background Paper for the Development of a Knowledge Management Strategy for Public Health in Canada*. This overview of KM identified pertinent issues, questions and implications surrounding the potential development of a solid, strategic approach to KM for public health in Canada and informed the conference convened by NCCMT on November 3rd and 4th, 2008. “Knowledge Management in Public Health: Exploring Culture, Content, Process and Technology” was attended by 237 participants from across the country. An invitational Strategy Forum was held on the following day. Together, the paper, the conference and the forum constituted the KM project of the NCCMT (Figure 1).

Figure 1: Exploring the Need for Knowledge Management Efforts for Public Health in Canada



2.0 Overview of the Knowledge Management Strategy Forum

Sir Muir Gray presented the keynote address at the KM Conference held the day before the Forum. According to Sir Gray, we are currently in a healthcare revolution of personal empowerment driven by three forces: citizens, information technology and knowledge. Sir Gray emphasized that the application of what we know will have a bigger impact on health and disease than any drug or technology likely to be delivered in the next decade (Gray, 2008). However, the creation, sharing and application of explicit knowledge (knowledge that is tangible and easily transmitted) and tacit knowledge (that which is known by individuals and less easily transferred) within systems such as public health is not easy. This continuum represents the spectrum of Knowledge Management, a relatively new term for many public health professionals.

A detailed summary of the KM Conference can be found in a separate report at

http://www.nccmt.ca/events/nccmt_events-eng.html (English) or
http://www.nccmt.ca/events/nccmt_events-fra.html (French)

With the background paper and an educational conference forming a foundation for discussion, the NCCMT invited people from a variety of perspectives to explore of the concept of KM. What follows are the details of that one-day invitational Strategy Forum held on November 5th, 2008.

2.1 Goal of the Knowledge Management Strategy Forum

The Knowledge Management Strategy Forum held on November 5, 2008, explored the need for a knowledge management strategy for public health in Canada, and considered recommendations and next steps related to the possible development of that strategy.

2.2 Objectives of the Knowledge Management Strategy Forum

The four objectives for the KM Forum developed by the NCCMT in conjunction with the Facilitator (Nancy Dubois) and PHAC representatives were to:

1. Incorporate the relevant learnings from the Knowledge Management Background Paper and the Knowledge Management Conference (November 4th, 2008) in the discussions, deliberations and decisions of the Forum.
2. Reach consensus on whether or not a knowledge management strategy for public health in Canada is needed. If yes, reach consensus on:
 - specific recommendations for action necessary to develop a knowledge management strategy;
 - next steps required to move a knowledge management strategy forward.
3. Stimulate interest, enthusiasm and commitment in participants for the development of a knowledge management strategy for public health in Canada.
4. Begin to build a network of relevant professionals interested in the field of knowledge management in public health.

3.0 Participants in the Knowledge Management Strategy Forum

People invited to participate in the Forum shared the characteristic of being essential to the development and implementation of a knowledge management strategy for public health in Canada, should one be determined as necessary. As such, the invited participants were strategically, purposefully and deliberately selected. Forum organizers intentionally limited the number of participants to encourage active discussion and effective decision-making. The intended target audience attended and participated in the Forum. Participants included senior representatives of the six National Collaborating Centres (NCCs), representatives of Public Health Agency of Canada (PHAC) departments, and others from federal and provincial/territorial public health organizations.

The Forum agenda (Appendix A) was created to actively engage all participants in the discussions throughout the day. Using the four themes identified in the background paper -- culture, content, process and technology -- participants discussed a vision of KM, the necessary elements of a KM approach for public health in Canada, and suggested actions to work towards these essential elements. The following sections of this document describe the discussions within these sections of the agenda.

4.0 Exploring KM for Public Health in Canada

In order to establish a basis for further discussion throughout the day, the Facilitator prepared a summary of key points from the KM Conference held the previous day. This was especially important for those few Forum participants who had not attended the Conference.

The term “strategy” was defined for the Forum participants as a long-term plan of action that is designed to achieve a particular goal and often addresses a problem. Unlike tactics or immediate actions that use resources at hand, a strategy is extensively premeditated and used to make a problem easier to understand and solve. The term “strategy” was not intended to describe a formally designated, government-funded approach. The definition of “public health system” from CIHR’s Institute of Population and Public Health (Appendix B) was accepted for use at the beginning of the Forum. Lastly, as a means of setting the stage for the day’s discussion, table groups were given the opportunity to discuss their impressions and key concepts from the Conference.

The first small group discussion format took the form of a World Café. The World Café is a methodology for linking and building conversations “as people move between groups, cross-pollinate ideas, and discover new insights into the questions or issues.” (The World Café Community Foundation, n.d.) Participants were asked to randomly start at one of four stations which were labeled as culture, content, process or technology. Participants at each station were asked to generate responses to the following question:

“If Public Health in Canada were to adopt a KM strategy, what would it look like at local / regional, provincial / territorial and national levels?”

After approximately 15 minutes, each group rotated to the next thematic area. The process allowed each participant to comment on all four themes. Recorders at each station captured the discussion ideas on flip charts. Those ideas and comments are presented below:

4.1 Culture

Culture comprises the shared, but often unspoken, assumptions that guide the daily behaviour of people in organizations. It is the “why” that underlies what is done: the beliefs, traditions, habits and values that influence the behaviour of the majority of the people in a social-ethnic group (Dubois & Wilkerson, 2008). Forum participants described what the public health system would look like at the local/regional, provincial/territorial and national levels if it adopted a culture of KM. The discussion identified that the culture would value the management of knowledge, promote a culture of trust to share knowledge, and provide support and leadership for KM. Specifically:

The culture would demonstrate **value** of knowledge management:

- Knowledge seen as an asset
- Value continuous quality improvement, including the inevitable failures that occur when learning
- Value tacit knowledge and what we each know

- A shift in values
 - Communities of Practice (CoPs) to enable the cultural shift
 - Increase value of reading, searching and decrease on doing. The opportunity and time to reflect. Not trying to “do more” but acknowledgement that reviewing and sharing knowledge is part of the role and not an “add on”. Need to be able to quantify the time given to reading/reflection and sharing. Ability to count the time spent on these tasks and report on them
- Value knowledge sharing of both literature and practitioner experience. Foster knowledge sharing and not knowledge hoarding. Knowledge sharing should be the norm, **trust** to share knowledge among people through a sustainable long-term relationship. A culture where “knowledge sharing is power”. People need to trust those they are sharing knowledge with; they need to trust the content they are sharing; and they need to trust the way they are sharing the knowledge (e.g., any technologies they are using to manage the knowledge such as web boards, email, databases).

The culture needs to **support** KM:

- Incentives and leadership to engage in KM to address “what’s in it for me?” and demonstrate the value of knowledge (e.g., invest in learning opportunities; create an award system; provide acknowledgement to individuals and organizations. Management support culture and trust are the 3 parts of shifting culture
- Staff at every local public health area to support knowledge translation, to function as a knowledge broker, to be responsible for getting knowledge to PH people and the community. (It is important that knowledge brokers are trans-jurisdictional and not at any one level.)
- Leadership support, modelling and training
- Ongoing support provided that goes beyond just having people meet every three years. Support to nurture “sharing organizations” not just “learning organizations”
- Specific suggestions regarding the culture of the public health system:
- Incorporate KM as part of the Human Resource strategy and the current workforce shortage
- Mentoring and reverse mentoring (“reciprocal mentoring”)
- Equity – if KM was part of the public health culture then those who don’t have access would be included
- Preservation/enforceable process
- Diverse Regional/Provincial/National dimensions
- Strategy to mesh and align key players – it’s not one organization; include all influences
- Critical (not negative) inquiry – it’s okay to ask questions and reflect as critical consumers to strive for quality; a system where inquiry is a norm
- Develop products that public health wants
- Governance

- Openness to the fact that knowledge can be dynamic and diverse; recognition that there are different ways of knowing (e.g., the Aboriginal communities, work in Quebec – within Aboriginal communities, knowledge sharing is just “part of what happens”)
- Develop a business case for KM
- Involvement of students in the process (with compensation) – include schools [of public health at] universities/colleges in the development of KM strategy

4.2 Content

Content is the knowledge to be managed. Knowledge can be described in two categories: “explicit knowledge” (things we can write down, share with others and put into a database) and “tacit knowledge” (know-how, experience, insights and intuition). Managing content ensures that users receive quality information that is relevant, up-to-date, accurate, easily accessible, and well organized. Forum participants identified what the content should look like at the local/regional, provincial/territorial and national levels if public health in Canada were to adopt a KM strategy. Participants discussed the types of content to be managed, the content areas and a number of practical considerations regarding the content.

Types of content:

- Expertise at a variety of levels (e.g., policy-makers, practitioners)
- Grey literature
- Core competencies (knowledge, skills, attitude)
- Realist reviews
- Process/concept maps
- Knowledge about how to conduct business
- Metaphors
- Stories/story-telling
- Wisdom/experience

Content areas:

- Surveillance
- Chronic Disease Prevention
- Gap areas
- Health promotion – bring it forward
- Evaluation data: what works and what does not
- Tacit and explicit to fulfill PH practice areas

Practical considerations:

- Organized so people know what their role is at their respective levels
- Inventory
- Search/find capability

- Mapping exercise
- Common language (e.g., Health Promotion) – Taxonomies (standard/starting point for common language, e.g., OHPE Bulletin) versus “folkonomies” (self-organizing/unique/personal systems of classification for online content, wherein individual users tag information with keywords they choose themselves)
- Combination of explicit and tacit content
 - More emphasis on tacit knowledge and moving tacit into explicit but don’t discard
 - Mapping of expertise and structures and tacit and explicit knowledge
- Prioritizing content
 - Consider regional needs
 - Based on questions we want answers to
 - Context – content needs to be considered within in it so it is relevant to users within levels
 - Consider PH standards and core competencies
 - Priorities for the future (e.g., policies and working back from problems)
 - Identify content priorities with a survey
 - More focus on best practices (and common best practices language) / promising/emerging – need to differentiate between guidelines and best practices
 - Primary public health research and research methods
 - Use the priorities to leverage resources and research funding – set the research agenda
- Processes are important
- Develop a number of standards
- Networking/social inventory/expertise, experts
- How do we determine that the evidence is best quality?
- Plan today for needs tomorrow – How do we figure out how to do this?
- Realize consensus may not be possible
- Program, policy, practice types of knowledge
- Whose content is it? Who owns the data? Who will protect it?

4.3 Process

This addresses “how” knowledge is passed from one person to another; how it is created, shared and transferred. In all organizations, processes to manage data and information exist in a variety of forms ranging from formal to informal. Collaborative networks or “Communities of Practice” are an emerging process of interest. This group observed that the four conference themes (culture, content, process and technology) overlap with one another and cannot be pursued in isolation; addressing one of these areas necessarily draws in the others.

Rather than trying to develop each theme independently, a KM strategy needs to harmonize the integration of all four. Forum participants identified the importance of working within existing structures to coordinate actions. Discussion acknowledged the importance of promoting knowledge management within public health and encouraged learning from private sector experiences.

Work within existing structures:

- Work within existing infrastructure connections (e.g., NCCs, Canadian Institutes of Health Research (CIHR), Regional Health Authorities, etc.) and use national level organizations to link/strengthen provincial and territorial connections. Determine whether the work of a KM strategy can be taken on by existing bodies and will fit with existing mandates. Carefully consider the impact of taking on the KM work (i.e., if KM work is taken on, does it mean something else cannot be done?) Assess the readiness for change by identifying what people, organizations, systems are ready to do/absorb.
- NCCs jointly facilitate Communities of Practice networks (less formal) and disciplines within the existing structures to both facilitate and create mechanisms to support KM. Start small (e.g., with NCCs) – the process needs to grow and develop through a series of small steps.
- Consider involving the Council of Chief Medical Officers of Health (CCMOH) as a group as a catalyst/champion for KM activities.

Coordinate across the levels of public health in Canada, as well as with other related systems and partners:

- Develop a process to engage provincial/territorial level (provincial/territorial agents are key to making a national strategy work).
- Ensure a knowledge flow within and between national, provincial/territorial and local levels that incorporates both PUSH and PULL components. Don't "impose" a system (it won't be used). It can't be a top-down approach, but rather the KM strategy must be built from within to be useful, credible and owned.
- Consider developing a 'plan of action' rather than a 'strategy.'
- Incorporate KM as a public health concern/priority that includes an external exchange. Public health transcends its boundaries and there is permeability between its boundaries and the external environment / context so it is important to consider how KM for public health intersects/ interacts/extends into (or joins up with) other areas.
- Public health partners need to get their internal house in order before beginning to work with others in the areas of KM.

Promote KM within public health:

- Market KM in a way that demonstrates its usefulness to each level/organization (e.g., through a knowledge audit); the added value; and ways that KM can occur that are not cumbersome. Start this by exploring and identifying needs and solidifying the justification for moving ahead with a KM strategy and ensuring processes/content/technology fit in with the culture of the public health system. Based on

results, select appropriate processes

- Create a communication plan to target specific audiences that consists of messages that are framed or crafted appropriately and delivered by the appropriate messengers, to the right audiences, using the appropriate media, and in a timely manner. Use a concrete case example and run through the full knowledge cycle to see how it plays out (provide an issue-specific example and test it out). Use this concrete example in the communication materials so audiences can see how KM activities are conceptualized, developed, implemented, and the impacts – give people something to grab onto rather than just the idea.
- Determine and plan how to use the media/marketing creatively and strategically to promote KM. Educate the media and ensure messages are tailored and appropriately crafted and directed.

Consider private sector models and examples:

- Consider KM as a business with all business elements (e.g., marketing, communication plan, cost/benefit) that will set the stage for moving forward with KM in a way that is clear, justifiable and efficient. Determine the measures of success (what impacts, how to evaluate, and desired results). Build a business case.
- Look to private industry for examples of processes (e.g., KPMG, Deloitte, “Stealth KM” by Niall Sinclair)

Participants suggested several specific processes:

- Move away from expert model to access tacit knowledge – to “normalize” knowledge and how it is managed rather than to make knowledge and its management something that can only be done and/or controlled by particular folks/roles.
- Depending on what knowledge you want/need to exchange, select the process (i.e., define and determine the processes by the type of knowledge that is to be shared/stored/etc. – the “how” follows from the “what”). Identify how KM helps you do your job, your knowledge needs, then select the appropriate processes (methods/tools) to meet needs.
- Inventory (create a living “tree” of knowledge networks not a static paper record) of CoPs (don’t re-create or duplicate what exists). The “yellow pages” idea is one way of documenting who has/knows what, but knowledge content needs to develop more rapidly than our ability to maintain records – networks are a faster way of keeping people up to date.
- Build skills/capacity to deliver/receive knowledge to engage/participate in KM strategy (e.g., accreditation, something to push us); not just the methods/tools to deliver knowledge, but also need to develop capacity to receive knowledge.
- Use technologies that people are using, are familiar with and have access to (e.g., e-mail vs. blogs/wikis).

Other process-related comments:

- Determine how to use the existing evidence to change something. New knowledge can be created, but we already have a large base of knowledge that can be

accessed and/or activated. How can we make sure the existing tacit and explicit knowledge within public health is incorporated? Don't assume that we need more research -- it might already be available, but just needs to be brought to our attention. Sift through all the information to have "conversations that matter" – the right conversations that will make a difference.

- Make explicit the core values underlying KM.
- Develop a process to identify gaps.
- Explore and identify a funding process to determine who will pay for KM activities (e.g., can it be integrated into what is already being done, or does it require new funding categories). Identify how to add KM to existing budgets and protect resources for KM.
- Develop adaptable KM processes not a static plan, but rather processes that are dynamic and flexible.
- Sustainability of the process is important; there is a need to ensure KM activities can be routinized and maintained.

4.4 Technology

Technology helps transform data to information, knowledge and wisdom. Technology to manage knowledge, especially explicit knowledge, is an essential part of a successful Knowledge Management strategy; it responds to the knowledge needs of staff, partners and clients by using appropriate technology to offer easy access to information when and where it's needed. Forum participants emphasized that technology can play a supportive role in KM but should not drive it. Participants encouraged future KM efforts to focus on increasing access and decreasing inequities through the use of existing public health technological systems. The following points were made regarding technology as it relates to KM during the brainstorming exercise.

Technology is a support, rather than a driver:

- Technology (e.g., new innovations; different ways of communicating and networking) is changing rapidly.
- Technology is a platform; it doesn't transform information.
- Culture needs to precede technology.
- Knowledge needs to be tailored to the medium.
- Technology shapes how the message is shaped.
- Technology is a risk factor – 2/3 of information management efforts don't succeed.
- Technology shouldn't drive the need or subtract time.
- There are barriers with respect to linkages; don't add more layers.
- Technology can be an enabler of KM and not a disabler.
- Tools need to meet the needs of the work and provide greater links to culture.
- Use technology to provide interaction opportunities for people between face-to-face meetings.

Technology should support access to knowledge:

- Every PH practitioner can access up-to-date relevant summaries of the literature that they need at their desk.
- Technology facilitates access to grey literature.
- Everyone needs the same access at every level.
- Need a single site where people go when they have a PH question. Increased time for and promotion of health evidence.

Existing systems should be used and inequities addressed:

- Not all organizations have the same sort of technology.
- Provide incentives to use the existing platforms for those who have technology (e.g., ID-CNPFI).
- Provide training and skill development, common standards for local level through technology.
- Provide skills training to use the existing technology and increase its utility through step-by-step teaching. Need to adhere to standards.
- It doesn't matter what system is used as long as the knowledge can be shared.

Relationship to the public and other partners:

- Distinction between public and professional may disappear due to networking and access to technology.
- Technology needs to relate back to the public.
- Inter-operability and connectivity – ability to connect the technological systems from different organizations.



Comments related to the type and characteristics of technology:

- Conceptualize technology as a tool.
- Find systems that will accommodate both written work and technological types of work.
- Develop standards for the sharing of content (instead of “what” we should store).
- Don't need a static strategy – be flexible.
- Develop a clear definition for KM and KT.
- Institutionalize use of technology for work.
- Strategy needs to be developed with front-line staff, with support by an upper system, and must be flexible for local adaptation.
- Spend 15 minutes a day to learning something new (e.g., using Web 2.0 and sharing technologies).
- Concern that technology to support CoPs is not helpful or supportive – we need helpful technology.

5.0 Ideal Elements of a Public Health in Canada Knowledge Management Strategy

A second layer of discussion generated by the World Café was intended to assess the characteristics previously listed as part of an ideal KM strategy and to identify those characteristics of what a realistic KM strategy in Canadian public health COULD look like. Participants selected one of the four thematic areas (culture, content, process or technology) to work on for this and the remaining small group discussions. Each small group was asked to distill the essential elements of a KM strategy for public health in Canada. From this refined list, participants were then asked to prioritize the essential elements in terms of importance and urgency. The following charts were created from these discussions. Items in the top right quadrant of the chart represent elements that the group felt were of highest importance and highest urgency.



5.1 Culture

 Importance	<p>High importance and lower urgency:</p> <ul style="list-style-type: none"> • Trust – if focus on public good then failure or risk of failure is minimized • Leverage this evolving dynamic – i.e., respond to evolving trends and workforce change; students play key role; will change over time • Share power by sharing control of knowledge • Power of knowledge is in sharing • Trust – within and between PH experts, organizations; researchers and policy developers (about power) 	<p>High importance and high urgency:</p> <ul style="list-style-type: none"> • Rewards must exist to affirm • Incentives must exist to engage • Need the time to gather and reflect on knowledge • Time for sharing and learning (including face-to-face time) • Action-oriented (demonstrate by doing vs. talking) describes how to do it, is an early win, find “low hanging fruit” • Leverage equity; guiding principles • Sense of/supportive inquiry as a norm • Learning organization encompasses KM • Legitimized as core business: business case, HR practices (hiring, rewards, professional activity system), dedicated time and resources • Welcome creativity and innovation; no negative consequences for sharing information • Knowledge seen as an asset • Demonstrated leadership at “high levels” of the organization- for implementing knowledge • Sustainable resources • Respectful and reflective of different knowledge styles/perspectives/mechanisms
	<p>Lower importance and lower urgency:</p> <ul style="list-style-type: none"> • Nothing identified 	<p>Lower importance and high urgency:</p> <ul style="list-style-type: none"> • Nothing identified
 Urgency		

Those working on the theme of Culture classified all of the items as important. Additionally, participants identified eight guiding principles of an effective KM culture:



- Equity
- Trust
- Action oriented
- Reflects and respects diversity and different ways of knowing
- Supportive of inquiry
- Dynamic and evolving, innovative
- Takes time (allow for it)
- Quality

5.2 Content



 Importance	<p>High importance and lower urgency:</p> <ul style="list-style-type: none"> • Protocols/Standards/Mapping – for how data/evidence is gathered and interpreted; exemplars, metrics for knowledge products (how presented). • Capture and share TACIT knowledge through mapping expertise, concepts/approaches, experience and organize in diverse ways. (E.g., Tacit: people, organization, network, CoP, Explicit: reviews, work-in-progress.) May be useful to distinguish between “core content” and “optional” or “additional” content. This distinction may be made on breadth or depth of knowledge. Sharable/ actionable/ useable across the health system, across jurisdictions, with the community. This provides a means of capturing tacit knowledge. 	<p>High importance and high urgency:</p> <ul style="list-style-type: none"> • Inventory – determine what is “out of sCoPe” and work back from PH policy or the decision required at various levels (practice, program, strategic policy) to prioritize. Priority-setting mechanism to guide knowledge creation. Inventory by province: know what’s there; KM initiative; what isn’t there? Know what exists to support the core functions of the public health system, core competencies, and the use of evidence. • Select 1–3 national “grand challenges” to get publicity/profile of KM initiative in PH • Develop thesaurus/common language structures (taxonomies, “folksonomies”) for best/promising practices, evidence, quality, health. Look at the National Public Health Language (NPHL) Index; national/provincial/territorial terms used; develop a template of knowledge domains including preferred and alternate definitions
	<p>Lower importance and lower urgency:</p> <ul style="list-style-type: none"> • Types of content – Inventory of cross-cutting issues, policies and procedures, environmental scans, issue analysis, research content, research analysis, practices and guidelines, expert pools, grey literature repository, templates/ logic model, people with skills to use core competency, addresses the emerging issues 	<p>Lower importance and high urgency:</p> <ul style="list-style-type: none"> • Content that describes KM related to the business we are in. This is the driver and must be related to the “business” of the organization. • Standards – public health standards (e.g., the Ontario standard with skills and knowledge) • Process – Highly connected network of diverse knowledge synthesizers. Adopt policy brief/deliberative dialogue approach to capture both best evidence and tacit knowledge. Barrier-free national access to explicit knowledge. Role definitions at all levels. Link and leverage existing resources.
<p>Urgency </p>		

This group made observed that research, policy and practice are inter-connected and that the content of KM is essential to all.

5.3 Process

 Importance	<p>High importance and lower urgency:</p> <ul style="list-style-type: none"> • Communities of practice with technological links to provide sharing between facilitated face-to-face meetings for public health practitioners who work in a common practice area (links need to be a combination of virtual and direct connection) • Training PH practitioners in KM • PH grants for KM-related research – develop grants process that addresses research needs of public health practitioners • Mechanisms and supports to examine evidence in the context of the community being served • Provide advice/support on KM practices/ processes to respond to knowledge needs • Develop indexes/search engines for Canadian grey literature. Many reports of value to PH are hard to access, need ways to easily get these • Each organization does a KM audit (including KM maturity assessment, processes with place and identifying gaps) • Build links between academics and PH practitioners for education and research • Performance evaluations at all levels incorporate criteria for EIDH and are tied to incentives • Job descriptions that include expectations around integrating research evidence into practice • Link different levels/organizations related to public health by KM strategies 	<p>High importance and high urgency:</p> <ul style="list-style-type: none"> • Every organization should assess its own knowledge needs (e.g., knowledge audit, including identifying the different needs within an organization's varied staff) • Business case to identify the value added by the strategy – fits into the emphasis on “selling” KM to stakeholders, facilitating buy-in, commitment and ownership • Clearly identify different processes for different purposes – the “how” is contingent on the “what” • Differentiate between internal and external linking processes • Map out current KM practices (good practices and lessons learned) • Create a communication strategy to identify “who” and “how” to build the culture and establish KM champions. Market KM to raise awareness and help align KM with an organization's strategic goals • Through a national library system provide access to full text articles at the desks of public health practitioners throughout Canada • Create a process to determine the leading priorities among the social determinants of health for KM. Develop skills and techniques to engage civil society/ inter-sectoral action on social determinants of health • Articulate “what KM means to me” so people can see how KM activities will impact their work and their access to info (both positively and negatively) • Provide financial and managerial support for networks (regional, provincial/territorial and national)
	<p>Lower importance and lower urgency:</p> <ul style="list-style-type: none"> • Tools to ensure knowledge was used in program planning so managers can “check” how knowledge was summarized • Journal clubs to review evidence 	<p>Lower importance and high urgency:</p> <ul style="list-style-type: none"> • An overarching strategy, with common goals and principles and a common tool kit that each stakeholder can draw from (may do things differently, but the core essence/intent remains consistent and shared)
	 Urgency	

5.4 Technology

 Importance	<p>High importance and lower urgency:</p> <ul style="list-style-type: none"> • Access (making sure that there is equal access to technology) • Comprehensive (make sure that people have access to the whole information (article; not just the abstract)) • User focus; supply – demand • Simple systems/tools • Consider public access not just for PH organizations (Focus on target audience, but available to others) • Convenience- from your own laptop or iPod; ability to view video streams of conferences • Timeliness (information should be posted as soon as possible) • Interactivity – support the conversation • Virtual CoP with some face-to-face meetings; share what we are doing; CoP online for in between; repository • See technology as only one tool for KM; consider balance between online and other methods of communication • Provide resource to help PH organizations choose technology 	<p>High importance and high urgency:</p> <ul style="list-style-type: none"> • Use existing systems/tools (adapt if necessary) • Built/developed with input from users • Include an assessment of technological skills • Economics: cost vs. benefits • Cost analysis – money – temporal but still important; • Pilot federal & provincial technologies once content is defined • Training, skills • Future-proof (as much as possible) • Evaluate (What is working with our systems? How they can be improved?) • Value added • Portability: information should be easily down-loadable to USB keys, etc.; it has to work and meet needs of the users • Highly visible
	<p>Lower importance and lower urgency:</p> <ul style="list-style-type: none"> • Users contribute “interesting opportunities” in sharing/capturing tacit knowledge • Universal/global; clean transparent linkages in other countries so we can download and share • Consider public contribution (user-generated content) • Archival 	<p>Lower importance and high urgency:</p> <ul style="list-style-type: none"> • Accessibility vs. rigour/evidence; “Web”- use Google custom search to target high quality evidence • Need to develop/make use of technology to share information (other than written text e.g., photo-voice, video, spoken word, etc. for sharing tacit knowledge) • Facebook for public health professionals- will it work with this population? Useful? • Online directory (federal/provincial/territorial) of PH experts and projects
	 Urgency	

It is important to acknowledge that the topic of Technology was difficult to discuss in isolation. Consistent with several comments generated in the World Café session, technology was felt to be a support to KM efforts; areas of importance and urgency were challenging to identify in isolation of what emerged as critical with the other areas of culture, content and process. The group identified that technology should answer a problem, barrier or function of content, culture or process.

6.0 Suggested Actions

Participants in each of the four small groups were asked to look at the essential elements, particularly those in the most urgent/important quadrant, and recommend next steps as a result of the Forum. Participants were not ready to formulate recommendations; instead, a number of suggested actions were generated by the four groups. As appropriate, suggested actions were formatted using the following template:

It is recommended that “who” (*a person, group, organization*) ... should “do what [a verb]” (*fund, investigate, survey*) ... “when” ... “because [rationale]” (*why the items were placed where they were within the quadrants*).

The actions have been grouped into immediate and longer-term priorities. As the Forum progressed, it became increasingly apparent that framing the “next steps” discussion on the four theme areas was not optimal. Due to the overlap in the suggested actions, they are not presented by the four theme areas. Many of the suggested actions did not include a time-frame when generated by the groups, but rather were identified as principles or suggestions to keep in mind. These have been captured within “Suggested Considerations” (section 6.3).

6.1 Suggested Immediate Actions

6.1.1

PHAC should use internal expertise to demonstrate national leadership in identifying the need for KM in PH within six months. This will prevent duplication at the provincial/territorial level and contribute to improvements in the health of the Canadian population. Suggested PHAC activities include:

- PHAC-led sessions about KM at the CPHA Annual Conference;
- references to KM in CPHO presentations;
- development of business case notes;
- an annotated bibliography about KM;
- inclusion of information about KM in the CPHO Annual Report;
- an environmental scan of existing KM efforts in Canada;
- an ongoing dialogue with Pan-Canadian leaders.

Barriers that need to be carefully considered are competing priorities and agendas, and the need to engage provincial/territorial leaders.

6.1.2

The NCCMT, together with the Pan-Canadian Public Health Network (the Network), the Network’s expert groups, the Chief Medical Officers of Health (and other groups, including Community Health Nurses Association of Canada), can create a profile of KM at the provincial/territorial level within the next six months. It is critical to engage provincial/territorial leadership in KM efforts. Anticipated obstacles include competing agendas, the time required to build agendas, lack of interest and cultural barriers.

6.1.3

The NCCs should sponsor three awards at the Annual CPHA conference for demonstrated leadership in KM to be awarded to an individual, a student and an organization. These awards will increase awareness and profile of KM; provide incentives and motivation for others to consider KM in their efforts; provide examples through stories of how KM is a part of public health work; and model support for KM at a national level.

6.1.4

The NCCMT and other NCCs should identify as soon as possible best (critically appraised) efforts in or examples of KM (e.g., performance appraisals, business cases, compensation models) and share them with public health organizations across Canada. This collection should be expanded regularly as more examples become available. These practices will model KM, provide a vocabulary for KM, and demonstrate accountability.

6.1.5

A Pan-Canadian coordinating group for KM should be convened to pull together key messages explaining how a KM strategy can facilitate/improve the work of public health. This information should be shared through Pan-Canadian champions and a brief document. The document should establish the rationale for a KM strategy and encourage buy-in for KM efforts by highlighting how KM can help public health efforts.

6.1.6

After building interest and momentum through a strategic communications initiative, a Pan-Canadian coordinating group for KM should 1. Conduct a comprehensive assessment of the current state of KM in public health at every level across Canada, and 2. Create a document that captures the existing lay of the land, and builds the case for further coordinated efforts in KM. The document should include a communication/marketing plan for KM in public health; identify opportunities/gaps/good practices; and enhance the rationale for KM in public health. Anticipated barriers include the multiple jurisdictions that provide and fund public health related efforts across Canada, efforts not labelled as KM, and the need for links between activity and KM. Mapping existing processes and providing common templates will help to address these barriers.

6.2 Suggested Longer-Term Actions

6.2.1

The NCCs should identify the opinion leaders/champions/role models for KM across all levels of public health and all geographic areas (national and international).

6.2.2

After assessing the current state of KM in public health, a Pan-Canadian coordinating group for KM should demonstrate leadership through the ongoing development, implementation and evaluation of a plan of action for KM in public health in Canada. The plan of action should be built from this assessment and address content-specific issues and emerging public health trends.

6.2.3

PHAC, CPHA and the NCCs should create and disseminate an inventory of existing KM initiatives, tools and expertise during the next year. This inventory will identify strengths and gaps in KM. (The process to keep the inventory up to date and the task of creating the inventory are acknowledged barriers.) Based on the inventory exercise, determine where there is sufficient tacit and explicit knowledge and what areas are gap areas and need to be addressed through additional tacit and explicit efforts. Determine a plan to address the gap areas.

6.2.4

The NCCs should initiate and support the development of a 'knowledge to practice' site for KM that would function as a learning site for KM approaches, processes, successes, failures and learnings. The site could be a physical or a virtual learning site and could be modeled on the NCCID Knowledge to Practice initiative. The knowledge to practice site would help to identify what works and doesn't work, support the development of a community of practice, and provide leadership. In addition to the efforts by NCCID, previous models implemented by the teaching health units in Ontario and Search Canada should be reviewed.

6.3 Suggested Considerations

6.3.1

National and provincial/territorial partnerships should prioritize content, giving higher priority to topics that are high-impact for public health in Canada.

6.3.2

Knowledge management efforts for public health in Canada should capture and share both tacit and explicit knowledge in diverse ways (e.g., tacit - people, organization, network, communities of practice; explicit - reviews, work-in-progress). Communities of practice should be fostered as one mechanism of sharing tacit knowledge.

6.3.3

Explicit knowledge (including useable access to full text articles, up-to-date literature summaries and grey literature) should be accessible barrier-free across the country.

6.3.4

Technological supports for KM should use, link to and build on current tools and systems to solve identified problems related to content, process and/or culture. Technology should be used to help practitioners find out what is happening in their area of interest (in a standardized format) across the country, as well as the “best practices” in that area. Incentives to share knowledge through technology should be explored.

6.3.5

Access to various KM technologies, and the related support and training/skill development, need to be universally accessible across the country. Policies within public health organizations at all levels should support access to technology and identify mechanisms for updating that technology.

6.3.6

Technology-related KM efforts should be evaluated to assess their effectiveness and value.

7.0 What Was Learned from the KM Strategy Forum?

The topic of Knowledge Management was relatively new for most Forum participants. The Conference that preceded the Forum provided much food for thought. Based on the evaluations received, the Background Paper prepared people for the Forum (and the Conference); however, some participants would like to have received the executive summary earlier. The Conference was also felt to be generally useful; however, because the topic was unfamiliar to many people, the information presented may have been challenging. Scheduling the Forum immediately following the Conference may not have allowed sufficient time for people to process the information and form personal opinions; and therefore, they may have been unready to begin discussing a strategy.

Evaluation results generated at the Forum, suggested that a good starting point would have been the clear identification of the existing problem(s) in the Canadian public health system that could potentially be addressed by KM. This situational assessment may have better prepared participants to describe a possible KM strategy and the necessary elements of that strategy. Without a prior agreement on the problems that exist in the absence of a KM strategy, some participants were skeptical of the need for a broad KM strategy for public health in Canada. Participants were, however more comfortable exploring specific activities that would encourage KM in the public health sector.

Ultimately, word choice may have complicated the discussions. Evaluation comments regarding the Forum suggested that “strategy” was likely not the best term to describe what was intended. Rather, “plan of action” may have suited the purpose better and avoided the impression of a pan-Canadian effort led by the federal government - as “strategy” was inferred by some.

In summary, the following learnings relate to the objectives established for the Forum:

- Focusing the Forum discussions on the four elements of KM – culture, content, process and technology – ensured that much of the information from the Paper and the Conference was discussed.
- In general, the group did not support the need for a formally named KM strategy.
- Several specific recommendations for action were identified; many recommendations included suggested timelines and leadership roles.

8.0 Where to From Here?

The KM Strategy Forum Report will be distributed to all participants. The relevance, benefits and challenges of KM in public health will be shared during an oral presentation at the 2009 Annual CPHA presentation in Winnipeg in June, 2009. The NCCMT is exploring appropriate next steps in the KM project.

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Appendices

Appendix A: Knowledge Management Invitational Strategy Forum
Agenda

Appendix B: CIHR-IPPH Definition of Canada's Public Health System

Appendix A: Knowledge Management Strategy Forum Agenda

- 8:00 – 8:30 *Breakfast & Networking*
- 8:30 – 8:45 **Welcoming Comments** – Donna Ciliska
What is meant by a strategy? a system?
- 8:45 – 9:00 **Introductions** – Nancy Dubois
Purpose, process, paper, place, people
- 9:00 – 9:20 **Key Concepts for Consideration Today**
What are the concepts from the KM Background Paper and the Nov. 4th Conference that should be considered today, given our purpose?
- 9:20 – 10:30 **Exploring a KM Strategy for Public Health in Canada**
What issues in the current public health system, at all levels, could a KM strategy address?

If Canada were to adopt a KM strategy for public health at all levels, what would it look like? Describe the preferred future.

Are there elements of the National Health Service (NHS) KM strategy that could be relevant in Canada?
- 10:30 – 10:45 *Break*
- 10:45 – 12:00 **Necessary Elements**
What would the necessary elements of a KM strategy be for public health in Canada?

Are there priorities?
- 12:00 – 1:00 *Lunch (hotel check-out)*
- 1:00 – 2:30 **What Would It Take?**
If the necessary elements were to come about, what would need to happen, by whom, by when?

Generate recommendations (consider research, leadership, resources)
- 2:30 – 2:45 *Break*
- 2:45 – 3:45 **Decision Point**
Should steps be undertaken to pursue a KM strategy for the public health system in Canada?

If not, should the NCC's consider a KM strategy?
- 3:45 – 4:00 **Closing Remarks** – Donna Ciliska
Evaluation Form

Appendix B: CIHR-IPPH Definition of Canada's Public Health System

“The public health system provides and supports a wide range of program and policy interventions including: the development of health status reports; disease surveillance and responses to outbreaks; health promotion to advocate for and facilitate healthier public policies, improve skills, and support individual and community-level behaviour change; immunization programs; and inspection of restaurants and child care facilities.

The essential functions of the Canadian public health system have never been officially defined although a national working group has recommended the following list:

- Population health assessment
- Health surveillance
- Health promotion
- Disease and injury prevention
- Health protection

The public health “system” in Canada might be better described as a grouping of multiple systems with varying roles, strengths and linkages. Each province has its own public health legislation although the age and content of these vary considerably. Most legislation focuses on the control of communicable diseases, although most preventable disability and death is now due to chronic diseases and injuries. Overall, the legislation does not identify the federal government’s mandate, roles, and responsibilities in public health.

The public health and health care systems share the same goal of maximizing the health of Canadians, and it is just as critical to have a well functioning public health system, as it is to have a strengthened health care system. Furthermore, both systems must work well together in responding to threats to the public’s health.” (Frank, J., Di Ruggiero, E. & Moloughney, B., 2003)

Frank, J., Di Ruggiero, E. & Moloughney, B. (2003) *The Future of Public Health in Canada: Developing a Public Health System for the 21st Century*. Canadian Institutes for Health Research - Institute of Population and Public Health. Retrieved on 2, February, 2009, from <http://www.cihr-irsc.gc.ca/e/19573.html>

