From Evidence to Action:
Report of Phase 1 Activities

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KEY POINTS

- The purpose of Phase 1 activities of the Canadian Institutes for Health Research (CIHR) funded From Evidence to Action project was to identify perspectives on "evidence" and barriers to evidence- informed decision-making from the perspective of planners and decision-makers from Regional Health Authorities (RHAs) in Manitoba.
- While there was almost universal support in principle for the importance of using evidence in decision-making, there was little consensus on what evidence is, what kinds of evidence are most appropriate, and how using "evidence" can best be demonstrated. A need to develop shared concepts and vocabulary was identified.
- Evidence-informed decision-making at the organizational level was poorly understood. It was commonly believed that only research should be considered "evidence" - this appears to contribute to some resistance to the concept of evidence-informed decision-making at the organizational level.
- Some appropriate forms of evidence (such as local program evaluation which can provide "context-sensitive evidence") were rarely considered. A need to differentiate between "data-driven" and "evidence-informed" planning was also identified.
- Perspectives on the role of evidence in political decision-making contribute to a high level of cynicism about "using evidence" in healthcare planning, and an acknowledgement of "gaming" of evidence.
- Significant differences were identified between decision-maker perspectives on barriers to using evidence and those identified in the academic literature. Even where themes were similar, the weight given to particular barriers differed markedly.
- Many different "layers" of complexity to previously recognized barriers were identified. Key among these were a) time, resources and workload as barriers, b) role of technology, and c) data availability.
- Time and resources were identified as the key barriers: these barriers, like others, were generally attributed to external forces beyond the influence of an individual RHA.
- Issues related to organizational culture, leadership, structure and processes (in particular the "crisis management" culture of healthcare) were highlighted as key barriers.
- Little difference was found in either perspectives on evidence, or barriers to evidence-informed decision-making between RHAs of varying size and complexity; factors related to culture and leadership appeared of greater importance.
- Findings from Phase 1 have resulted in a redefinition of the research problem from "using research to support decision-making" to "establishing and using processes that facilitate evidence-informed decision-making": a significant change in emphasis and orientation.

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EXECUTIVE SUMMARY

Background and Introduction
This report summarizes the results of Phase 1 of the Canadian Institutes for Health Research (CIHR) funded From Evidence to Action project (2005-2008). The purpose of From Evidence to Action is to identify barriers specific to evidence-informed health service planning and decision making (EIDM) with regional health authorities (RHAs), and to develop strategies, credible to decision-makers, to address these barriers. Project partners included all eleven RHAs in Manitoba, along with the Manitoba Centre for Health Policy. From Evidence to Action was based on a key finding of the evaluation of The Need to Know Project: the importance of addressing organizational barriers to research use in RHA planning and decision-making. The Need to Know Team members form the Advisory Committee for the project.

Following the official project launch in fall 2005, consultations were held in all Manitoba RHAs. The purpose of these consultations was: a) to present information on the project and establish the communication framework needed to support it; and b) to explore perspectives of RHA planners and decision-makers on the nature of evidence in healthcare decision-making at the organizational level, and the barriers to EIDM. Between November 2005 and April 2006, a total of seventeen focus groups and 53 individual interviews were conducted, for a total of 205 participants. Participation in, and apparent commitment to, these activities varied significantly between RHAs, enabling initial identification of organizational characteristics associated with effective, and less effective, consultations.

Perspectives on Evidence and Evidence-informed Decision-making
Although there was almost universal support in principle for the importance of using evidence in decision-making, there was little consensus among participants on what evidence is, what kind of evidence is most appropriate, and how "using evidence" can best be demonstrated. Evidence-informed decision-making at the organizational (planning/policy) level was poorly understood. In addition, in spite of the strong support in principle for the importance of using evidence in decision-making, it was commonly assumed that only "research" should be used as evidence. This assumption, combined with an understanding of the limited research available to guide key decisions facing the healthcare system and the need for "context-sensitive" evidence, led to a clear message of caution around the concept of "evidence-informed" decision-making. Participants highlighted the need to develop a shared vocabulary around the concept of "evidence".

Many different sources of evidence, commonly used in planning, were identified. However, there was a significant range in perspective among RHAs, as well as between individuals of the same RHA, as to the extent that evidence is currently being used. Commonly, evidence was defined simply as quantitative data, which has the effect of privileging some health areas (e.g. health services with already established data collection systems) over others. Confusion between "evidence-informed" and "data-driven" decision-making was identified. The potential role of program evaluation as a source of evidence was rarely mentioned. There was

also significant cynicism about use of “evidence” in the political decision-making context. While it was clear that using evidence was an expectation, it was also commonly acknowledged that evidence could be “gamed”.

Barriers to Evidence-informed Decision-making

Participants readily identified a number of barriers affecting use of evidence in planning and decision-making barriers at the practice, program and policy level. Many of these barriers were consistent with those identified in the Knowledge Translation literature and through initial assessment activities undertaken by The Need to Know project: time, resources, leadership, organizational factors (e.g. organizational culture, authority to make change, competing and conflicting demands, lack of information and timeliness of data, resource availability, appropriate structure for supporting EIDM, and lack of knowledge, education). However, although there was mention of key themes identified in the Knowledge Translation literature (e.g. addressing the gap between the group that does the research and the group providing patient care; lack of relevant data, need to “translate” information into lay language, need for greater research capacity) these were relatively minor themes in the overall consultation. Rather, the focus was on the organizational culture, structure and processes (including workload) and the politicized context of decision-making.

The cynicism regarding political decision-making processes creates a context in which the other barriers must be understood. Consistent with other research, lack of time and resources emerged as key barriers. However, further exploration of this theme provided other insights: e.g. the assumption that EIDM is an “add-on” requiring additional time; and time allocation as an indicator of organizational priorities. In the vast majority of cases, barriers to EIDM were identified as being external to the RHA, rather than barriers amenable to RHA intervention. A number of organizational barriers hindering EIDM were also highlighted. The key barrier in this area relates to what many informants referred to a “crisis management” culture; resistance to change was also identified. A number of factors related to leadership, processes of communication/consultation, structure and process were described as barriers to EIDM. These organizational factors, combined with issues related to workload and focus were described as interacting in important ways. A key issue identified was the fracturing of attention associated with involvement in multiple projects, and a crisis management culture.

Exploration of issues around information technology identified two major and distinct themes: lack of IT resources, and the intrusiveness of new technologies and the negative impact on thoughtful decision-making. Analysis of issues related to data availability identified four distinct themes; lack of data, lack of systems and resources for tracking, organizing and retrieving data, data overload, and lack of access to library resources. Lack of decision-maker knowledge and skill emerged as a minor theme.

While a number of different strategies for addressing barriers and supporting EIDM were identified, this project (which relied on self-report data by senior staff) was not able to determine the extent to which reported activities do in fact support EIDM.

Conclusion and Recommendations

Phase 1 research activities have provided some unique insights on RHA decision maker perspectives in two main areas:

- The nature of evidence and use of evidence in decision-making, and
- Barriers to evidence-informed decision-making in RHAs.

Although there are some similarities, these perspectives differ in important ways from the perspectives of the academic community. In addition, analysis of consultation data across all 11 regions allowed "drilling down" into these issues, providing additional insight into the complexity and varied components within each of the barriers identified. If strategies to increase evidence-informed decision-making in these settings are to be effective, they must recognize and reflect the experience and perspectives of decision-makers, as well as the practical barriers they face on a day-to-day basis.

Based on findings to date, preliminary recommendations have been developed in three areas for further discussion:

- Recommendations for RHA consideration
- Recommendations for coordinated RHA/Manitoba Health consideration, and
- Areas for joint academic/health system collaboration.

A key research question included in the From Evidence to Action proposal was whether there were differences between RHAs based on size, rural/urban/remote characteristics, organizational structure, leadership characteristics, and resource availability, particularly whether there were differences between the Winnipeg Regional Health Authority (WRHA) and the smaller Manitoba RHAs. Contrary to expectation, the initial consultation suggests that while there are some important differences between the WRHA and other RHAs, there are in fact more similarities, and that many of the differences relate more to scope and intensity than to substance. Factors related to culture and leadership appeared of greater importance in differences in EIDM between RHAs than size and complexity.

These findings have provided important insights that have resulted, in collaboration with the Advisory Committee of The Need to Know team members, with a revised focus for the project. The definition of the research problem has been changed from "using research evidence to support decision-making" to "establishing and using processes that facilitate and support evidence-informed decision-making". This focus has been reflected in a change in the intended project outputs from an instrument to "assess organizational barriers" to a "Toolkit" to facilitate use of evidence in RHA decision-making processes. It also has resulted in revisions to research objectives and questions, and a broadening of the scope of relevant research to be reviewed to include the topics of organizational culture, learning organizations and change management.

FROM EVIDENCE TO ACTION: REPORT OF PHASE 1 ACTIVITIES

BACKGROUND

RELATIONSHIP WITH THE NEED TO KNOW PROJECT

From Evidence to Action grew out of the success of *The Need to Know* (NTK) project. *The Need to Know* project, a CIHR-funded collaboration between the Manitoba Centre for Health Policy (MCHP), the 10 rural and northern Manitoba Regional Health Authorities (RHAs) and Manitoba Health (2001-2006), has been described in detail elsewhere (Bowen, 20002; Bowen, 2004; Bowen et al., 2005; Bowen & Martens, 2006): a summary can be found in Appendix A.

The Need to Know project was designed to address key challenges to knowledge translation (KT) identified in the literature at the time of its inception – developing collaborative relationships, producing research of relevance to users, and building capacity of key individuals within RHAs to understand and use research. The evaluation component of the project, however, contributed to a maturing of KT theory (Bowen 2002, Bowen 2004) and RHA participants highlighted the importance of addressing *organizational* barriers to research use in RHA planning and decision-making. They felt that the greatest challenge was to affect change in how decision-making is conducted – to move *from evidence to action* (Bowen et al., 2005). *The Need to Know* project was not designed or funded to undertake these activities, and it is for that reason that the team promoted development of this *From Evidence to Action (FEA)* initiative. Another difference between the NTK and FEA projects is that *From Evidence to Action* also includes the participation of the Winnipeg Regional Health Authority, the largest RHA in the province.

FROM EVIDENCE TO ACTION: PURPOSE AND OBJECTIVES

The purpose of *From Evidence to Action* is to identify barriers specific to health service planning and decision-making within regional health authorities, and to develop strategies, credible to decision-makers, to address these barriers. The *Need to Know* Team members are integral to the project, and the proposal incorporated them as "knowledge translation experts" for their region.

Objectives were to[1]:

1. Develop a collaboratively-created tool designed to assess barriers to evidence-based planning and decision-making in RHAs, and organizational strengths and limitations in research utilization and knowledge translation;
2. Apply the co-created tool in all RHAs within the province of Manitoba;
3. Evaluate the effectiveness of this tool across RHAs with varying characteristics (e.g. size, urban/rural/remote characteristics, organizational structure);

[1] Appendix B summarizes the revised objectives and research questions emerging from the results of this phase of the *From Evidence to Action* project.

4. Collaboratively develop and implement priority interventions to address identified barriers;
5. Assess the effectiveness of specific strategies to address identified barriers, across RHAs with varying characteristics; and
6. Produce user-friendly resources for use by other RHAs and health districts across Canada.

The project is designed to address the following research questions:

- What are the greatest barriers to increased use of research in planning within RHAs as perceived by RHA decision-makers? Are these barriers similar across RHAs? What RHA characteristics are associated with specific barriers? Which barriers can be addressed by RHAs themselves, which require the participation of other stakeholders?
- What are the strengths and weaknesses of RHAs in addressing these barriers? Are there differences between RHAs based on size, rural/urban/remote characteristics, organizational structure, leadership characteristics, and resource availability?
- Does a collaborative approach to developing an assessment tool result in inclusion of unique elements or innovative approaches not included in other identified assessment tools? Does it promote acceptance of assessment results, and willingness to engage in strategies to address identified barriers?
- Is it feasible to develop one tool that is appropriate for RHAs with diverse characteristics or are separate tools needed?
- What strategies to address identified barriers are proposed by RHA decision-makers? What similarities and differences are found between urban/rural/remote, and large, medium and small RHAs? Does linkage with other RHAs with similar challenges assist in developing effective strategies for addressing identified barriers?
- What strategies are most effective in a) increasing awareness and commitment of RHAs to research utilization? b) addressing specific planning issues facing RHAs? What difficulties are found in implementing these strategies?

It was proposed that this project will contribute to increased understanding of knowledge translation theory by identifying barriers to research utilization within RHAs – an important arena for research use. As this research will incorporate the perspectives of RHA decision-makers, it will provide unique insights regarding the importance of various barriers and feasibility of proposed strategies ***from a decision-maker perspective.***

This report summarizes Phase 1 results from the CIHR funded (2005-2008) *From Evidence to Action* Project: perspectives of RHA planners and decision makers on the nature of "evidence", the use of evidence in decision-making, and barriers to evidence informed decision making. It includes a discussion of the implications of these findings for subsequent phases of the project and outlines the work plan for the completion of the project.

HOW THIS REPORT IS ORGANIZED

The first section of the report summarizes the activities undertaken during Phase 1 of the *From Evidence to Action* project. The second section reviews findings from this research under three main headings: Participation in Phase 1 Activities, Perspectives on Evidence and Evidence-informed Decision-making, and Barriers to Evidence-informed Decision-making. This is followed by a brief discussion of the findings, and summary and recommendations.

Language and formatting
Direct quotes from interviews/focus groups are noted in the report in *italics*. In order to protect confidentiality, while avoiding the awkward use of the phrase "he or she", the female pronouns are used in all cases.

A glossary of commonly used terms can be found in Appendix C. Phase 1 activities identified a strong interest in clarifying and defining concepts such as "evidence-based" and "evidence-informed", and developing a shared vocabulary.

ACKNOWLEDGEMENTS
From Evidence to Action is supported by a research grant from the Canadian Institutes for Health Services Research (CIHR), whose support is gratefully acknowledged.

This report reflects the important contribution of Tannis Erickson, Research Coordinator for Phase 1 of the project. She undertook the overwhelming majority of interview, focus group and consultation activities, participated in analysis of the data, and development of this report.

The ongoing commitment and insights of *The Need to Know* Team members, who served as the advisory body (working group) for the *From Evidence to Action* project, is greatly appreciated.

PHASE 1 ACTIVITIES

INITIAL COMMUNICATIONS WITH RHAS

One of the first activities of the project was to communicate with each of the *Need to Know (NTK)* representatives and regional CEOs. While all of the CEOs and *The Need to Know* Team itself had given support to the proposal, the time lag between submission and approval, required that participants were updated on the proposal, and implications for their role were reviewed. *The Need to Know* team was provided with an update (May 30, 2005) and a presentation to the provincial meeting of CEOs to launch the project was made (April 14, 2005). A Research Coordinator, Tannis Erickson, was hired. This position was a secondment of an experienced NTK Team member from one of the RHAs.

Between August and November 2005, the Research Coordinator contacted 16 NTK team members and 11 CEOs by phone. During these phone conversations, the accomplishments of the NTK team, its relationship to *From Evidence to Action*, and the objectives of the FEA project were reviewed. The initial identification of barriers to evidence informed decision-making that were identified as part of the NTK project evaluation were also reviewed, as these evaluation activities became the foundation of *The From Evidence to Action* project.

PLANNING ACTIVITIES

The Need to Know Team. Planning has been ongoing, in collaboration with *The Need to Know* Team members, who form the Advisory Committee for the project. As team members were identified as the "Knowledge Translation" experts for their RHAs, and the operational link between the project and the RHAs, participatory planning sessions were held at each team meeting (Appendix D). At the May 2005 workshop, Sarah Bowen, Co-Principal Investigator, reviewed the objectives of the FEA project and its links to the priorities identified by team members through the NTK project evaluation. Team members reviewed project planning and implementation issues and discussed recommendations for a communication plan and next steps. At the October 2005 meeting, Sarah Bowen and Tannis Erickson (Project Coordinator) provided an update of project activities to date and discussed NTK team member involvement in upcoming activities. At the January 2006 meeting, another update was provided, along with a summary of preliminary findings. A initial discussion of implications of these findings led to a tentative decision to refocus project activities from "assessing organizational barriers" to "developing tools" to facilitate and support evidence-informed decision-making. By the June 2006 meeting, Phase 1 consultations had been completed. A summary of findings was presented, including barriers identified, and RHA perspectives on evidence and its use. Further discussion resulted in consensus on redefining the problem from "using research evidence to support decision making" to "establishing and using processes that facilitate and support evidence-informed decision making".

Literature Review and Analysis. As indicated in the proposal, an important step was further review and analysis of the relevant literature. This has evolved to become an ongoing activity. As Phase 1 findings have resulted in a reframing of the project, analysis has broadened to

include literature related to organizational change, learning organizations, organizational culture and management.

Role of Phase 1 consultations in ongoing planning. Findings from Phase 1 consultations have led to refinement, in conjunction with the NTK Advisory Committee, of the original research objectives and questions, and to reframing of activities to better reflect issues of concern to decision makers. This is discussed in more detail in the section *Changes to Project Focus and Objectives,* page 28.

RHA CONSULTATIONS

The formal Consultation Phase (Phase 1) began in October 2005. Initially, the plan was to have the consultation phase divided into two stages: initial presentations and consultations. The purpose of stage one (**presentation phase**) was to inform RHAs about the details of the project, to establish the consultative and communication framework needed, and collaboratively define the methods to be used. Specifically, the goals were:

- To ensure that the project was fully understood within each of the regions;
- To determine effective strategies for generating input from all sectors within the RHAs;
- To clarify the role and expectations of partners (RHA management, RHA Advisory Group member, project staff); and
- To negotiate any concerns regarding ethics/confidentiality.

The purpose of the second stage (**consultation phase**) was to generate, from the perspective of stakeholders, assessment of:

a) perceived importance of evidence-based decision-making;
b) regional KT accomplishments achieved to date;
c) barriers to evidence-based decision-making within the RHA[2];
d) suggested indicators for assessment of such barriers;
e) input into the overall evaluation of the *From Evidence to Action* project.

Due to challenges related to both scheduling and travel planning, however, the two phases were usually combined, and so in the following section are described together. Methods included

a) presentations about the project (this preceded other activities);
b) key informant interviews; and
c) focus groups.

Participants in Phase 1 activities were senior managers, Board members, and some program managers, with the majority of participants being in senior management/director positions. Therefore the perspectives described should only be interpreted to apply to senior-level managers, not to RHA staff as a whole.

These activities took place, in all 11 RHAs, between November 2005 and April 2006. Significant time was required to organize and undertake this consultation phase as many scheduling difficulties were experienced in planning such extensive consultation with 11 RHAs.

[2] See Appendix C, Glossary of Commonly Used Terms for explanation of why the term *"evidence-based"* (used in the original proposal) has been replaced by *"evidence-informed"* as the project has proceeded.

While the audience for the presentations varied from region to region, attendees generally included Board members, senior managers and program/service managers. In some regions there was more than one presentation (i.e. one for Board members and another for staff).

The balance between group presentations and individual interviews varied from region to region depending on management structure and advice from *The Need to Know* team member from that RHA. In some regions, senior managers and Board members participated in key informant interviews while in others they participated in a group discussion. In all regions, program and service managers participated in focus groups. The number of interviews and focus groups conducted in each region depended in large part on the size of their management team(s): there is significant variation in size and organizational complexity among the RHAs. Seventeen focus groups and 54 individual interviews were conducted, for a total of 205 participants (Appendix E).

Written consents were obtained for individual interviews and focus groups (interview/focus group guides and consent forms can be found in Appendices F and G). The Research Coordinator conducted all the presentations, interviews, and focus group, with the exception of those interviews and focus groups in the RHA in which she was employed. In this case, one of the Principal investigators conducted the research. Field notes were taken of all interviews and meetings and immediately transcribed. Group sessions were audiotaped. Analysis was based on cross-case analysis organized around specific questions, and open-coding to identify unanticipated themes.

ONGOING COMMUNICATION WITH RHAS

Throughout the course of the project various communication tools were used to outline the project and present initial findings.

a) *NTK Team newsletters*. Updates were included in the Fall 2005 (Vol 11), Winter 2006 (Vol 12), Spring 2006 (Vol 13), and Fall 2006 (Vol 14) issues of the team newsletter. (Appendix H)
b) *Periodic Update Memos* were sent to regional CEOs highlighting the progress of the project and outlining preliminary findings (August 2005 and December 2005, Appendix I.)
c) *Short project descriptions* were developed to facilitate communication within the regions, e.g. for insertion in regional newsletters. (Appendix J)

In addition, the provincial meetings of RHA CEOs (RHAM) were provided with a short update on key findings on September 13, 2006.

At the October 2006 Rural and Northern Health Care day, a keynote presentation (*More Than 'Using Research": Perspectives of RHA decision makers on using evidence in decision making*) was made on Phase 1 findings. This was followed by table discussions, where 158 RHA Board members and staff discussed strategies to address barriers identified in the consultation phase. This activity provided opportunities for planners and decision-makers from all rural and northern RHAs to receive feedback on Phase 1 findings and an overview of the revised direction for the project; as well as to begin reflecting on implications of findings for their particular RHA.

OTHER PROJECT ACTIVITIES

National Dissemination. Information on the project objectives, activities and initial findings have been presented at:

- CIHR IPPH-IHSPR Summer Institute – June 23, 2006. (Winnipeg, Manitoba) Overview of the *From Evidence to Action* project and objectives and preliminary findings.
- Canadian Rural Health Research Society Conference – October 28, 2005. (Quebec City, Quebec) Presentation entitled *From Evidence to Action: Individual Research Capacity to Organizational Change.*
- Canadian Rural Health Research Society Conference – October 20, 2006. (Prince George, British Columbia) Presentation entitled: *More than "Using Evidence": Reframing the Challenge of Evidence Informed Decision Making in RHAs.*

FINDINGS

PARTICIPATION IN PHASE 1 ACTIVITIES

There were varying levels of engagement in the Phase 1 activities of *From Evidence to Action* among the RHAs, and differences among RHAs in the resources assigned to organize and participate in activities. In addition, the priority given to the consultation activities appeared to differ significantly.

How the organization of Phase 1 activities was managed also varied. In some RHAs, there was a clearly designated person who was assigned as the liaison for the project and took responsibility for all organization at the regional level (i.e. arranging for the presentation and organizing staff to participate in the consultations). In the majority of cases this liaison was, as expected, The *Need to Know* Team representative. In other regions, there was less evident commitment to the activities, and in some, significant challenges were experienced in organizing consultation activities. In one region, for example, the presentation and subsequent consultation was rescheduled three times, even though this meant that complex travel arrangements needed to be rescheduled.

The level of organization and resources provided was often reflected in the number of people who were invited to, and actually attended, the consultations and interviews. For example, there were some consultations where only a few of those invited actually attended.

It should be noted that there were a number of factors that placed some RHAs at additional disadvantage in organizing the consultations (e.g. distance between sites at some of the northern RHAs; continuity of NTK team member from a region), and that ability to schedule consultation activities in conjunction with other regional events (often but not always possible) also appeared to predict attendance. However, these factors do not explain all variation between RHAs during this phase.

The following section presents a prototype of a "successful" and "less successful" consultation process, based on Phase 1 results. It should be noted that while each of the factors was observed at some time during Phase 1 activities ***neither of the following examples describes a particular RHA***: rather each description is of an "imaginary" RHA that demonstrates a synthesis of a number of factors related to the "low" and "high" commitment and/or organization identified through the consultation process. They describe extreme cases, where all the negative factors are combined into one description, and all positive factors into another.

Composite: Effective consultation RHA.

- In this RHA, *The Need to Know* team member was directly involved in planning and organizing the consultations, including identifying key roles within the organization to be included. She also attended the consultations, and welcomed participants.

- Logistical details (e.g. facility arrangements) were organized ahead of time. Meeting rooms were prepared, and coffee provided. There was clear communication to participants about the consultation. Participants were provided with background information, and it was clear

to them "why they were there". Adequate time for discussion was provided, and staff indicated they had support for participating on work time.

- The CEO attended consultation activities and indicated solid support for the project objectives. Participants were knowledgeable about both *From Evidence to Action*, and *The Need to Know* projects. There was often reference to *Need to Know* activities, and actions taken in response to research findings.

- There was enthusiastic participation in the meetings by participants, and many issues were raised. The tone of the discussions was colloquial, often with friendly joking between staff, management and board. There was no evidence that participants were editing their opinions or that a senior manager was controlling the discussion.

Composite: Low Effectiveness Consultation RHA

- *The Need to Know* representative was either not the key person organizing the group, or did not demonstrate interest in the activity. The CEO was either a) not involved in planning and did not attend the consultation, or b) was directly responsible for selecting each participant or vetting the list of those invited, and dominated the consultation discussion.

- Organization of the consultations was poor. The liaison neglected to follow up and communicate about the project. The meeting room was not open and there was no one from the RHA designated to greet and welcome the Research Coordinator. The consultation was rescheduled on more than one occasion, often at the last minute.

- There was disappointing turn out from staff. Few were invited: there was poor communication about the activities; lack of clear messages about the purpose of the project and consultation activities; and/or little evidence of organizational support for their participation. Many attendees had little or no awareness of *The Need to Know* or *From Evidence to Action* projects.

- Group discussions were dominated by a senior staff person who answered each question first, and set the tone for what was to be said. Staff contributions were few. There was indication of tension, even overt conflict, between participants.

While participation in a project focused on evidence-informed decision-making (EIDM) ***cannot*** be assumed to represent organizational commitment to, or participation in, EIDM at the organizational level, it is reasonable to consider whether the level of participation reflects commitment to the project. In addition, response to project activities (to which each RHA had given support in principle) may be reflective of larger organizational characteristics that may be associated with EIDM. For example, some of the factors noted above (e.g. centralized decision-making, organizational climate, crisis management) do correlate with the larger literature on "Learning Organizations" and effective decision-making. These observations should inform planning of future project activities.

PERSPECTIVES ON EVIDENCE AND EVIDENCE INFORMED DECISION-MAKING

Conceptualization of "Evidence"[3]

There was almost universal support in principle for the importance of using evidence in decision-making. In all regions strong supportive statements were made, and concrete examples given, of current evidence use. In some regions, "using evidence" was presented as a source of pride (e.g. *We pride ourselves on a very evidence-based approach,* or *don't think any decision is made without it; it's how (we) do business – we live and breathe it.)* It was clear from this consultation that "using evidence" was accepted as an expectation of planners and decision-makers, and that informants were sensitive to the need to be seen to be meeting this expectation. In many cases there was a sense that it would have been unacceptable ***not*** to voice such commitment. (*We talk a lot about it, we are using the language more – whether or not we can operationalize it is another question…we use the term evidence-based decision-making loosely).*

Further analysis of responses, however, indicates that there is little consensus on what "evidence" is, what kind of evidence is most appropriate, and how "using evidence" can best be demonstrated. There was striking variation in interpretation of the concept of "evidence" and even contradictory definitions. Some examples are provided below:

- *not making decisions on whims or political ideation*
- literally what it says – making decisions based on evidence
- taking findings from the literature and from best practice sites and making decisions based on those findings
- facts not assumptions
- experience is important, what you see
- *using what is at hand*
- using hard information based on some systematic way of collecting data
- less emphasis on following your gut
- knowing what is going on
- a synthesis of what is available
- means starting with a plan
- reporting of indicators as required
- cost benefit analysis
- what has worked in other places
- that thought has gone into the area you are focusing on
- basing decisions on something tangible.

In spite of the strong support in principle for the importance of using evidence in planning, there was also some caution about "evidence-informed decision making". It was commented that many different kinds of information can be considered evidence, and should be included (e.g. *there are many different types of information that need to be included, scientific, anecdotal, community history etc*). There was a common assumption that the "evidence" in evidence-informed decision-making, referred only to evidence from the academic research. There did not appear to be awareness of the distinction currently being made between the terms "evidence-

[3] Appendix C provides definitions of many of the terms described in this section.

based" and "evidence-informed". There was no reference, in any consultations or interviews, to recent exploration of this issue by Canadian Health Services Research Foundation (CHSRF) or other bodies, suggesting low awareness of such resources. Many participants felt (appropriately) that a focus limited to "research" was inadequate (*not all the evidence that you use is based on research*), stressing the absence of relevant research for key issues facing regional health authorities, as well as the need to incorporate local experience, and respond to the local context. There were also several comments related to the context sensitive nature of evidence (although this term itself was not used).

- *There is always some risk taking because as its been alluded to, perhaps that model is the best practice in the country, but will it in fact have the same impact on our needs? So sometimes you implement based on a best practice and then you need to …. see if in fact it has the same merit here.*

This concern about placing too much emphasis on "evidence-based" given an insufficient research base was consistent with themes identified in other Canadian and international research. (Mitton & Patten, 2004; CHSRF, 2006; Walshe & Rundall, 2001**;** Mitton et al., 2005**)**.

Another theme that emerged was the importance of differentiating between "data-driven" and "evidence informed" decision-making. As one informant commented: *There is a difference between having some numbers together as opposed to having all the necessary evidence to make a decision.* Even when not articulated, this theme was often expressed in other ways, e.g. frustration that community needs for which only qualitative data was available (based on local community health consultations for example) would be less likely to get a positive response from Manitoba Health than issues (often acute-care based) for which such data was available. This appeared to be related to a common quantitative bias. Indeed for some respondents (though certainly not all), evidence appeared to be simply "numbers", a common assumption about the meaning of "evidence-based" (Jack, 2006). In some cases "qualitative" was defined simply as "anecdotal", suggesting little understanding of qualitative research and evaluation as a legitimate and systematic process.

Evidence-informed decision making at an organizational level proved to be a challenging concept. The concept of evidence-informed *planning* and *decision-making* appeared to be a complex and difficult concept for most, even though "using evidence" at the clinical level was a well-established concept. When asked for examples at the organizational decision making level, many participants were only able to present clinical examples.

Using evidence was often perceived as an "add-on" to existing activities. It was also apparent in many of the consultations that using evidence was perceived as time consuming, in many cases because it was perceived as "add-on" or extra activity, rather than a change in how business was conducted. It was believed by many that it takes longer to make an "evidence-informed" decision, than one based on experience or anecdotal information. The implications of this are significant given, as discussed in the next section, the identification of "time" as a major barrier to evidence informed decision-making.

A need to define "evidence" and its appropriate use was identified. A clear need for developing a shared vocabulary and the concept of "evidence" was articulated by many participants (in fact, lack of common language and concepts was identified as a barrier by several). Many informants felt that staff lacked skills to appropriately access, interpret & analyze

evidence, particularly to weigh the importance of the numerous different sources of evidence that may be available. This is consistent with other research (Mitton & Patten, 2004).

Current Use of Evidence in RHAs

Many different sources of evidence, commonly used in planning, were identified. Sources included MCHP reports, information provided by Manitoba Health, the Community Health Assessment process, Canadian Agency for Drugs & Technology (CADTH, formerly CCOHTA), Cochrane Collaboration, quality indicators, benchmarking and balanced score cards, satisfaction surveys, and Statistics Canada data. Most commonly cited were health planning and Community Health Assessment processes. Striking in its near absence as a source of evidence (especially considering, as discussed earlier, the common identification of gaps in the relevant research) was program/service evaluation. It was not clear from this consultation whether this was due to limited evaluation activities being undertaken, or the lack of recognition of this as a potential source of quality, while at the same time context-sensitive, evidence for decision making.

There was a significant range in perspectives among RHAs, as well as between individuals within the same RHA, as to the extent that evidence is currently being used in planning and decision-making within their RHAs. Several informants showed insight as to the divide between "ideal" and "actual" use of evidence (for example *we would like to have all evidence but often make decisions on what is available at the time).* The majority of respondents provided cautious and realistic assessments, for example:

- *We don't do a good job of staying current and putting information to use like we could, not as extensive as we would like it.*
- *We are getting better at it slowly*
- *We use experience 100% in our planning and now we are trying to add other types of evidence.*
- *There is an evolution in these processes and we are still in the early stages.*
- *Not to the extent I would like it to, but it happens*
- *I often feel we use it when it is convenient …it is not part of our culture yet.*

Many of these respondents, however, felt that evidence informed decision-making in their organizations was better than it had been in the past, particularly in formal processes such as strategic planning, or Community Health Assessment. Most felt that effort was going into this area, although there was more variability suggested as to assessment of actual achievement.

In many RHAs there was recognition of variation in evidence use among programs and portfolios, as well as among individuals. This variation was found both within and among RHAs. Some felt that there were good processes in place at "upper level", but less at lower levels, in other regions this perception was reversed.

However, variation in individual perspectives on how well evidence was being used was dramatic. These ranged from pessimistic (e.g. *We tend to make decisions based on historical info and this is how it happens (here)),* to a minority who expressed high levels of confidence in the use of evidence within their RHAs.

- *I believe any decision we are making we are using the best evidence that we have.*

- *Process is consistently applied to use evidence in decision-making on all days, by all people, in all departments.*
- *At a management level we use evidence all the time, there is never a new initiative that is not based on evidence that is out there.*

Significant cynicism about "using evidence" was expressed. A significant minority voiced dissatisfaction regarding claims of evidence informed decision-making, and clear criticism of whether, at higher levels, evidence was actually used. There was recognition that *evidence was only a small piece* of a decision, *only one of the factors that informs decisions*. There was a feeling that *many decisions are from the top, at the local level you just adapt to the big plan.*

Because, increasingly, evidence was demanded, informants stated that they would use it *(we need to include evidence for Manitoba Health, so we will)*. The perception by the RHAs of failure to model evidence-informed decision-making at the provincial level (and inconsistency of demands that RHAs do so) was a source of frustration and/or criticism by many (*politics trumps evidence every time*; *evidence is not the primary driver, politics comes into play*). This understanding of the political context of "evidence" appeared to lead to conscious "gaming" of evidence in some instances: looking for some evidence to support decisions that had been made for other reasons.

- *You really can't get anything unless you have some kind of documentation to support your proposals so any of our briefing notes and stuff like that are based on a review of situations and stuff like that to support it. Mind you, you can probably cheat on this evidence too, because you try to get the evidence that supports you so it could be skewed so its always a danger*
- I thought it was to use evidence to support decisions – as it turns out a lot of decisions are already made, now its about finding evidence to support the decisions that have already been made.

Participants also reflected an understanding that decisions were not enough – that it was necessary to implement the decisions. Several respondents also identified a gap between "making a decision" and the "implementation" of a concrete plan, highlighting the challenges in getting a decision translated into effective action.

- *I think the follow through with evidence-based justification or whatever you want to call it, really may become kind of fuzzy because of not for lack of trying, but lack of resources and people because you can't get from there to here.*
- *Having enough time to just not plan but then implement.*
- *To develop an action plan is not the issue. To find resources, the time and resources to implement the way its supposed to be implemented and not just pay a lip service on paper, is what I find challenging sometimes.*
- *There is not a good recognition of what it takes to implement a new initiative.*
- *We use it a lot in our planning but we aren't always able to implement*
- *Action piece is where we fall short…*

Summary

While the importance of using evidence in decision-making is clearly in the lexicon of RHA decision-makers, there is little consensus about what evidence is or should be, or the extent to which it is being used. Defining "evidence" simply as quantitative data appears to be privileging some health areas (e.g. health services with already established data collection systems or accepted indicators) over others (e.g. community based or preventive health issues). In some cases this even can result in *pressure not to ask a question for which there is no answer*. This was also

described as contributing to the tendency for *new money in the system going to support the status quo* rather than new areas.

Developing resources that outline the many sources of evidence, their strengths, limitations and appropriate use in health services and community health research could potentially help build a shared vocabulary and promote more effective use of a variety of forms of evidence. Recognition of the important and legitimate role of sources of evidence other than academic research in organizational decision-making may also address some of the resistance to activities promoting evidence use.

There is, however, significant cynicism about provincial commitment to evidence-informed decision-making that would need to be addressed through other strategies. In addition, further strategies are required to develop effective strategies for actually "using" evidence effectively.

Given that using evidence is seen as "time-consuming" and (as will be discussed in later sections of this report) that time is seen as a major barrier to EIDM, the fact that it is viewed as an "additional" activity, rather than a change in how things are done now should also be highlighted.

BARRIERS TO EVIDENCE-INFORMED DECISION MAKING

Barriers from the RHA Perspective

Participants readily identified a number of barriers affecting use of evidence in planning and decision-making: barriers at the practice, program and policy level. Given the focus of this research, this analysis focused on barriers identified at program and policy levels. Many of these barriers were consistent with those identified in the Knowledge Translation literature and through initial assessment activities undertaken by *The Need to Know* project: time, resources, leadership, organizational factors (e.g. organizational culture, authority to make change, competing and conflicting demands, lack of information and timeliness of data, resource availability, appropriate structure for supporting EIDM, and lack of knowledge, education). However, analysis of consultation data across all 11 regions allowed "drilling down" into these issues, with the result that there is additional insight into how these barriers are perceived and experienced by senior RHA decision-makers.

Researcher and decision-maker perspectives are different in important ways. This analysis indicates that the "barriers" to evidence informed decision-making are weighed very differently by RHA decision makers than by researchers. Consequently, the Phase 1 consultations have resulted in reframing of the primary research questions, and adaptation of project activities. The following section highlights the barriers identified.

"Politics Trumps Evidence." A theme raised consistently and strongly throughout the consultations was that of recognition of the political context of decision-making. While not the most common barrier identified, analysis of the consultation data suggests that this common perception provides a context in which the other barriers should be understood.

Health plans were one example where participants felt "politics" or "political will" presented barriers. For example, even if health plan submissions include supporting evidence, they may not be ultimately approved through the political decision-making process. One example given related to closure of rural hospitals. It was reported that although there may be good "evidence" – supported by the RHA – that some of these hospitals should close (with resources being moved into other programs), this has been overruled as the political costs of hospital closure are too great.[4]

- *Government politics, policy – the government is not willing to let us implement changes to the provision of health care services in the region based on the evidence we have.*
- *The political agenda. If what you think you need doesn't fit with the political agenda, you don't get it.*
- *The difference between what the region deems to be a priority and what Manitoba Health thinks is a priority…the evidence supports a certain thing but Manitoba Health won't fund or approve it, they require us to participate in provincial priorities that we may not have chosen.*

This issue was sometimes presented as "Manitoba Health as a barrier". (*The biggest barrier is the way Manitoba Health operates – they are not evidence-based – things get political and they don't make decisions based on evidence at all*). Further analysis indicates, however, that "Manitoba Health" was often used as a catch-all phrase that included both "political" (made by politicians) decision-making, and some internal departmental processes. It was unclear from the consultations to what extent

[4] While it may be that other important considerations come into the decision-making process, e.g. consideration of the effects on the economy of smaller communities of hospital closures, these perspectives were not raised by participants.

there was confusion by participants of the roles of health department and politicians, and the differences between Manitoba Health staff decisions and those resulting from political processes.

Reactivity to public perception *(government is more concerned with public views than good patient care; the minute someone makes a fuss about something there is hesitancy to make a decision);* **"**throwing money" at high profile political issues; and *"incomplete" regionalization* (leaving RHAs with the responsibility, but not the authority to make change) were all examples provided.

Some respondents felt that it was not just "government" but the media, the public, professional organizations, unions and special interest groups that together created a larger political context that worked against an RHA's ability or willingness to practice EIDM.

Some Manitoba Health processes were also identified as presenting barriers. One commonly identified area was the requirement for provincial "performance deliverables". Performance deliverables, set lists of topics/issues that regions must address, are determined by Manitoba Health. Some respondents felt that this process often showed lack of appreciation for local issues and that having to respond to these requests pulled limited resources away from regional "evidence-informed" priorities to issues that may or may not be of importance to a particular region.

- *I don't have the time because I have three other performance deliverables that are really good deliverables that make sense, but perhaps they might not have been the priority that I would have been working on but I don't have any choice because Manitoba Health has said "Thou shall". So unfortunately, there's not often…a lot of ability to have a dialogue about what the priority is or should be at the program level.*
- *Performance deliverables placed a huge strain on the staff with respect to time. A lot of frustration on the part of staff as they did not see any results coming from these.*

Although this example was frequently mentioned, several participants did note that they felt that the process had become more responsive, and that there was now greater opportunity to create deliverables that more closely meet the priorities of the regions. The performance deliverable process appeared in at least some RHAs to be significantly less of a concern than it had been in the past. This may suggest that previous concerns were related to the specific processes/requirements rather than to the requirement for overall health system planning/coordination.

Other barriers related to Manitoba Health included the frequency of departmental reorganizations, *making it difficult for RHAs to know how to proceed with certain things*, and a belief that there was limited understanding of rural/northern issues (*Manitoba Health does not always understand what "rural" is.*)

A final "political" consideration often raised in the consultations was that of *physicians as a barrier.* "Physicians" were described as a barrier in many different contexts. Lack of physician accountability to the RHAs, was viewed as an often intractable problem – a shortage of physicians, and fear of alienating (and losing) more physicians appears to drive many decisions. While this factor seemed to be of greater importance to remote regions, it was not limited to these RHAs. This concern reflects the reality of community concern and advocacy for action to ensure physician recruitment and retention.

The need to develop strategies for "bringing physicians on side" (when they had not been included in the regionalization/health reform process from the beginning) was also identified as a continuing challenge.

Lack of Time and Resources Emerged as the Key Barriers. Consistent with findings from *The Need to Know* project, a key barrier identified in all RHAs was related to resources. Even regions that felt they were doing a good job related to EIDM, identified a need for additional and specialized resources (e.g. in interpreting data into working documents, getting information in lay rather than researcher language). Under-resourcing is described as resulting both in poor decisions (*what makes sense is too expensive*), inability to allocate resources to research/evidence related positions, and (perhaps most importantly) to workload pressures which were described as actively working against thoughtful reflection – identified as an essential component of EIDM. It is interesting to note that this lack of time for researching evidence, weighing evidence, and reflecting on it, emerged as a significantly more important issue than "absence of research", or "understanding of research". This finding is consistent with much of the "learning organization" literature that identifies "organizational slack" as a key predictor of learning organizations (Greenhalgh, 2004). In addition, some regions felt that resources were not distributed equitably.

Further "drilling down" within this theme provided other insights on the theme of "time and resources". There appears to be a tendency to view EIDM as an "add-on" requiring additional time, rather than a change in the way business is done (with a potential to save time down the road). The "crisis – management" culture within healthcare, so often referenced by informants, makes it difficult for decision-makers to prioritize important but non-urgent issues. A minority of respondents did recognize that the issue of "time" was also an issue of organizational priorities (as reflected by the expressions: "there is always time for the important things") and that if it were a priority, appropriate resources (including protected time) would be allocated to support the stated goal of supporting EIDM. It was also recognized that "not having enough time" may also reflect individual decision that this is not a priority (*there are elements within the organization that don't appreciate the need for evidence*).

In the vast majority of cases, barriers to EIDM were identified as being external to the organization, and so not amenable to intervention by an individual RHA. In one case the statement was made *Internally we have no barriers. No barriers within the organization.* However, further analysis indicates that these so-identified "external" barriers often have aspects that are both external (not readily amenable to intervention by an individual RHA) and internal (issues that an individual RHA does have some power to address). For example lack of time and resources for research was a barrier for which Manitoba Health was usually blamed. Fewer comments indicated that attention was placed on the issue of how RHAs allocate the resources they do have at their disposal to best support EIDM. As there will always be limitations on resource availability in a complex health system, one strategy for enhanced EIDM is to promote greater awareness of the internal components on perceived (and actual) external barriers. Some examples are illustrated in Table 1.[5]

[5] A framework of all the barriers identified, both internal and external can be found in Appendix I.

Table 1

External Barriers to EBDM (not modifiable by RHAs alone)	Internal Barriers to EBDM (can be modified by individual RHAs)
Financial resources allocated to the region Inequitable distribution of resources by Manitoba Health	Internal resource allocation: Staffing & use of staff time (research, data management, analysis) • Lack of support for protected "research" time Resources to support research use (e.g. library access)

A number of organizational barriers hindering EIDM were also highlighted. Many participants expressed a practical and indepth understanding of a number of organizational factors affecting EIDM. The consultations provided greater insight as to what issues related to "organizational culture", "structure", or "leadership" that were associated with barriers to EIDM. The sub-themes identified below are not distinct, but overlapping and interactive in many ways.

Organizational Culture
Overall, the key organizational barrier relates to what many informants referred to as a "crisis management" culture, where people were *too busy dealing with the urgent, can't get to the important.* This was an issue for all RHAs, regardless of location and size, and was commonly simply accepted as a given. In a crisis management culture, "research", or more broadly, "developing processes for ensuring use of evidence in decision-making" are a lower priority (research needs are rarely a crisis). In this context, it makes sense that staff found they *don't have time to use research.* This pervasive crisis management culture also was viewed as resulting in *constantly changing priorities* that also made evidence-informed planning difficult. In several consultations staff fatigue with continuous change was mentioned (*Enough already, every few week or every few months there is something new that we have to do. …a continuous state of change).*

A number of respondents also referenced the challenge of promoting a culture of evidence, and several referred to fear of, or resistance to, change as a barrier (*Old mindset thinking from way, way back…..Because we've always done it that way.).* Both staff and management were identified as resistant to change in various RHAs *(Nervousness in senior management in the area of research…they are somewhat afraid of it, we would never do research here; This is the way we have always done things, why do we need to change. This is at all levels, from strategic thinking to clinical applications*; *Convincing staff that things need to be evidence-based* (is a barrier), *they are task based. Most times evidence-based means that staff's job are going to be a little harder but usually better for the client*; *Resistance to change particularly the case with professional staff. If it works well why change it.)*

Some felt that the lack of an effective change management process was a contributing factor. Resistance to change was also sometimes referred to as "parochialism".

- *We only look within Manitoba for evidence – or what to do with a problem – the ability to dream is limited to just gathering more comprehensive utilization stats*
- *You create a Manitoba environment of, you know, we're number 12 and that's OK.*

A few informants voiced specific concern that while the emphasis on evidence-based medicine was accepted, research in the management area was not being used (*I'd like to see research in relation to reasonable time frames. There's got to be research out there*), and that this crisis driven culture prevented *stated* plans and priorities being implemented or "lived" through the organization.

Leadership
A number of factors related to leadership were also identified. Centralized decision-making, or making decisions without appropriate consultation, were identified as key factors hindering EIDM. In some regions there was felt to be lack of support for EIDM from senior levels. Other barriers in this category included *senior managers who were unable to make decisions* and not having *up to date leaders.*

A few respondents noted that unlike managers in many other areas, healthcare managers often "rose through the ranks" of various disciplines, and may not have management training. This has been identified in the literature as presenting as a challenge to promoting EI management within healthcare (Walshe & Rundall, 2001**).**

In two RHAs, lack of succession planning was also identified as a current concern with the potential to effect EIDM. For example, there was concern that there would be a *knowledge crisis* as the result of the number of senior staff nearing retirement at the same time.

Communication/Consultation
Closely related to the issue of leadership is that of communication – as leadership appeared to affect the communication style, and processes within RHAs. An important issue in this category was identified as "lack of clear channels for input" (e.g. access to CEO). However, broader "communication processes" were also identified.

- *getting info filtered down to field staff level; ..they (managers) parcel it out, and by the time it gets down to that person that's actually going to meet that standard or do that thing, its lost somewhere*
- *don't know what peoples' jobs are or where there are resources.*

A contrary view was also identified. In one group it was commented that there was "*too much democracy in health care";* that over-consultation has negative effects both by slowing down the decision-making and implementation process, and by contributing to workload pressures (and each person having *too many plates in the air*) that inhibited effective decision-making.

Structure and Process
A number of factors in the general category of organizational structure and process were also identified. Sometimes these were generally worded (e.g. *Structural barriers to smooth decision-making (waiting for approval*), in other cases specific examples were given:

- Matrix organizational structure, common to many RHAs was often referenced as a barrier, but with one exception (confusion about "who was responsible") the specific factors were not elucidated.
- Lack of research structure, research, planning or decision support positions
- Issues related to RHA boards. This included role of Boards, models chosen for board functioning (e.g. rigidity of Carver model, specific agendas of board members, and even, in one case whether there should be regional boards at all).

- Planning processes. These included the relationship of decision-making and financial models, (e.g. *planning tied to budget),* and *responding to immediate financial pressures rather than things that would make a difference.*
- Program "silos" and variability between programs was also mentioned.

A combination of the factors above, combined with issues related to accountability, and responsibility, were often described as resulting in an environment where EIDM was extremely difficult. Consistent with the academic research, many respondents felt they did not have the authority to make decisions, an interesting finding given that the majority of participants were senior managers. Some of this related to incomplete regionalization – devolution of responsibility for health services planning and management to the regions without the accompanying authority to make the full range of decisions that would enable them to do so effectively. This was described as resulting in a situation where key decisions based on evidence *still need Manitoba Health blessing.* One participant stated a hope that as a result of the project, there would be *recognition that we need some autonomy for decision-making, and resources to facilitate decision-making.* A key issue for many was that regional evidence was taken into account in provincial government decisions.

Workload and focus interact in important ways. It is interesting to note, that the theme of workload (a key theme tied to the previous themes of time and resources) was more than simply the *amount* of work. Rather the issue specifically related to EIDM was that of fracturing of attention by multiple and competing projects and activities.

- *People are expected to do 100 things badly vs. 1 or 2 things well.*
- *I have far too many plates in the air and one of these days they may crash. There are so many things coming down the pipe sometimes.*
- *In doing research in client service planning, it was very clear that you don't want to overwhelm people, and so you should be maximum only working on two to three goals, projects, outcomes, whatever at a time. And comments from staff were, why don't we do that?*

The intrusiveness of modern technology, particularly email and "blackberry" technology was also identified as contributing to this fracturing of attention, leaving "no time to think". Some respondents felt they spent an inordinate amount of time "keeping up" with email, and that the email culture demanded an instant, rather than thoughtful, response. The common practice of having senior managers always connected (via cell phone & blackberry), even during meetings where important decisions were being made, was viewed by many as antithetical to the thoughtful consideration that was needed for EIDM.

Exploration of issues around information technology also identified two major, and distinct themes. The first, a barrier commonly identified in the KT literature, related to the lack of IT resources. This lack was perceived to impair the ability of regions to respond to key sources of evidence (e.g. data on service utilization). Lack of IT support for primary care was perceived to contribute to a vicious circle – lack of data resulted in lack of funding resulting in lack of data.

The other, less anticipated, theme related to IT was discussed in the previous section – the intrusiveness of new technologies. Email was viewed as both intrusive, increasing the pace of work through expectation of immediate response, and contributing to *over communication* – simply

because it was so easy to share information. This was described as resulting in "no time to think", and a negative impact on thoughtful decision-making. This was also demonstrated in the consultations itself; for example in one interview with a senior manager, 2 blackberries and a cell phone were active at the same time.

Lack of knowledge and skill related to research were also identified as barriers. This lack was described in a number of ways. First, many felt that there was a lack of understanding of research, or benefits of research. Consistent with the findings of *The Need to Know* evaluation (Bowen, 2002), there was even cynicism about the usefulness of research, which was sometimes seen as theoretical and not connected to the real work people were doing. Sometimes research-related activities were described as being viewed as "*administrative workload*". Second, there was often a perceived lack of research literacy (*We still don't know what we should be doing in a lot of situations).* As mentioned in the previous section, the lack of a shared understanding of "evidence" and how to use it, was also identified as an issue (*We need to demystify evidence-based approaches; Need to determine which types of data you place the most weight on when making your decisions.)*

The need for skills in evaluation research was identified by some participants (*How do we evaluate it, or if we want to conduct it ourselves, what do we do?)* Lack of computer expertise was also a concern in some consultations.

Data availability is a commonly recognized barrier – However, this barrier too appears more complex on further analysis. Four main components can be identified:

a) *Lack of data* (availability and timeliness). This included factors such as lack of integrated patient charting, or regional ADT and charting systems.
b) *Lack of systems and resources for tracking, organizing and retrieving data.* The need to organize, and have ready access to, data that was available was commonly identified. (*There is a lot of data that is available that people are not aware of – no-one in the organization fathers the data and circulates it*).
c) *Data overload.* This was evidenced by statements such as: *We're drowning in paper,* or *No one knows what we are collecting and why. We are buried in information. We generate a lot of data we don't do anything with. We started collecting it a long time ago, needs have changed but we still collect it.* As observed in other Canadian research (Mitton & Patten, 2004), given the abundance of data, there is a need for skills in weighing the usefulness of any data for a particular decision, as well as resources for analysis and synthesis, skills often identified by informants as lacking. Given the lack of dedicated resources in this area, fragmentation of data and inconsistencies in formatting, etc., may appear overwhelming, particularly to smaller RHAs.
d) *Lack of access to library resources, or capacity to conduct literature searches.* Participants from several regions expressed frustration in lack of library access, and organizational or provincial access to negotiate library access. Conversely, the few regions that had arranged access to the university library system identified this as a facilitator to EIDM.

Addressing Barriers to EIDM

A variety of different strategies were identified for addressing barriers and supporting evidence informed decision-making. Given the varying, and often conflicting, conceptualizations of evidence, it is not surprising that there was also great diversity in suggested solutions for addressing the needs for evidence or improving EIDM, reflecting these different understandings of what evidence informed decision making is or should be. These ideas ranged from a belief that better internet access, or access to the Cochrane Collaboration, were key to a focus on changing organizational culture and decision-making processes. In spite of this variation, however, several excellent examples were provided of organizational actions or characteristics that promoted or supported evidence informed decisions. Some of these included:

- Best Practice research as standing item on leadership agendas
- Using reports from MCHP
- *The Need to Know* Project
- Participation in Rural and Northern Health Care days
- Use of internet, library access, resource material
- Use of CADTH (Canadian Agency for Drugs & Technology) resources, or Cochrane Collaboration
- Hiring/restructuring to create research related positions (data analyst, practice guidelines facilitator, strategic planning education etc)
- The Community Health Assessment process – ongoing community consultation
- Strategic planning processes
- Developing and using practice guidelines
- Establishing research teams or specialized units (e.g. population health)
- Educational activities for staff and board (e.g. education sessions for staff related to research, sending staff to conferences, journal subscriptions)
- Strategies to make CEO accessible to staff across the region (light hierarchy)
- Participation in initiatives such as the Knowledge Exchange Network of Canadian Cancer Society (Manitoba Division) for EIDM in community planning
- Partnership with university faculties
- Participation of senior RHA staff in the CHSRF EXTRA program[6]
- Development of an ethical framework for decision-making
- Task forces or planning teams to make specific decisions
- Leadership that supports research related activities
- Creation of, or changes to, internal intranet
- Centralized coordination of data, information
- Restructuring – separating research/planning/decision support from operations
- Having the Medical Officer of Health at the senior management table
- Investing in e-health applications
- Provincial networking activities.
- Continuous Improvement teams, participation in accreditation, satisfaction surveys
- Providing library resources, internet access
- Senior management briefing notes.

[6] Information on the Executive Training for Research Application (EXTRA) program can be found at http://www.chsrf.ca/extra/index_e.php

It is not clear, given that this consultation phase relied on self-report by senior staff, to what extent the reported activities do actually support EIDM. In fact, some informal communication suggests that there is skepticism, at least in some RHAs, about the effectiveness of the stated initiatives, or even the extent to which the stated initiatives have been implemented.

Similarities and Differences Between RHAs

A key research question included in the *From Evidence to Action* proposal was whether there were differences between RHAs based on size, rural/urban/remote characteristics, organizational structure, leadership characteristics, and resource availability. This Phase 1 report provides some preliminary data to address this question, in particular whether there were substantive differences between the Winnipeg Regional Health Authority and the other, smaller, RHAs in the province. At the time the proposal was developed, it was anticipated that issues facing the WRHA may be distinct from those facing other regions. This capital health region is home to over 60% of the province's residents, and most of the tertiary and specialized services. Its size and complexity place it in a very different category than all the other Manitoba RHAs[7] There was a strong sense, before the project began, that KT challenges facing the WRHA, as well as tools that were useful to them, would be very different than those of the other RHAs.

Contrary to expectation, however, the initial consultation suggests that while there are some important differences between the WRHA and other RHAs, there are in fact more similarities, and that many of the differences relate more to scope and intensity than to substance. The major barriers identified ("politics", time, resources and workload, and factors related to organizational culture, leadership and structure) were remarkably similar among all RHAs, large, small, urban or remote. It is true that the WRHA identified more resources for EIDM than most of the other RHAs (e.g. Research and Evaluation Unit, Project Management Office), however, there was also evidence of equal or greater integration of EIDM in some of the smaller RHAs.

Where there are differences, there are also sometimes corresponding issues between smaller RHAs and the WRHA. For example, geography was cited as a barrier to KT for some RHAs. There is one element of geography that clearly places rural/northern RHAs at a disadvantage – HR recruitment and retention. Another barrier cited, however, was the communication and planning challenges created by distance. While the WRHA does not face challenges as the result of geographic size/distance, WRHA participants identified similar challenges (e.g. silos or poor communication) related to organizational size and complexity. As another example, smaller RHAs often identified the need for staff to wear "many hats", or play many roles, as a barrier. While the WRHA more often had designated staff for "research" or "planning" positions, the number and complexity of tasks may often take away any advantage this may have. In other words, while rural RHAs see the WRHA as better resourced, the WRHA sees itself as having greater demands. In other cases, barriers cited were not unique to the WRHA, but were a greater barrier to this region (e.g. incomplete devolution, or sensitivity to media coverage). One problem that may be unique to the WRHA is the description of an "us" and "them" mentality between sites and WRHA corporate leadership. Another barrier that is significant for some of the northern RHAs, but not even mentioned in some others, are jurisdictional issues related to health services for First Nations communities.

[7] It is for this reason the original *The Need to Know* project focused only on rural/northern RHAs.

There was a tendency by some of the RHAs to see the WRHA as more privileged, and to believe that some Manitoba Health processes were more appropriate for the WRHA than for rural areas. In contrast, there was concern expressed from within the WRHA that Manitoba Health was more likely to "fiddle" with their region than others, and reports that some of the processes and timelines required by Manitoba Health are more difficult for the WRHA because of size and complexity. Both the WRHA and rural consultations identified a sense of closer ties between WRHA and Manitoba Health, although there was varied interpretation on whether this was a positive thing.

Summary

While the barriers identified show consistency with the published KT literature, there were also some important differences. Although there was mention of key themes identified in the KT literature (e.g. addressing the gap between the group that does the research and the group providing patient care; lack of relevant data, need to "translate" information into lay language, need for greater research capacity) these were relatively minor themes in the overall consultation. Rather, the focus was on the organizational culture, structure and processes (including workload) and the politicized context of decision-making. As discussed in more detail (*Discussion* and *Summary and Recommendations*) this finding has led to a change in focus of the overall research question for the project, as well as to proposed activities for the next phases.

DISCUSSION

Although, on the surface, many of the same issues are identified by researchers and decision-makers, this consultative phase identified significant differences between the barriers to evidence-informed decision-making identified by Manitoba RHA decision-makers and the barriers generally highlighted by the academic community. Of note, issues related to workload, the politicized decision-making and organizational factors dominated the discussion of decision makers, whereas data availability, and research related capacity (issues often identified by researchers) were given relatively less weight. Many of the themes raised are, however, consistent with those from the broadly defined "learning organization", organizational culture, and organizational change literature. There is increasing recognition that in terms of evidence-informed decision-making "the challenges are not just clinical" (Ramanujan & Rousseau, 2006): that organizational learning and implementing effective management practices are key (Bradley et al., 2004). Findings are also consistent with other Canadian research within regional health authorities. For example, Mitton & Patton (2004) found that management operations limited managers' ability to apply evidence effectively; and that input from frontline staff was associated with effective EIDM.

Another important difference relates to views of "evidence", with strong consensus among decision-makers that forms of evidence other than research were also important. This is consistent with growing public discussion regarding the value of "evidence-based" thinking in the fields of health policy and management (Smith, 2001; Grypdonck, 2006; Learnmonth & Harding, 2006). This theme is also supported by recent initiatives such as the CHSRF workshop on "*Weighing up the Evidence: Making Evidence-informed guidance accurate, achievable, and acceptable*" (2006). While there appeared little participant awareness of this work and other related work (CHSRF, 2005; Bowen & Zwi, 2005), these initiatives give support to the instincts of RHAs that local experience must also be considered. A major challenge is to improve the ability of RHAs to differentiate between sources of evidence of differing quality. What is needed is to a) develop skills of managers in recognizing weight of various types of evidence, b) provide tools that facilitate appropriate use of various types of evidence, c) develop strategies for combining various sources of evidence, and d) allocate resources to provide supplementary sources of evidence appropriate to the local context (e.g. program evaluation).

The lack of awareness of the potential role of program evaluation as a source of evidence was evident through this consultation. As "evaluation research" can combine research rigour with the need of decision-makers for context sensitive information, more attention should be directed to building organizational – and academic – capacity for program evaluation. It should be noted that evaluation encompasses much more than "health technology assessment", but can be designed to meet the needs of a variety of local programs and services. In addition to providing information on the value of certain programs (summative evaluation), a well-designed evaluation can also provide guidance on service improvement (formative evaluation). Implementation evaluation can also provide effective mechanisms for input from all stakeholders, and through early identification of potential problems during times of change. For all these reasons, program evaluation can meet organizational objectives of accountability, and contribute to efficient use of available resources. Decision-makers should be encouraged to promote more program/service evaluation, particularly for new initiatives, or during times of service restructuring.

A similar need can be observed related to awareness of qualitative research methods. Most health service evaluation at the regional level will require a mix of methods (both qualitative and quantitative). Many participants appeared unaware that qualitative, like quantitative methods, require *systematic evaluation of data*, or that qualitative methods were appropriate for exploring many of the questions facing the health system. In fact, many respondents appeared to equate *qualitative* with *anecdotal*. This confusion is of concern, as while an effective evidence-informed decision making process would avoid use of anecdotal evidence, it would ensure that high-quality research and evaluation using qualitative methods be solicited as a source of evidence.

The issue that EIDM is seen as too time consuming must be addressed, particularly as the major barrier identified is that of workload (and related factors). This barrier must also, however, be appreciated in the context of a (broadly recognized) climate of "crisis management".

A concerning finding was the common attribution of most barriers to EIDM to factors *external* to the RHA. There is a strong and consistent message that if EIDM is to be achieved there must be recognition of the resource needs to do so – whether this relates to creation of individual staff positions within the RHA, centralized research-related resources, or creation of organizational "slack" which allows time for reflection and planning. At the same time, this preliminary work identified notable differences between RHAs in the initiative they have taken to take ownership of issues they can affect – for example by restructuring to create protected positions, arranging for library access, or creating a climate (and effective processes) for appropriate input into decisions. This suggests that RHAs can be encouraged to direct attention to those issues (see Appendix K) that they do have the power to address.

There was consistent recognition of the "crisis management" culture pervasive in health care: it was also often (but not always) viewed as "given" by participants. It would perhaps be useful to attempt to disentangle *workload* (which at the current time individual RHAs may have limited ability to address) and *acceptance* of a crisis management culture. The extent to which regionalization has provided a potential to promote evidence-informed decision-making (e.g. consolidation of resources that facilitates creation of roles with research or decision-support functions that would not be possible in a single facility); or conversely, created additional challenges (e.g. increasing the number of projects that an individual is responsible for) requires further exploration.

While this phase provides important insight into the barriers as perceived by decision-makers, there is less evidence on either the extent to which RHAs are actually practicing "EIDM" or what strategies are most effective. While a number of examples are given of activities that would, in principle, contribute to EIDM, it is not possible, based on the research design, to evaluate the extent either to which these are being used; or the impact they do have when used. A major limitation of the research is that it relies on self-report by senior managers. Because of the strong evidence that EIDM was an "expectation", these self-reports should be interpreted with caution, as there is the possibility of social desirability response bias in the results recorded. In addition, there has been no evaluation as to whether the perceptions of senior managers would be similar to those of staff, even within the same RHA. There was no evidence identified through this first phase of consultation activities that those RHAs where decision-makers rated their use of evidence as excellent did in fact have more evidence informed decision-making than those whose evaluations were more cautious.

In addition, many participants had difficulty applying the concepts of evidence-informed decision-making to their own practice, instead focusing on clinical issues. It has been observed that health care managers have been slow to adopt ideas of evidence-informed decision-making to their own managerial practice, and that evidence-informed management has made little or no progress in health care – even that policymakers and managers have shown a conspicuous lack of interest in the area (Walshe & Rundall, 2001). This may, in part, be because of the limitations of "evidence-based" decision-making referenced earlier. Some participants, however, indicated an interest in more evidence on management practices; specifically as it relates to individual and organizational ability to undertake effective decision-making. The issues raised related to workload and focus suggests that research evidence on issues such as multitasking would be extremely relevant to the discussion of evidence-informed decision-making. Sources of evidence, in other words, should not be limited to evidence related to health services provision. For example, there is good evidence that multitasking (so common in a crisis management culture) takes a toll on productivity and raises risks (Rubinstein et al., 2001), and requests for more evidence in this area are appropriate. The increasing use by healthcare decision makers of technology such as Blackberries, therefore, flies in the face of evidence on the risks of the switching behaviours found in research on multi-tasking.

The issue of "evidence-informed" implementation (as opposed to EIDM) requires further attention. The actual capacity to effectively carry out a decision was identified as a concern: this has been a neglected area of research to date (Bowen & Zwi, 2005).

There is also an emerging literature on evidence related to managing people and performance (Michie & West, 2004). There is growing evidence that the culture of senior management does affect specific aspects of health system performance (Gerowitz et al, 1996; Gerowitz, 1998; Mannion et al, 2003), although there is lack of consensus on the concept of organizational culture itself (Scott et al., 2003). For example, a number of studies, including those focusing on safety culture, have linked employee, including middle management, involvement in decision-making to performance outcomes (Carney, 2006; Michie & West, 2004; Mitton & Patten, 2004).

A systematic review conducted by Greenhalgh et al. (2004) concluded that large, mature, functionally differentiated, specialized organizations, with slack resources to channel into new projects and with decentralized decision making structure are better able to adopt innovations (incorporate evidence). As another example (responding to one participant's request for evidence on "how many projects an individual can effectively handle at a time"), there is also some, although limited, evidence related to decision support models for project assignment in the academic literature (Patanakul et al.; Kuprenas et al, 2000). This too, is the kind of "evidence" needed by decision makers.

SUMMARY AND RECOMMENDATIONS

CHANGES TO PROJECT FOCUS AND OBJECTIVES

Results of the Phase 1 consultations have provided important insights that have resulted, in collaboration with the Advisory Committee of *The Need to Know* team members, in a revised focus for the project. Two different views of EIDM can be identified in the literature. One is focused on using data and research, and developing guidelines for doing so. The second perspective is broader, and focuses on larger cultural and contextual factors. Based on the perspectives of decision-makers identified through Phase 1 activities, this broader view has been adopted and the definition of the research problem has been changed from "*using research evidence to support decision-making*" to "*establishing and using processes that facilitate and support evidence-informed decision-making*". It recognizes that knowledge translation is not a single event, but a *process* (Bowen & Zwi, 2005; Lomas, 1997), and recognizes the varied sources of appropriate evidence, the complexities of applying research in a specific setting.

There are several implications of this change for future project activities:

a) *Tools to be developed.* Rather than developing a tool to assess barriers to EIDM, it was proposed that, based on the results of the consultation, the focus change to developing a "Toolkit" of resources that would support and facilitate evidence-informed RHA decision-making. These tools will be based on the issues identified through the consultation, including the specific suggestions for needed resources. They will be piloted, evaluated, and refined through a coordinated process that includes each RHA.

b) Research objectives, specific research questions. Minor changes were made to the original research objectives and questions in order to reflect this change. (Appendix B).

c) *Scope of relevant literature to be reviewed.* The initial literature review focused on the "knowledge translation" literature, mainly within the health services and policy areas. This has now been expanded to include literature related to organizational culture, learning organizations, and change management.

d) Time lines and work plans. The time lines are also in the process of being adjusted to reflect the revised activities. Over the next several months, significant "behind the scenes" work to develop draft elements of the tool kit (rather than additional site visits) are proposed as the focus of activity. The RHA *Need to Know* team members, at the same time, focus on developing an implementation and evaluation strategy appropriate for their region.

PRELIMINARY RECOMMENDATIONS: RHA CONSIDERATION

As indicated in the previous section, RHAs should be encouraged to "take ownership" of barriers that they do have the power to affect. Use of a tool such as the Internal/External matrix (Appendix K) may be helpful in determining which aspects of any particular issue an RHA does have the responsibility and authority to affect. Other actions include:

- Undertaking activities to determine characteristics of their organizational culture that facilitate and impede EIDM
- Ensuring that research-related, evaluation, and decision support functions are considered and prioritized in any restructuring activities

- Increasing organizational capacity for rigorous program/service evaluation (e.g. by requiring objective evaluation of new activities)
- Reviewing and improving mechanisms for community and staff input
- Establishing mechanisms for coordinating, tracking and retrieving data
- Developing strategies for "maximizing" use of resources available (e.g. Has the potential of *The Need to Know* team member as a "knowledge broker" been fully realized in the region?).

The consultation findings also suggest that RHAs should prioritize the task of creating space (time, resources, "slack") in two areas:

- Exploring creation of positions with responsibility for program evaluation, and knowledge translation/research utilization activities. The time for these activities must be protected time. Where ever possible, these positions should not also carry operational responsibilities as the crises inherent in these positions will compete with research related activities.
- Ensuring that decision-making forums provide "reflective space" and tools to support effective decision making. This may include strategies such as:
    - Adequate uninterrupted time to review and discuss various alternatives when a decision is required
    - Ensuring prior notification to affected parties so that relevant evidence (including consultation) can be assembled and reviewed
    - Banning cell phone/blackberry use in decision-making settings.

PRELIMINARY RECOMMENDATIONS: COORDINATED RHA/MANITOBA HEALTH ACTION

Findings highlight a number of issues identified by RHAs, that affect their ability to practice evidence-informed decision making (including perceived imbalance of responsibility and authority, incomplete devolution, and what are seen as increasing demands from Manitoba Health) that are unlikely to be effectively addressed by an individual RHA working alone.

Strategies should be explored for ensuring that services/programs for which secondary data is not available, particularly preventive and community-based programs, are not penalized by a data-driven (vs. evidence-informed) approach. As there was some perception that there were political obstacles to RHAs reallocating resources from acute care to upstream interventions, a coordinated strategy must include Manitoba Health.

Another option suggested by some participants that should be explored is the potential of centralized expertise to support regions. The small size of the Manitoba RHAs presents additional challenges in allocating resources with the potential to increase organizational capacity. Participants identified the need for help in developing capacity, with some "external organization to assist" sometimes specifically mentioned. Options suggested through the consultation include:

- A Research & Evaluation unit similar to the one at the WRHA established at the provincial level to provide consultation support for all regions
- Centralized data sources, tools

- Development of distance education/training opportunities. Some regions have already developed and are conducting research capacity building training for staff, and there are several existing NTK 101 Modules that could be adapted for distance learning. This option has also been proposed by members of *The Need to Know* team. Some models that could be explored include:
    - Dedicated website with downloadable video sessions
    - Interactive training using telehealth technology
- A coordinated provincial response to library access. Only a few of the regions have library access, and lack of access to library resources continues to be identified as a barrier by most regions.

AREAS FOR JOINT ACADEMIC – HEALTH SYSTEM COLLABORATION

Several broad areas of potential research are suggested through this research. The preliminary literature search undertaken in Phase 1 suggests that there may be limited research in these areas specific to health services research, and even fewer that may be of use to RHA decision-makers. Topics for further exploration may include:

- Characteristics of learning health organizations
- Effective health system leadership
- Organizational culture and evidence-informed decision-making
- Impact of multi-tasking on productivity and decision-making
- Decision support for multi-project management environments
- HR management issues related to evidence-informed organizations.

CONCLUSION

Phase 1 research activities have provided some unique insights on RHA decision maker perspectives in two main areas:

- The nature of evidence and use of evidence in decision-making, and
- Barriers to evidence-informed decision-making in RHAs.

Although there are some similarities, these perspectives differ in important ways from the perspectives of the academic community. If strategies to increase evidence-informed decision-making in these settings are to be effective, they must recognize and reflect the experience and perspectives of decision-makers, as well as the practical barriers they face on a day-to-day basis.

Findings of this research have also resulted in refocusing the *From Evidence to Action* project. Redefining the research problem from "*using research evidence to support decision-making*" to "*establishing and using processes that facilitate and support evidence-informed decision-making*" reflects an important reorientation of the project – a reorientation that reflects the insights of RHA decision-makers and the reality of the challenges facing them. This focus has been reflected in a change in the intended project outputs from an instrument to "assess organizational barriers" to a Toolkit to facilitate use of evidence in RHA decision-making processes. Findings will continue to inform subsequent phases of project development.

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Appendix A: Summary of *Need To Know* Project

Manitoba Centre for Health Policy

CIHR IRSC
Canadian Institutes of Health Research
Instituts de recherche en santé du Canada

The Need To Know Team is a collaboration of the Manitoba Centre for Health Policy (MCHP) – a unit of the Department of Community Health Sciences, University of Manitoba, the ten rural and northern Manitoba regional health authorities (RHAs) and Manitoba Health. It is funded through CIHR's Community Alliances for Health Research program (2001-2006).

There are three main project goals: (i) the creation of new knowledge directly relevant to the rural and northern RHAs; (ii) the development of useful models for health information infrastructure, training and interaction that increase the capacity for collaborative research; and (iii) the dissemination and application of health research that influences decision making and increases the effectiveness of health services and the health of RHA populations.

Two-day meetings, held three times a year, serve as the focus for Team activities. These meetings provide the forum for work on research projects; participation in capacity-building activities (for both RHA Team members and academics); planning for dissemination of the research; and opportunities for both structured and informal networking.

The research projects are selected through consensus, and speak to the questions facing RHA decision makers. Three research projects have been completed to date: a regional indicators atlas showing health status and health care use patterns by RHA, district and over time; a mental illness report documenting the prevalence and health care use patterns of people with mental illness; and a sex differences report analyzing male/female differences in health, health care use and quality of care.

Collaborative evaluation has been an essential guiding component of the project from the very beginning. A structured feedback process enables each stakeholder group to review and provide input into the draft evaluation reports, and evaluation activities are used to model research principles and concepts. The evaluation process and activities, along with key findings, have been documented in two evaluation reports and have contributed to further development of KT theory.

We have succeeded in producing research of high quality and relevance to rural and northern RHAs:

- RHA attention to research findings has helped spur development of primary health care centres and nursing homes, cervical cancer screening programs, regional injury prevention programs and proposed changes to mental health services.
- The regional indicators atlas is being used extensively in strategic planning, and the mental illness report is contributing to regional, provincial and national (through Senator Kirby's commission) mental health service planning. Team reports are in high demand, with seven times the number printed compared to typical MCHP reports (1500 versus 200 copies). Hits to MCHP's website increased by 20,000 during the months when these reports were released.

- The Team's reports are now released at the annual Rural and Northern Health Care Days. The workshop has become increasingly popular - attendance has grown from around 30 in the 1990s to over 160 in the past two years. RHAs encourage diverse groups to attend, including board members, CEOs, VPs of planning, medical health officers, physicians, senior nurses and front line workers.

According to evaluations the RHA Team members as facilitators at roundtable discussions of research in this setting are indistinguishable from MCHP academics in understanding and interpreting research findings for participants. We have found storytelling to be a powerful tool to affect change in decision-making behaviour – looking for the stories or "golden nuggets" in each report facilitates *evidence-based story-telling* which helps identify important issues for RHA planners and decision makers and becomes especially relevant at the annual Health Care Day discussions.

Participant satisfaction with the project has been extremely high, with turnover of Team members limited to those who have left employment with the RHA. Evaluation indicates that this can be attributed to the benefits the Team members experience through participation, the "way we are treated and feel valued" and the opportunities for useful networking. Other essential elements in the Team's success include development of trust, the quality of relationships, adequate time commitment of partners, committed leadership, and genuine partnerships – mirroring previous literature on researcher/user interactions. RHA CEOs and the Ministry of Health also attest to *The Need To Know* Team's role in creating a culture that promotes KT and evidence-based decision making provincially.

The evaluation found that the first three years fostered *individual* capacity building, relationship building and networking. But Team members also identified the need to develop strategies for capacity building at the *organizational* level to ensure sustainability. So in 2005, priority was given to RHA site visits to build regional organizational capacity beyond the Team members. The Team has also recently received CIHR funding to identify and address organizational challenges to KT in the RHAs. However, we continue to find it challenging to convince traditional peer review panels to fund a *process* rather than a *product* - the process of utilizing a strong team model with a proven track record to conduct research in response to future needs.

The Need To Know Team story has captured the imagination of researchers and decision makers throughout Canada. The Team has become nationally recognized, with over 80 oral and poster presentations by various Team members. The evaluator (Sarah Bowen) has made important contributions to the development of KT theory, and receives many cross-country requests for consultation. The Canadian Health Services Research Foundation (CHSRF) considers this initiative a best-practice model for KT, and has funded workshops in Saskatchewan and Nova Scotia to discuss translating the model to other provinces. The director (Pat Martens) receives numerous invitations to discuss the Team model and its research, with groups such as CIHR's scientific directors and governing council, the University of Alberta and CHSRF decision maker workshops. MCHP/*The Need To Know* Team also received the CIHR KT Award (Regional) for 2005.

The Need To Know Team, the successes and challenges we have experienced in knowledge translation and the outcomes of this collaboration—is about what can be achieved when researchers and decision makers truly collaborate in research and its translation into action

Appendix B: Revised Objectives & Research Questions

OBJECTIVES

Original	Revised
1. Develop a collaboratively-created tool designed to assess barriers to evidence-based planning and decision-making in RHAs, and organizational strengths and limitations in research utilization and knowledge translation.	Develop collaboratively-created tools to support evidence informed planning and decision-making in RHAs, based on needs identified in consultation phase. Comment: This "toolbox" may include organizational assessment instrument(s).
2. Apply the co-created tool in all RHAs within the province of Manitoba.	Make available for implementation this tool box in all RHAs within the province of Manitoba.
3. Evaluate the effectiveness of this tool across RHAs with varying characteristics (e.g. size, urban/rural/remote characteristics, organizational structure).	Evaluate the effectiveness of this toolbox in all of the RHAs, making note of any differences in usefulness across RHAs with varying characteristics (e.g. size, urban/rural/remote characteristics, organizational structure)
4. Collaboratively develop and implement priority interventions to address identified barriers.	Collaboratively develop and implement strategies to address identified barriers.
5. Assess the effectiveness of specific strategies to address identified barriers, across RHAs with varying characteristics.	Assess the effectiveness of these strategies to address identified barriers. Comment: many of these strategies may be undertake jointly by RHAs to address some of the external barriers.
6. Produce user-friendly resources for use by other RHAs and health districts across Canada.	Unchanged.

RESEARCH QUESTIONS

Original	Revised
▪ What are the greatest barriers to increased use of research in planning within RHAs as perceived by RHA decision-makers? Are these barriers similar across RHAs? What RHA characteristics are associated with specific barriers? Which barriers can be addressed by RHAs themselves, which require the participation of other stakeholders?	▪ What are the greatest barriers to increased use of research in planning within RHAs as perceived by RHA decision-makers? Are these barriers similar across RHAs? Which barriers can be addressed by RHAs themselves, which require the participation of other stakeholders? ▪ Comment: without digging deeper into "how business is really conducted" in each RHA, the project cannot answer the question *What RHA characteristics are associated with specific barriers?* There may be opportunity to build in strategies to answer this question in the future.
▪ What are the strengths and weaknesses of RHAs in addressing these barriers? Are there differences between RHAs based on size, rural/urban/remote characteristics, organizational structure, leadership characteristics, and resource availability?	▪ Unlikely to be able to address these without "digging deeper".
▪ Does a collaborative approach to developing an assessment tool result in inclusion of unique elements or innovative approaches not included in other identified assessment tools? Does it promote acceptance of assessment results, and willingness to engage in strategies to address identified barriers?	▪ Does a collaborative approach to developing tools to support evidence informed planning and decision-making result in inclusion of unique elements or innovative approaches not included in resources developed to date? Does a collaborative process promote use of the tools, and willingness to engage in strategies to address identified barriers?
▪ Is it feasible to develop one tool that is appropriate for RHAs with diverse characteristics or are separate tools needed?	▪ Is it feasible to develop a toolbox that is appropriate for RHAs with diverse characteristics or are separate ones needed?

Appendix C: Glossary of Commonly Used Terms

Evidence - Information that comes closest to the facts of a matter. The findings of high-quality, methodologically appropriate research are the most accurate evidence. Because research is often incomplete and sometimes contradictory or unavailable, other kinds of information are necessary supplements to or stand-ins for research. The evidence base for a decision is the multiple forms of evidence combined to balance rigour with expedience—while privileging the former over the latter.
(CHSRF – www.chsrf.ca/other_documents/evidence_e.php printed on Oct. 21, 2005)

Evidence-Based Decision Making – The systematic application of the best available evidence to the evaluation of options and to decision-making in clinical, management and policy settings.
(Prime Minister's National Forum on Health in 1997 as reported in Health Services and Evidence-Based Decision-Making, June 2000, CHSRF)

Evidence-Informed Decision Making – The concept of "***evidence-based***" comes from clinical medicine, and implies that the best answer lies in research findings. There are a number of concerns that this is not an appropriate approach for planning and decision making, with the result that an ***evidence-informed*** approach has been proposed as an alternative. An evidence-informed approach recognizes that

- research may be lacking for many questions facing decision-makers,
- research findings may not be available in a timely way,
- there is often a need for ***context-sensitive*** information, and the results from health services research may not always be applicable in other settings.

Evidence-informed approaches also recognize that there are other factors affecting decision-making – these include values, resource availability, political judgment and professional experience.
(See also CHSRF "*What Counts? Interpreting evidence-based decision making for management & policy",* March 2004)

Anecdotal Information/Evidence
This refers to:

- information that is not based on facts or careful study
- reports or observations of usually unscientific observers
- casual observations or indications rather than rigorous or scientific analysis
- information passed along by word-of-mouth but not documented scientifically
  Anecdotal evidence is not considered a good source of evidence for decision-making. It is sometimes confused with "qualitative research" which can be an excellent source of evidence (see below).

Quantitative Research – The establishment of facts, relationships and causal mechanisms through attributes which exist in a range of magnitudes and can therefore be measured. Measurement is the determination of extent, dimension, or capacity in relation to a standard unit.

Qualitative Research – The systematic examination, analysis and interpretation of observations of text, talk or interactions for the purpose of discovering underlying meanings and patterns. The goals of qualitative researchers involve describing, explaining, discovering or understanding phenomena in naturally occurring settings. Qualitative research can provide an in-depth understanding of human behavior, and the reasons that govern that behavior, and can therefore potentially illuminate ways to improve health care.

Appendix D: Summary of Activities

Region	# of Interviews	# of Focus Groups	# of Focus Group Participants	Total # of Staff Consulted
1	7	2	6	13
2	3	1	9	12
3	0	2	21	21
4	9	2	14	23
5	3	1	14	17
6	8	1	19	27
7	2	2	19	21
8	7	3	18	25
9	7	1	18	25
10	7	0	0	7
11	1	2	13	14
Total	54	17	151	205

Note: *Regional Health Authorities have been listed by number, rather than name, to protect organizational confidentiality.*

Appendix E: Interview & Focus Group Guides

Interview Guide: Staff

Conceptualization of EIDM

1. The term *evidence-informed decision-making* is used a lot these days. What does this term mean to you?

Assessment of current EIDM Practice

2. In your opinion, to what extent is EIDM demonstrated in the day-to-day operations of your RHA?
   a. In what ways does your RHA practice evidence-informed decision-making?
   b. If the board/senior management was faced with a decision, (e.g. whether or not to institute a certain program or service) what information would be used to assist in decision-making?
3. What actions has your RHA taken to date to support evidence-informed planning throughout the organization?
   a. How does the organizational structure in your RHA facilitate/support evidence-informed decision making? Are there any ways in which the structure hinders EIDM?
   b. What supports are in place to promote EIDM?, (Probes: access to reports, library resources, internet access, training opportunities, environment that encourages discussion/debate? etc.?)

Knowledge of NTK

4. Are you aware of the NTK Team and the reports they have produced? Probe as necessary:

Regional KT Accomplishments

5. Can you share some examples of where/ when research evidence, such as research reports have been used in decision-making within your RHA?

Barriers to EIDM

6. What are the barriers to effective decision-making that you have experienced, either in your current role, or in previous positions?

Development of Assessment Instrument

7. If an instrument, tool or strategy was developed to measure the extent to which RHAs use research in planning and decision-making, what do you think should be included?
   a. What would be some indicators of successful evidence-based decision making in RHAs?

Development of Evaluation Strategy

8. How should a project such as this, which aims to develop strategies for identifying and addressing barriers to evidence-based decision-making, be evaluated?
   a. Who should be involved?
   b. What information are you hoping will come out of the evaluation?
   c. What will/would you do with the information in this RHA?
   d. What methods would be most appropriate?, e.g. how would you go about answering the question (insert from 6.b.)?

Conclusion

9. Is there anything else about EIDM in your RHA that you would like to share with me?

Interview Guide: Board Members

Conceptualization of EIDM

1. The term *evidence-informed decision-making* is used a lot these days. What does this term mean to you?

Assessment of current EIDM Practice

2. In your opinion, to what extent is EIDM demonstrated by or within your RHA?
   a. In what ways does your RHA practice evidence-informed decision-making?
   b. If the Board was faced with a decision, (e.g. whether or not to institute a certain program or service) what information would be used to assist in decision-making?

Knowledge of MCHP/NTK

3. Are you aware of MCHP & the NTK Team and the reports they have produced?
   a. What is your understanding of the purpose of the MCHP & the NTK project?
   b. Have you personally been involved in any MCHP/NTK-related activities?

Regional KT Accomplishments

4. Can you share some examples of where/ when research evidence, such as research reports, have been used in decision-making by your Board?

Barriers to EBDM

5. That are the barriers to effective decision-making that you have experienced?

Development of Assessment Instrument

6. If an instrument, tool or strategy was developed to measure the extent to which RHAs use research in planning and decision-making, what do you think should be included?
   a. What would be some indicators of successful evidence-based decision making in RHAs?

Conclusion

7. Is there anything else about EIDM in your RHA that you would like to share with me?

Focus Group Guide

Conceptualization of EIDM

1. The term *evidence-informed decision-making* is used a lot these days. What does this term mean to you?

Assessment of current EIDM Practice

2. In your opinion, to what extent is EIDM demonstrated in the day-to-day operations of your RHA?
   a. In what ways does your RHA practice evidence-informed decision-making?
   b. If the board/senior management was faced with a decision, (e.g. whether or not to institute a certain program or service) what information would be used to assist in decision-making?
3. What actions has your RHA taken to date to support evidence-based planning throughout the organization?
   a. How does the organizational structure in your RHA facilitate/support evidence-based decision making? Are there any ways in which the structure hinders EIDM?
   b. What supports are in place to promote EIDM?, (Probes, first note what they say, then probe ie access to reports, library resources, internet access, training opportunities, environment that encourages discussion/debate? etc.?)

Regional KT Accomplishments

4. Can you share some examples of where/ when research evidence, such as research reports have been used in decision-making within your RHA?

Barriers to EIDM

5. What are the barriers to effective decision-making that you have experienced, either in your current role, or in previous positions?

Input on implementation process

6. When the assessment instrument is complete, how would you recommend it be implemented in this RHA?

Input into project evaluation

7. How should a project such as this, which aims to develop strategies for identifying and addressing barriers to evidence-based decision-making, be evaluated?
   a. Who should be involved?
   b. What information are you hoping will come out of the evaluation?
   c. What will be done with the information?
   d. What methods would be most appropriate?

Appendix F: Consent Information

RESEARCH PARTICIPANT INFORMATION AND CONSENT FORM
FOCUS GROUPS

Title of Study*: From Evidence to Action: Addressing Challenges to Knowledge Translation in Regional Health Authorities*

Principal Investigators: Dr. Patricia Martens
Manitoba Centre for Health Policy
408-727 McDermot Avenue
Winnipeg, MB R3E 3P5 Telephone: (204) 789-3791

Dr. Sarah Bowen
Winnipeg Regional Health Authority
1800-155 Carlton St.
Winnipeg, MB Telephone: (204) 926-7127

Study Coordinator: Tannis Erickson Telephone: (204)642-4522

You are being asked to participate in a research project that is exploring barriers to evidence-based planning and decision-making faced by regional health authorities in Manitoba. This project will involve The Manitoba Centre for Health Policy (MCHP) at the University of Manitoba, *The Need to Know* Team members, and all RHAs in the province of Manitoba. Please take your time to review this consent form and discuss any questions you may have with the investigator(s). You may discuss your decision about participating in this study with your colleagues or supervisor before you make your decision. Please ask one of the investigators listed above to explain any information that you do not clearly understand.

Purpose and Objectives of Study
This research will help identify the barriers to evidence-based planning and decision-making experienced by decision-makers within RHAs, and collaboratively develop strategies to address these barriers. It will involve development of an assessment instrument designed to identify barriers and organizational strengths and limitations. Each RHA will participate in identifying priority strategies to address these barriers, and select some of these joint strategies for implementation. It is anticipated that the results of this study will provide information on barriers and strategies that will be useful to other RHAs and health districts across Canada.

A working group composed of *The Need to Know Team* representatives from each RHA and research staff from the MCHP will guide the project and ensure appropriate consultation and communication within RHA. The CEO from your RHA has approved the participation of your RHA in this study. You may participate in the study on work time.

From Evidence to Action: Specific research objectives
The objectives of this research study are to:

1. Develop a collaboratively-created tool designed to assess barriers to evidence-based planning and decision-making research in RHAs, and organizational strengths and limitations in research utilization and knowledge translation;
2. Apply the co-created tool in all RHAs within the province of Manitoba;
3. Evaluate the effectiveness of this tool across RHAs with varying characteristics;
4. Collaboratively develop and implement priority interventions to address identified barriers;
5. Assess the effectiveness of strategies to address identified barriers, across RHAs with varying characteristics (e.g. size, urban/rural/remote); and
6. Produce user-friendly resources for use by other RHAs and health districts across Canada.

According to the ethical guidelines used in Canada, program evaluation studies are often considered exempt from formal ethical consent. Although this is a program development/evaluation activity, ethical approval is being sought for three reasons:

a) All participants have the right to be informed that the process will be documented, and that they have the right to decline to participate in certain activities;
b) Exploration of perspectives on organizational strengths and weaknesses requires careful attention to issues of consent and confidentiality at both the individual and the organizational level; and
c) There is a possibility that results of the evaluations may be published in the future.

It is expected that a total of approximately 200-300 persons, from all 11 Manitoba RHAs will participate in this study over a three year period.

Study procedures
You have been chosen to participate in these activities because of your position related to planning and decision-making within your RHA. You are being asked to participate in a focus group with other members of your RHA.

If you take part in this research project, you will be part of the following activity:
You are being invited to participate in a focus group conducted by MCHP research staff. Participation in this activity is voluntary, and you may decline to participate. The focus group will take approximately 1½ hours. It will consist of 5-10 persons. Questions to be discussed in this meeting will focus on evidence-based decision-making within RHAs, and strategies for evaluating the effectiveness of the From Evidence to Action Project. You may be contacted for follow-up interviews for clarification or verification. Participation in these activities is voluntary, and you may decline to participate in any or all of them.
If you agree to participate in this study, you may withdraw your participation at any time, or decline to answer any question.

Risks and Discomforts
No research study is without risks. You may feel some discomfort or anxiety in being asked to divulge information on these topics in front of other participants in the focus group. However, you may decline to respond to any question.

Benefits
There may or may not be direct benefit to you from participating in this study. We hope that the process will have a benefit to the RHA by helping identify barriers to effective decision-making, and providing the opportunity to explore, with other RHAs, potential strategies for addressing these barriers.
We also anticipate that the information learned from this study will have long term benefit to Regional Health Authorities and health districts in other provinces, through development of assessment tool(s), and evaluation of potential strategies for addressing barriers to evidence-based planning and decision-making.

Costs
Any costs incurred as a result of participation will be covered by the Manitoba Centre for Health Policy.

Payment for participation
You will receive no payment or reimbursement for taking part in this study.

Confidentiality
The fact that you were invited to participate in a focus group will not be shared with your supervisor, or any other person. Because a limited number of staff eligible to participate will actually receive invitations to the focus group, if you decline to participate, only the study coordinator will know that you have declined.

No personal information will be gathered in this study. All information gathered will be kept confidential. Only the investigators and study coordinator will have access to audiotapes and notes of the session, and audiotapes will be erased following completion of the study. All notes and tapes will be stored in a locked cabinet in the investigator's private office.

However, should you choose to participate, confidentiality cannot be guaranteed despite efforts to keep your personal information confidential. Although focus group participants will be reminded of the importance of maintaining confidentiality of comments made within the group, the investigator cannot ensure the confidentiality of comments made in this forum.

Information gathered in this study may be published or presented in public forums, however your name and other identifying information will not be used or revealed. Information related to findings about your RHA will be shared only within the RHA. A summary of results from all RHAs will be provided as a public report: this report will remove any information that could identify an individual RHA.

The University of Manitoba Health Research Ethics Board may review records related to the study for quality assurance purposes.

Voluntary Participation/Withdrawal from the Study
Your decision to take part in this study is voluntary. You may refuse to participate in the focus group, decline to answer any question, or withdraw from the activity at any time. Your decision to participate, or decline to participate, will not be shared with any other person, including other staff /management of your RHA.

Questions

You are free to ask any questions that you may have about your rights as a research participant. If any questions come up during or after the study, contact one of the principal investigators: Dr. Patricia Martens at (204) 789-3791, or Dr. Sarah Bowen at (204) 926-7127. If calling from outside Winnipeg, you may call toll free through the University of Manitoba: 1-800-432-1960, then 3791.

For questions about your rights as a research participant, you may contact The University of Manitoba, Bannatyne Campus Research Ethics Board Office at (204) 789-3389.

Do not sign this consent form unless you have had a chance to ask questions and have received satisfactory answers to all of your questions.

STATEMENT OF CONSENT

Title of Study: **From Evidence to Action: Addressing Challenges to Knowledge Translation in Regional Health Authorities**

I have read this consent form. I have had the opportunity to discuss this research study with a member of the research team. I have had my questions answered by them in language I understand. The risks and benefits have been explained to me. I understand that I will be given a copy of this consent form after signing it. I understand that my participation in this study is voluntary and that I may choose to withdraw at any time. I freely agree to participate in this research study. I believe that I have not been unduly influenced by any study team member to participate in the research study by any statements or implied statements. My relationship with the study team members has not affected my decision to participate.

I understand that information regarding my personal identity will be kept confidential in any presentation or publication. I authorize the inspection of any of my records that relate to this study by The University of Manitoba Research Ethics Board for quality assurance purposes.

By signing this consent form, I have not waived any of the legal rights that I have as a participant in a research study.

– –

I agree to participate in a focus group with the Study Coordinator on the topic of barriers to evidence-based planning and decision-making faced by regional health authorities to take place on__________________at________________.

I agree that this focus group may be audio-taped. Audiotapes will be erased once the study is completed.

______ Yes ____ No

Participant signature_____________________________ Date ______________________

Participant printed name: ____

– –

I, the undersigned, have fully explained the relevant details of this research study to the participant named above and believe that the participant has understood and has knowingly given their consent.

Printed Name: ___________________________________ Date ______________________

Signature: _________________________________

Role in the study: _________________________

Appendix G: Update Memos

Update Memo - August 26, 2005

Dear RHA CEOs and members of *The Need To Know* Team,

Hope all of you had a pleasant summer, and were able to squeeze in some leisure time despite your hectic schedules! I am writing to provide an update on the three-year, CIHR-funded *From Evidence to Action* project. As you will recall from our presentation to RHAM in April, *From Evidence to Action* is a collaborative research project that includes MCHP and all of the RHAs in Manitoba. Its purpose is to identify and address, from the perspective of RHAs themselves, barriers to evidence-based decision making within RHAs.

The *From Evidence to Action* activities in the regions will be starting this September. We are delighted to announce that **Tannis Erickson** has agreed to assume the position of research coordinator for the project (in a secondment arrangement with Interlake RHA). As many of you know, Tannis has been a member of *The Need To Know* Team since its inception in 2001, so she is very aware of regional perspectives, and researcher/user interactions. Tannis will be contacting the CEO of each RHA in the very near future to begin the consultation phase of the project. This phase (which will include presentations, discussion and interviews with decision-makers) is intended to ensure that effective strategies are developed for the consultation, and that input from the regions is included from the very first stage of research.

Please join us in welcoming Tannis to her new role with the project. If you have any questions please don't hesitate to be in touch with us, or with Tannis Erickson (phone 204-642-4522).

Sincerely,
Pat and Sarah
Co-Principal Investigators of *From Evidence to Action*

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Update Memo – December 2005

To: RHA CEOs

From: Tannis Erickson, Research Coordinator

Date: December, 2005

Re: December 2005 Project Update

The *From Evidence to Action* (FEA) project will be providing regular updates to participants as the project progresses. Attached you will find our first update memo highlighting our activities and challenges to date.

The FEA Working Group (*The Need to Know* Team members) had an opportunity to further discuss this project at the October Need to Know Team meeting, and provided many suggestions that have guided the planning to date.

We have completed initial presentations in six of the RHAs and in three of them have begun consultations in the form of focus groups and interviews. The remainder of the RHAs will be conducting their presentations and consultations over the next few months. Two RHAs have not yet scheduled these initial consultation activities.

The Team would like to express thanks to the RHA executive, staff and board members who were able to attend our presentations and participate in the consultations so far. The insights we have obtained into barriers to evidence-based planning will continue to guide the development of the project, including the assessment strategy/tools.

As a result of our initial consultations and Working Group discussions, we have identified an important challenge relating to the actual FEA research itself – RHA staff having time available to participate in the FEA project. This barrier is of particular concern to *The Need to Know* reps. Many Team members indicated that, although there was good support in principle for the project within their RHA, this was not always translated into ensuring that there was protected time to support and facilitate the research activities (e.g. assist in planning presentations and consultations, and assisting in developing and implementing the assessment tool/strategy). The Team will be investigating ways to address this barrier to ensure that the required consultations and participation are achieved, and would also request your assistance and suggestions.

I look forward to continuing to work with you on this exciting project. If you have any comments or questions at any time, please contact me by phone at (204)642-4522 or by email at terickson@irha.mb.ca.

Update Memo – December 2005

This is the first in a series of regular updates on the *From Evidence to Action* (FEA) project. The purpose of these updates it to keep all participants informed about the progress and activities of the project.

From Evidence to Action is a research project of the Manitoba Centre for Health Policy (MCHP). It has been developed in response to a key challenge identified by RHA *Need to Know* Team members – the need to better identify and address *organizational barriers* that hinder evidence-based planning and decision making at the RHA level. The purpose of the three-year *From Evidence to Action* project is to identify, from the perspective of the RHA decision makers themselves, organizational factors that hinder or facilitate evidence-based decision making in RHAs and to collaboratively develop strategies to address these barriers.

Consultation activities completed to date include:

- Telephone interviews with NTK reps and CEOs of most regions (25 in total),
- Planning with the FEA Advisory Group at the NTK meeting in October
- Presentations to management teams in 5 RHAs
- Focus groups and interviews in 3 RHAs

We would like to express our thanks for the support given to the project by RHA CEOs, and to RHA staff and Board who attended our presentations and have provided valuable input through the consultations into project development. There have already been some important findings. The insights from these consultations will continue to provide direction to development of the assessment strategy.

As a result of our initial consultations we have identified our first major barrier in conducting this project - finding the time available that is required for participation in the FEA project. This barrier is applicable to *The Need to Know* Team members as well as to others in the organization. Many of the Team members indicated that, although there was good support in principle for the project within their RHA, this was not always translated into ensuring that there was protected time to support and facilitate the research activities (e.g. assist in planning presentations, consultations, and assisting in developing and implementing the assessment tool/strategy).The Team will be investigating ways to address this barrier to ensure that the required consultations and participation are achieved.

Please contact me if you have any comments or questions. I can be reached by phone at (204)642-4522 or by email at terickson@irha.mb.ca

Appendix H: Project Description for RHA Communication

Manitoba RHAs to Collaborate in Research Project with the Manitoba Centre for Health Policy (MCHP)

From Evidence to Action is a CIHR funded research project of the MCHP that grew out of a need identified by RHA Members of the nationally recognized *The Need to Know* project. *The Need to Know* is a research partnership (2001-2006) between MCHP, Manitoba Health and the 10 rural and northern RHAs.

MCHP is a research unit of the Department of Community Health Sciences in the Faculty of Medicine at the University of Manitoba. MCHP's mission is to provide accurate and timely information to health care decision-makers, analysts and providers, so they in turn can offer services which are effective and efficient in improving the health of Manitobans. *The Need To Know* Team has three main project goals: (i) the creation of new knowledge directly relevant to the rural and northern RHAs; (ii) the development of useful models for increasing the capacity for collaborative research; and (iii) the dissemination and application of health research that influences decision making.

The purpose of the three-year *From Evidence to Action* project is to identify, from the perspective of the RHA decision makers themselves, organizational factors that hinder evidence-informed planning and decision making in RHAs and to collaboratively develop strategies to address these barriers.

Some initial barriers that have been identified through previous consultations include:

(i) time constraints / work demands that leave insufficient time for facilitating capacity building at the organizational level,
(ii) crises that push research off the agenda,
(iii) difficulties establishing effective communication channels within the RHA, and
(iv) insufficient awareness of the importance of research and the skills required to use it effectively.

The project will work with RHAs to further explore these barriers, as well as to develop strategies effective in addressing them.

The project will also develop and evaluate strategies to assess barriers to the use of research in RHA planning and to produce user-friendly resources for use by all RHAs. This project provides an exciting opportunity for the experiences and perspectives of RHA executives, Board, and staff to be incorporated into our understanding of "knowledge translation" and what works in facilitating evidence – informed planning.

The initial consultation phase has already begun with presentations to groups of RHA managers. If you have any questions about this project please contact _____(Insert Name of NTK Rep) or Research Coordinator.

Appendix I: Internal/External Barriers Matrix

EXTERNAL BARRIERS TO EIDM (NOT MODIFIABLE BY RHA ALONE)	**INTERNAL BARRIERS TO EIDM (CAN BE MODIFIED BY INDIVIDUAL RHA)**
Timeliness of reports/data received	Lack of effective strategies/mechanisms for sharing, storing and using data
Lack of relevant or quality information	Failure to undertake organizational initiatives to increase awareness of benefits of research/evidence and research utilization skills
Human/Fiscal Resources: – Low awareness/training of research benefits in health system management – Recruitment challenges skilled personnel in rural areas – Financial resources allocated to the region – Inequitable distribution of resources by province	Lack of support for participation in conferences, workshops, use of available data Internal resource allocation: – Staffing & use of staff time (research, data management, analysis) – Resources to support research use (e.g. library access)
Limited internet access (rural areas, problems with provincial firewalls)	Limited support given to IT /data management supports Internal action to address firewalls
Decision making processes: – Political "issues" – e.g. authority to make change (*"politics trumps evidence")* – Manitoba Health may not respond to evidence in plans – Lack of consultation with regions – Lack of understanding of rural health issues	Lack of attention given to EIDM by RHA leadership Lack of support for protected "research", evidence-gathering time Absence of appropriate structure for supporting EIDM & information dissemination
Structures and historical factors affecting physician involvement, buy in	Failure to implement effective strategies at the regional level to promote physician participation
	Acceptance of inevitability of "crisis management" culture
	Framing issue as "lack of time" vs. "organizational/personal priorities" (*There is always time for the important things*)
	Organizational structure that: a) inhibits information flow b) centralizes decision making in few people
	Competing & conflicting demands
	Challenges encountered in any organizational change (*how we've always done it vs. what we need to do to make it work)* Fear of change