



Michael Smith Foundation for
Health Research

**ENVIRONMENTAL AND OCCUPATIONAL
HEALTH RESEARCH NETWORK
FORMATIVE REVIEW REPORT**

December 2004

Prepared by: **Lisa May**



TABLE OF CONTENTS

| | |
|--|-----------|
| INTRODUCTION | 4 |
| OVERVIEW OF MSFHR NETWORKING PROGRAM | 4 |
| FEEDBACK ON THE ENVIRONMENTAL AND OCCUPATIONAL NETWORK PROPOSAL | 6 |
| Primary Reviewer: Dr. Jean-Pierre Brun | 6 |
| Secondary Reviewer: Dr. Stephen Bornstein | 6 |
| Open Discussion | 7 |
| COMMON NETWORKING THEMES | 8 |
| 1. Consultation process added value | 8 |
| 2. Network development | 8 |
| 3. Clarify activities and priorities | 8 |
| 4. Clarify leverage | 9 |
| 5. Cross network collaboration | 9 |
| 6. Organizational structure | 9 |
| 7. Budgeting issues | 10 |
| 8. Define membership | 10 |
| 9. Expand inclusiveness | 10 |
| 10. Seek strategic opportunities | 11 |
| SHARED INFRASTRUCTURE | 11 |
| Issues to consider | 12 |
| Administration | 12 |
| Additional suggestions | 12 |
| Business planning | 13 |
| Performance indicators | 13 |
| Research inventory | 14 |
| Meetings | 15 |
| Website | 15 |
| Tracking proposal calls | 15 |
| Videoconferencing and web casting | 16 |
| Training | 16 |
| Research infrastructure | 16 |
| SUMMARY OF PANEL RECOMMENDATIONS | 17 |

| | |
|---|-----------|
| 1. Review panel endorses MSFHR Networking Program | 17 |
| 2. Consider networking structure | 17 |
| 3. Combine flexibility with accountability | 17 |
| 4. Create advisory role for networking leadership | 17 |
| 5. Develop clear, relevant performance indicators | 17 |
| 6. Tailor support to network needs | 18 |
| 7. Include diverse populations | 18 |
| 8. Encourage provincial, national and international collaboration..... | 18 |
| 9. Develop a strategy for creating new networks | 18 |
| 10. Reduce budget allocations for staffing | 19 |
| NEXT STEPS | 19 |
| APPENDIX | 21 |
| Primary Reviewer Report | 21 |
| Additional Reviewer Feedback | 23 |
| List of Participants – November 25, 2004 | 26 |
| List of Participants – November 26, 2004 | 28 |

INTRODUCTION

The Michael Smith Foundation for Health Research (MSFHR) convened a formative review panel on November 25-26, 2004 to provide feedback on proposals submitted by eight health of population networks. The panel included external members of the health research community with experience developing networks and other research programs. Interim co-leaders from each network presented their networking proposals. Primary and secondary reviewers provided comments, followed by an open discussion session. In addition, reviewers and participants discussed opportunities for shared infrastructure.

The purpose of the formative review process was to:

- Understand the networking program proposal for each area.
- Provide constructive feedback and recommendations on the proposals to position the networks for success.
- Explore opportunities for collaboration and shared infrastructure among the networks.
- Propose networking program suggestions to MSFHR.

Dr. Roy Cameron, Professor of Applied Health Sciences at the University of Waterloo, and Executive Director of the Canadian Cancer Society/National Cancer Institute Centre for Behavioural Research and Program Evaluation, chaired the two-day formative review process. Dr. Cameron introduced the review as an opportunity for people from across Canada to confer with BC networking co-leaders on how to accomplish their objectives.

This report on the formative review process for the Environmental and Occupational Health Research Network contains:

- An outline of the MSFHR networking program.
- Reviewer and participant feedback on the environmental and occupational network proposal.
- Common themes that emerged during the review.
- Shared infrastructure opportunities.
- Panel recommendations for the MSFHR networking program.
- A review of the environmental and occupational network proposal by the primary and secondary reviewers (beginning in the appendix on page 21).

OVERVIEW OF MSFHR NETWORKING PROGRAM

MSFHR was established in 2001, based on a consultation process led by the Coalition for Health Research in BC, which identified infrastructure as a key building block for the province. As a result, 25 percent of MSFHR's \$110 million funding has been allocated to three components of the Infrastructure Program: research unit awards, institutional awards and networking awards.

MSFHR supports networking to enhance BC's ability to address health issues, and align with national and international research funding priorities to improve provincial competitiveness for external funding. The networking program is intended to enhance effectiveness by:

- Achieving critical mass.
- Bringing creative minds together across BC.
- Supporting communication, collaboration and planning with shared infrastructure.
- Creating a platform for knowledge transfer across organizational and functional boundaries.
- Increasing the potential for impact on policy and service delivery.
- Mobilizing knowledge and efficiently distributing scarce resources across boundaries.

After analyzing networking options, the MSFHR Board decided to initially focus on the following eight health of populations:

- Aboriginal people's health
- Aging health
- Child and youth health
- Disabilities health
- Environmental and occupational health
- Mental health and addictions
- Rural and remote health
- Women's health

Developing these networks will be an iterative process, based, in part, on learning from programs outside BC, and on the networks learning from each other, through their proposal presentations and ongoing dialogue. MSFHR noted that networks face a number of challenges. Networks change decision making dynamics, and can create conflicting loyalties and commitments. Different networks have different needs, so one approach does not fit all. Health networks have proliferated, so new networks must demonstrate the value of belonging. And networks require time and resources to achieve their mandate.

Funding criteria for the networks include:

- Demonstrating inclusiveness.
- Delivering a plan to MSFHR according to program timelines.
- Increasing researcher productivity, collaboration and competitiveness.
- Building capacity in areas where it is currently lacking.
- Enhancing the student training environment.
- Maximizing resources to lever opportunities.
- Enhancing the potential for knowledge transfer and impacting health policy.

Following the formative review, MSFHR will hold conference calls with the interim network co-leaders to discuss the reviewers' recommendations, and will begin allocating network funding in January 2005.

FEEDBACK ON THE ENVIRONMENTAL AND OCCUPATIONAL NETWORK PROPOSAL

Primary Reviewer: Dr. Jean-Pierre Brun

Professor, Management Department, Faculty of Business Administration, and Director, Chair and MBA program in Occupational Health and Safety Management, Université Laval, Québec City; Director, Québec Health and Safety Research Network; Consultant/Speaker, OHS Management and Occupational Mental Health

After the presentation on the Environmental and Occupational Health Research Network proposal, primary reviewer Dr. Jean-Pierre Brun provided the following comments:

- This network addresses two big issues, environmental and occupational risks. Québec has two separate networks for these areas. Over the longer term, MSFHR may also want to consider two separate networks.
- A lot of networks refer to chapters or nodes. A different model is used in Québec: research axes with committees and people who are responsible for these axes.
- Dr. Brun recommended the network put research first on its agenda. Research should be the first point in the vision, with more emphasis on axes and teams. He suggested more money be directed to finance research opportunities, not projects, and that the network identify research leaders and determine if they want to get involved.
- The organizational structure should be lighter, with less money allocated to personnel and more to tactical research, such as a meta-research team with a network of people.
- Québec draws on existing teams in universities. If teams already exist in BC universities, the network should draw on this resource to avoid duplicating their structure.
- Outcomes need to be clarified by MSFHR . Does return on investment include leveraging funding, research proposals and publications? The network should also identify research opportunities (with Health Canada and private foundations, for example), and spread this information to members.
- The differing status of members needs to be more clearly defined. The Québec Health and Safety Research Network has regular and associate members, with status for students and socioeconomic partners.
- The proposed student fellowships are a good idea, but the network will need to be careful not to fund students who are refused in other competitions, a problem that was encountered in Québec.

Secondary Reviewer: Dr. Stephen Bornstein

Professor, Political Science, and Professor, Medicine, Memorial University, Newfoundland; Director, Newfoundland and Labrador Centre for Applied Health Research; Co-Director, SafetyNet, a CIHR Research Program in Workplace Health and Safety

Dr. Stephen Bornstein had two observations for the environmental and occupational network co-leaders:

- This network faces a dual purpose, in addition to the diversity of environmental and occupational areas it covers. Occupational and environmental health concerns overlap in the areas of hygiene and toxicology, but aren't really the same. Most other aspects of occupational health do not link up with environmental concerns, and some are fundamentally contradictory. For example, negative results tend to occur when provincial governments put labour and environment in the same portfolio. Protecting workers and neighbours following a manufacturing plant spill creates differing needs. The network will have to pay careful attention to taking care of both sides, particularly where there isn't any overlap, and may want to have co-directors, similar to the approach used by the child and youth network.
- The co-leaders were complimented on the proposed multi-network, annual scientific conference focused on cross cutting research themes. This conference could lead to greater exchange of information between researchers and users.

Open Discussion

Following the reviewers' feedback, a number of additional comments were made during the open discussion:

- Spending money on seed grants was recommended as an allowable expense under the MSFHR networking program.
- A needs analysis was suggested to identify strengths and gaps, and then targeting these areas in both environmental and occupational health.
- MSFHR recognized the need for and value of an environmental scan of research currently underway in BC to identify strengths and gaps, and to look outside the province for role models and opportunities for interaction. Staffing is a key consideration, as performing an environmental scan requires expertise. There is a difference between being a funding agency and a catalytic change agent, and MSFHR has played the latter role to date. Networking is an evolutionary process that is just getting started in BC, and spinning off another network may be justified at some point. MSFHR hopes to expand the networking program to include additional networks in its second mandate.
- It will be interesting to compare MSFHR and Québec networking over time to see how the program evolves in BC and what return on investment is produced.
- One reviewer advised against locking into a "super structure" that can be difficult to get out of after being established. In the Québec mental health network, the aging axis asked for funding for a research assistant to help structure the axis, and was turned down. Instead, money was given to groups of researchers to obtain assistance in preparing research applications. Perhaps, this program can look at the staffing issue from a similar perspective. The concern is locking into regional directors or a program director for four years, versus developing strategic staffing support. A research assistant could be hired to help the scientific director develop the networking program in the coming year, and then assess if needs differ in subsequent years.

- What do groups want to achieve through networks: building communities of researchers or developing infrastructure? Each priority has associated costs. For example, several proposals include support for grant preparation. Networks should target strategic priorities and not replicate support available elsewhere, becoming, in effect, small granting agencies. A number of networks propose regional nodes, which raises the issue of supporting networking versus regional development, or both.
- The co-leaders were complimented on the shared infrastructure section, which outlined the most complete list of any proposal. Consequently, this list was suggested as a starting point for the shared infrastructure discussion.

COMMON NETWORKING THEMES

Common themes emerged that were relevant to all or several of the networks. First, both network co-leaders and reviewers expressed enthusiasm about the creation of networks in BC, and thanked MSFHR for the opportunity to participate in the program and formative review process. Other themes included:

1. Consultation process added value

Reviewers commended a number of networks on the scope and inclusiveness of their consultation. The networking task forces sought input from a wide variety of people prior to developing their proposals, which proved valuable in starting to build relationships.

2. Network development

Reviewers noted the networks are at differing stages of development, with some more advanced and others emerging. Consequently, each network will need to be held to slightly different standards, based on measures developed in consultation with the interim co-leaders.

Some reviewers also commented that 15 months is not enough time for a network to get up and running and deliver measurable outcomes. It takes time to develop network relationships and activities, and to change the research culture so people see the benefit in coming together. MSFHR clarified that 15 months reflects the funding commitment the agency is able to make at this point. MSFHR has always viewed the networking program as a long term investment, and does not expect all outcomes to be achieved within 15 months.

It is crucial to identify the advantages networks offer to attract and retain participants. Meetings and conferences will attract people for a year or two, but more tangible added value is needed beyond that, or attrition will occur.

Some networks need to restructure the strategic elements of their proposals to more clearly define the vision, research focus, goals, milestones, strategies and outcome measures. Greater clarity is needed to explain how the network will allow teams to achieve the vision.

3. Clarify activities and priorities

Most networks need to set more concrete targets in their proposals. Specific activities need to be defined in areas such as training, partnerships and knowledge transfer. In addition, teams need to define how these activities will be implemented.

Many network plans are very broad in scope, and reviewers expressed concern that not everything could be accomplished within the available budget or time frame. Some networks have a variety of nodes or clusters, and need to clarify how priorities will be set. Networks need to identify a few strategic areas, or their investments will be too diluted to provide any return. Reviewers suggested the networks build on areas of strength, and identify a few crucial gaps for building capacity in BC.

Some co-leaders explained that they did not see their role as defining priorities; instead, the network itself would set priorities.

MSFHR acknowledged the need for and value of an environmental scan of research currently underway in BC to identify strengths and gaps, and to look outside the province for role models and opportunities for interaction.

4. Clarify leverage

Many networks need to define what leverage means in their plans, and how additional funding will be levered. For example, can the networks use MSFHR funding to lever money from other organizations in the private and non-profit sectors, foundations and CIHR?

MSFHR is assessed by the government on its ability to lever funding, and must demonstrate leverage to the Board to justify additional funding for the networking program. Consequently, network criteria include demonstrating that funding was used to attract additional resources.

5. Cross network collaboration

Reviewers noted a number of opportunities for collaboration among different networks such as the Aboriginal and rural and remote health research networks, the children and youth and disabilities networks, the aging and disabilities networks (particularly in the area of assistive technologies), and the environmental and occupational health and disabilities networks. It was suggested that links between provincial networks would be most fruitful if each identifies its strengths.

Reviewers also recommended the networks consider partners and links outside the province. MSFHR added that BC does not have the critical mass to deal with major issues on its own, so opportunities for national and international links are considered a key part of the networking strategy.

6. Organizational structure

Reviewers expressed concern with the leadership structure proposed by a number of networks. While they acknowledged the effort to be democratic by using several nodes, a Board, committee, or fluid leadership, reviewers felt one or two scientific leaders are needed to move the network forward more quickly, as this approach has proven most effective in other jurisdictions. In addition, leaders need to be in place long enough to develop a comprehensive understanding of network needs and keep the network on track.

Reviewers also advised the networks not to create an organizational structure that blocks them from being responsive, in their effort to achieve accountability and appeal to members.

Reviewers questioned whether most of the proposals described networks of organizations rather than networks of individuals. Québec has focused on networks of people, not organizations, to move beyond traditional institutional boundaries. Networks of investigators can support activities people cannot achieve within a given institution.

Participants noted that BC does not have as many researchers as Ontario or Québec. In many cases, people are concentrated at the universities and need to be linked to create capacity, so others will begin to see the advantages of networking.

In Québec, most investigators are located in four universities, so people in the network are brought together from each centre around specific themes, such as cognition in aging, and work on various aspects at different sites. The network adds value by bringing people together around research themes they cannot work on alone.

7. Budgeting issues

Reviewers were concerned that many networking proposals allocated too much of the budget to staff and administration, leaving little to support strategic initiatives and training. However, the co-leaders identified a need to fund staff. As a result, it was suggested that additional program funding may be needed, or MSFHR may want to consider providing some shared support, if groups cannot fund both staff and infrastructure with the available funding.

8. Define membership

Some networks need to define membership criteria and how people will be attracted to join the network. Will the membership include investigators, students, clinicians and community members? Will networks try to get as many members as possible, or will membership be driven by the people who get involved in network activities and slowly expand? Networks may want to draw on ideas from other networks.

Membership may vary enormously from network to network. For example, a small network may want to be exhaustive in its membership drive, while a network with 200 may strive for inclusiveness but not be exhaustive. Having many participants does not necessarily lead to desired outcomes.

It was suggested that MSFHR keep track of membership for all the networks, and share this information among the networks.

9. Expand inclusiveness

Reviewers and networking participants suggested a number of opportunities to expand the inclusiveness of networking plans, by including:

- A sex/gender component in all research and networks.
- The perspectives of immigrant and refugee communities.
- Accessibility as a standard across networks (publication formats, meeting locations, etc.).
- Community researchers and organizations. While some proposals include community researchers, many need to define community-based research and how community people will be involved.

- Consumers in the planning process. An evaluation of health networks in Ontario found networks worked well when consumers were actively involved. While BC is developing health research networks, an opportunity exists to define and involve consumers of research activity.

10. Seek strategic opportunities

In addition to identifying strengths and gaps, networks should look for strategic funding opportunities (such as CIHR team grants, Health Canada and private foundation funding).

SHARED INFRASTRUCTURE

Dr. Gilles Paradis, Consultant to the Quebec Public Health Institute and the Department of Public Health in Montreal, Associate Professor in the Department of Epidemiology and Biostatistics at McGill University, and Scientific Director for the Quebec Research Network in Population Health, presented shared infrastructure opportunities identified in all of the networking proposals. Cross cutting platforms or structural activities that transcend networks fall into four categories:

Management

- Consultation for strategic planning/business planning (MSFHR)
- Measures of performance indicators (MSFHR and network leaders)
- Inventory of researchers and research (MSFHR)
- Regular meetings of network leaders (MSFHR)
- Annual meeting of network researchers (MSFHR and networks)

Knowledge Transfer

- Website support – technical/content and design (MSFHR)
- Media and communication services (networks in partnership)
- Tracking calls for proposals (networks in partnership)
- Videoconferencing/web casting (networks in partnership)
- Commercialization (MSFHR and selected networks)

Training

- Mentorship workshops (networks in partnership)
- Common educational material to support training (networks in partnership)

Research Infrastructure

- Access to and use of administrative databases (child and youth network and partners)
- Cohorts for longitudinal studies (aging network and partners)
- Methodological consultation – grant writing/statistical consultation/workshop development (networks in partnership)

An open discussion followed the presentation on setting priorities for shared infrastructure:

Issues to consider

- Some shared infrastructure suggestions involve network partnerships, and will require a coordinating body to move forward, even if one network takes the lead.
- Some participants felt the shared infrastructure discussion was premature, as each network should select its priorities and then discuss these areas with MSFHR.
- Some co-leaders suggested it would be difficult to set shared infrastructure priorities before MSFHR confirms what can be funded (i.e., pilot projects and proof of concept initiatives).
- A concern was raised that some networks are at a very early stage, and have stayed away from setting priorities. MSFHR suggested that certain items could be fast tracked.
- Reviewers suggested MSFHR does not necessarily have to provide shared services, as a shift from research funding to managing services may create issues for the agency. Alternatively, a non-profit organization could be used to provide common services, similar to the approach the WestLink Innovation Network uses to support commercialization.
- It was suggested MSFHR consider a leadership model for the networking program, similar to the CIHR relationship with its institute directors, who are part of the leadership group and influence policy development. MSFHR can create a synergistic relationship with network leaders to benefit the development of both.

Administration

- A common secretariat was suggested, rather than having all eight networks duplicate basic administrative functions. Budgeting decisions would be handled by network leaders.
- Several networks discussed using PHSA for cheque writing and other administrative tasks, which raises an issue with annual reporting and auditing. MSFHR has audit requirements that make it easier to deal with single agencies, and would prefer financial interests to be held with the network leadership.
- In Québec, frequent flyer points are awarded to network leaders and network funding is listed on their CVs as an incentive.
- A university will claim any money it administers as part of its funding, which could cause friction with other universities and non-academic researchers.
- It was agreed that the interim co-leaders will discuss how to handle this issue in a December 2004/January 2005 conference call (see *Next Steps* on page 19-20).

Additional suggestions

- To avoid having too many groups trying to do research in the same community, MSFHR could coordinate community access. Researchers could contact MSFHR to find out which communities have been studied, which have not, and which agree to be studied.

- MSFHR is also developing receptor capacity in health authorities, through the Health Services and Policy Research Support Network, which could be shared with the networks to identify opportunities for collaboration.
- Many networks propose regional nodes. Reviewers questioned whether the networks are being used to support regional development or networking or both. If the goal is to promote research expertise in areas that are under developed due to inadequate time or staffing, MSFHR could target shared infrastructure funding to regional nodes, or a shared regional coordinator to help link the networks in overlapping areas.

Business planning

- Reviewers suggested MSFHR provide a central coordinating role for strategic planning. Some participants were concerned that strategic planning can be a time consuming process. Reviewers noted that the networks have already done much of this work, and simply need assistance clarifying and reorganizing the material into a more concrete implementation plan.
- While some networks have already established linkages and partners, others want to further consult members before deciding how to allocate funding to ensure ideas have value for the research community. Emerging networks need to focus initially on network building, and specific research axes may take longer to develop. Nevertheless, reviewers suggested initial consultations often produce ideas people want, and network participants will want to see a more concrete proposal in subsequent consultations.
- Since the networks are at different stages, MSFHR will help individual networks assess capacity, produce implementation plans, and develop expertise to achieve their goals.
- FRSQ requires each network to have a charter outlining governing principles, membership, etc., which are available on the networks' website, and could be a helpful guide for BC networks.

Performance indicators

- Participants noted that performance indicators go hand in hand with developing implementation plans. Clarification from MSFHR on negotiable and non-negotiable standards, key accountability measures and non-fundable items would make it easier for groups to produce these plans.
- MSFHR has focused on funding people and infrastructure to date, and has not generally funded operating grants, although some will occur through the Health Services and Policy Research Support Network. MSFHR wants to support maximum flexibility for the networks, so some seed or pilot grants may be appropriate, if a compelling case can be made. Grants should be a precursor to larger, strategic projects or grants, not seed funds that support separate projects without long term goals. Pilot studies can support the success of CIHR applications.
- Some participants advocated a cautious approach to creating stipulations at this point in the process, as spending will be defined from the bottom up, based on community needs.

- MSFHR explained that supporting maximum front end flexibility creates a requirement for back end accountability for the agency. In Québec, the networks also have front end flexibility with back end accountability; four-year funding is not guaranteed, the networks have to justify their funding each year.
- A logic model was suggested to assist networks in clarifying their aims and to support an iterative development process.
- Participants were advised to incorporate ideas from the general discussions and reviewers' specific suggestions in their implementation plans, recognizing that plans will evolve over time. As a result, some advice will be acted on now, other suggestions will be put aside for later stages, and some will be rejected as not applicable to individual networks.
- Concern was expressed that indicators for accountability, weighting of various indicators, and reporting back were not clear. Obtaining a large grant is one measure, but networks are supposed to support a variety of areas such as young researchers' career development.
- MSFHR noted that all provincial health research foundations have identified accountability as a key issue. It was agreed that interim co-leaders would discuss performance indicators with MSFHR during their December/January conference calls to jointly define expectations and deliverables. Since networks will proceed at different rates, the measures will not be identical.
- Reviewers noted the networks are in a powerful position to negotiate their own success, and recommended the networks obtain professional assistance to develop metrics for success. In addition, networks have already completed the first stage of planning, and much of this metric information is contained in the appendices to their proposals. Participants suggested this information varies from team to team, as some network consultation was very concrete, while others held brainstorming sessions without defining specific activities and measurable outcomes.

Research inventory

- MSFHR has updated the population inventories originally produced for the networking task force meetings, and provided CDs to interim network co-leaders. In addition, MSFHR downloads inventories from CIHR twice a year, but is unable to obtain information from SSHRC and NSERC. The NIH also has a searchable database. MSFHR would like assistance from the networks in defining what to include in the inventories, as the way areas are defined affects the information produced. Projects not funded by major agencies are not included in any database, so MSFHR can only do a limited job without network involvement.
- A comprehensive list of researchers and research is a high priority to give networks a baseline and identify people who have not been reached. This information must be kept current to be useful to the networks.

- MSFHR explained that the lack of a “real time” capacity listing in BC is an ongoing issue. In response, MSFHR is creating a mechanism to provide centralized capacity with decentralized information the networks need for their activities. Funding has been allocated and implementation is underway. Another area involves tracking national research to analyze grants coming to BC investigators, as a performance indicator to report back to government. Maintaining this data in real time is a challenge. MSFHR is collaborating with CIHR and other provinces, and talking to universities and health authorities about sharing information.
- It was suggested that an inventory would not help start the networks, because people with enthusiasm for the concept will come forward and form the core. Others will hear about the network and feel it has something to offer them. But over time, an inventory can help with recruitment. Some participants noted not all potential members have been reached or even identified, so an inventory is important to developing research capacity over time.
- A common CV is needed, using software that puts the content into a searchable database. Québec has offered to share this software with MSFHR.

Meetings

- The openness of this process and the partnership between MSFHR and the networks are seen as strengths. Meetings should occur at least twice a year to continue fostering this partnership, and one could be a retreat.
- In the first year, the networks need to meet to establish their identities. Then in the second year, all the networks could meet to build on overlaps between networks. Individual networks could tag their own business meetings onto this province-wide gathering.
- MSFHR could bring in the co-leaders with a management consultant each year to collectively learn about people management and network development.

Website

- Most participants think Internet and website capability will help people access networking information, such as proceedings and planning tools. Some participants feel it may be premature to identify what the website will contain. MSFHR noted that networking information has been posted on its website for nine months, and could be ramped up.
- Some networking groups may have access to website and Internet capability through a host agency, such as the PHSA. Consequently, a longer term plan is needed to define how groups will work together, considering existing capability in some networks, to avoid duplication. It was agreed that longer term needs would be identified at future leadership meetings.

Tracking proposal calls

- Monitoring proposal call opportunities was described as an enormous task. MSFHR suggested networking co-leaders meet with the Health Services and Policy Research Support Network leaders to identify ways to link efforts.

Videoconferencing and web casting

- Different networks have different needs in this area. Some universities have videoconferencing and web casting capabilities, and can share access to help build networks. However, involving non-academic partners has proven more challenging for other groups, particularly in outlying areas that are not considered a priority for telehealth conferencing. Consequently, some common communication and IT infrastructure was suggested to support cross institution and sector communication.

Training

- Centralized peer review was suggested for joint traineeships and studentships, instead of each network trying to conduct its own peer review. However, agreement was not reached on sharing peer review, as some participants are concerned the needs of individual networks may be superseded by a “super network” structure, and feel a shared peer review process may impede innovation and flexibility.
- Mentoring and statistical analysis are linked to disciplinary content, and are not necessarily generic functions.
- Some capacity building could be shared among the eight networks, as certain skills are common to all areas. For example, MSFHR could explore innovative core training services with Royal Roads University, such as adapting the management leadership program to research leadership.
- Other common training needs include implementation tools, financial management, communications and marketing, conflict resolution, and people management skills.
- Funding could be allocated to train people to use the BC linked health database.
- A working group was suggested to consider common training requirements as networks determine how to develop their training programs.

Research infrastructure

- Research infrastructure was identified as a high priority. Access to administrative databases is vital over the long term to determine community or population health research needs. MSFHR is examining this question as a broader issue for all provincial research.
- Participants noted that developing research infrastructure (such as database access and grant writing support) can take a long time, so it is important to start early.
- Some grant writing and statistical analysis will be network specific, and some more generic, which should be considered in developing this support.
- The BC linked health database is seen as a crucial part of some networks’ research infrastructure.

SUMMARY OF PANEL RECOMMENDATIONS

The reviewers made a number of comments and recommendations to MSFHR to help ensure the success of the networking program:

1. Review panel endorses MSFHR Networking Program

The panel endorsed moving forward with all eight BC networks, as all groups have developed strong overall proposals. Reviewers have not previously seen this type of networking review process, and were impressed with both the MSFHR program and process.

Panel members noted that networking takes time to break down barriers and change systems. Proposals are in place, and MSFHR will now work with the networks to develop implementation plans.

2. Consider networking structure

Reviewers recommended that MSFHR determine whether there is a conflict between supporting networking versus regional development.

3. Combine flexibility with accountability

Since the individual networks are at different developmental stages, combining front end flexibility with back end accountability is a good principle for this program.

4. Create advisory role for networking leadership

The panel suggested giving network leaders a senior advisory role would create an incentive to draw people into the network, and help sustain close relationships between MSFHR and the networks. Members of the advisory team would be consulted when issues arise in their areas of expertise and on overall strategic directions. Networks could gather information and the advisory group would make recommendations to the MSFHR Board, based on the data.

MSFHR also suggested the Health Services and Policy Research Support Network be included in the advisory group.

5. Develop clear, relevant performance indicators

Reviewers recommended clear performance metrics for the networking program that are individually aligned and negotiated by MSFHR and each network, and:

- Include excellence in research to increase the competitiveness of BC researchers in Canada and internationally, recognizing that various groups may evaluate excellence differently.
- Include some measures of return on investment/value add/economic development/cost avoidance/commercialization to achieve maximum impact on the health system and economy.
- Include knowledge transfer.
- Enhance ability to lever additional resources through partnerships and collaboration.
- Include both basic and applied research that will impact health in BC over the long term.

- Align with MSFHR goals.
- Support networks of people rather than institutions to succeed in breaking down barriers.

The panel suggested the networks' first task in developing implementation plans is to base metrics on an assessment of capacities, assets, gaps and opportunities. A logic model could be used to link with outcomes.

The panel also recommended that MSFHR establish an ongoing review process.

MSFHR should help the networks define what is meant by leverage and partnerships, and how to achieve these goals.

In addition, reviewers suggested the MSFHR Board consider advocating with universities, hospitals and health Boards to revise the academic reward and credential system. The goals are to encourage support for networking within institutions, enhance recognition and access for knowledge translation and community-based researchers, and create an environment in which networks can flourish.

6. Tailor support to network needs

Reviewers recommended MSFHR ensure each network gets the support it needs to develop an implementation plan, as the groups are at different levels of development.

7. Include diverse populations

The panel suggested most networks need to pay greater attention to the diversity of populations in their implementation plans.

In addition, it was suggested MSFHR and the networks discuss the role of research stakeholders in the networking process. Networking proposals need to engage patients and administrators to support knowledge transfer.

8. Encourage provincial, national and international collaboration

The panel recommended continuing interaction between MSFHR and FRSQ, as there is tremendous potential for complementarity. In addition, links were suggested with other provincial health research foundations to learn from each other's experiences. MSFHR clarified that a national alliance of provincial health research organizations has been created, as a forum for discussing many of the issues arising during the formative review.

BC networks were encouraged to form networking links beyond BC, with other provinces, nationally and internationally.

9. Develop a strategy for creating new networks

Reviewers noted that MSFHR may want to consider a longer term strategy for identifying new networks to continue to break down institutional barriers and support cross boundary research. MSFHR noted that the networking program started with population health groups to broaden the provincial scope of agency infrastructure support.

A strategy for new networks should be based on lessons learned from the development of the initial eight networks. In addition, new networks could target key areas of strength in BC and align with CIHR.

MSFHR noted that some of the issues brought up by each network may be better addressed through a key platform technology network, rather than having each group try to manage on their own. The panel suggested MSFHR observe the development of the networking teams in the coming months to determine the best approach.

10. Reduce budget allocations for staffing

The review panel believes all the network budgets inflate staffing costs, with too little funding allocated to other initiatives.

In closing, the reviewers noted that they expect to see positive outcomes in BC from these networks, and will be interested in hearing how the groups develop.

NEXT STEPS

Interim co-leaders and MSFHR agreed to the following activities as the networking teams' next steps:

- 1) MSFHR will give each network a formative review report containing network specific feedback and general feedback on the networking program.
- 2) MSFHR will hold a conference call in December 2004/January 2005 with each network's co-leaders to:
 - Discuss the formative review feedback.
 - Develop performance indicators that reflect each network's level of development.
 - Determine what support each network needs to develop an implementation plan and facilitate that support.
 - Discuss the timeline for each network's implementation plan.
- 3) Network co-leaders will begin consulting their membership (if needed) and revising their proposals to include:
 - Concrete activities and implementation plans, based on a three-month start up phase.
 - A one-page addendum outlining the network's leadership and financial accountability process.
- 4) MSFHR and the network co-leaders will discuss financial administration and shared infrastructure priorities during a joint conference call in December 2004/January 2005.
- 5) MSFHR funding will commence in January 2005, with quarterly payments.
- 6) MSFHR will consider continuing relationships with the formative review panel to:
 - Have a small external team conduct an interim review of network activities in a year to 15 months.
 - Sustain a mentorship role with the networking co-leaders.Another option is to have a local review team perform this role.
- 7) MSFHR will share network implementation plans across teams to share knowledge and support learning.

- 8) MSFHR will keep track of network membership and share this information across networks.
- 9) Longer term shared infrastructure needs will be discussed at future leadership meetings, and a working group will be established to consider common training requirements.

APPENDIX

Primary Reviewer Report

| | |
|---|--|
| <p>A. Does the network have a clear and concise direction?</p> | <ol style="list-style-type: none"> 1. Does the proposal provide a clear and concise description of the network's vision? Mission? 2. Does the proposed network implementation plan fit within the needs and challenges faced by the health research community? |
|---|--|

Primary Reviewer Comments:

- The application is generally well documented and the development plan includes all the elements needed for the network to be established effectively.
 However, the fields of environmental health and workplace health seem to me to be very important areas that would merit having their own respective networks. In Québec, the FRSQ has chosen to separate these two fields and collaborative links are being planned. MSFHR must ensure that this network does not become paralyzed by the range of research fields to be covered and the number of researchers to be integrated. If the network is too broad, there is a risk that the funds will be spread too thinly, and MSFHR's investments will be less effective than if two different networks were being funded.
- The strategic direction and scientific programming of the network should emphasize research: "Put Research First!" The purpose of a network is to stimulate research, not just to bring researchers together. It is important to distinguish between a network and a researchers' association such as the Canadian Association for Research on Work and Health (CARWH).
 In the coming months, it will be very important to clearly identify the research themes to be supported. These themes must be subjected to a strategic analysis, taking into account the current state of research, researchers' expertise, federal funding opportunities and possible partnerships with other networks in British Columbia or elsewhere in Canada.

| | |
|--|--|
| <p>B. Proposed Networking Scope i) Training Support</p> | <ol style="list-style-type: none"> 1. Are there strategies in place for: <ol style="list-style-type: none"> a. Training? b. Student participation in research projects and research related activities? c. Linkage-exchange opportunities for trainees with non-academic partners in industry/policy sectors? |
|--|--|

Primary Reviewer Comments:

- With regard to offering scholarships to students, it is important to ensure that they are awarded based on excellence and will not fund students who have been unsuccessful in other competitions.

| | |
|--|--|
| <p>B. Proposed Networking Scope</p> <p>ii) Networking and Partnerships</p> | <ol style="list-style-type: none"> 1. Are there strategies in place to build on existing and new partnerships? 2. Is there any discussion around optimizing funds by sharing resources and equipment in and amongst these partnerships? 3. Are potential leveraging opportunities the networking program will gain through partnerships identified? |
|--|--|

Primary Reviewer Comments:

- Those in charge of the network must play an important role in identifying research opportunities presented by granting agencies. In order to do this, I suggest meeting with researchers sitting on the scientific committees of these organizations, in order to provide them with a clear understanding of the issues in environmental and workplace health. An information watch system should also be set up so that the network can be informed promptly of calls for projects.

Still thinking in terms of competitive research, it is suggested that BC's research leaders be identified and their active involvement in network activities be ensured.

| | |
|--|--|
| <p>B. Proposed Networking Scope</p> <p>iii) Knowledge Exchange</p> | <ol style="list-style-type: none"> 1. Has a process for knowledge dissemination and sharing of information been articulated? <ul style="list-style-type: none"> • Is it innovative? Is it effective? 2. Has the network identified knowledge exchange mechanisms within the network? Beyond the network? 3. Has the network identified how network generated knowledge will be used for public policy development and social program delivery? Economic return? |
|--|--|

Primary Reviewer Comments:

- The proposed development plan could more clearly identify the expected ROIs: research dollars, scientific publications, numbers of grant applications submitted and obtained, etc. Once again, there needs to be a clear basis for evaluating the network's performance. The MSFHR needs to lay out for the networks the criteria that will be used to evaluate their effectiveness and performance.

| | |
|---|---|
| <p>B. Proposed Networking Scope</p> <p>iv) Network Management</p> | <ol style="list-style-type: none"> 1. Is there a description of how the proposed network will operate? 2. Is the proposed leadership model clear? 3. Is there a description of how members will be selected? 4. Are the network's internal and external communications articulated? |
|---|---|

Primary Reviewer Comments:

- A network must not only be strategic but also tactical, which means that the simplest possible structure should be preferred. A network must be inclusive but not necessarily exhaustive. This implies that the objective is not to include all researchers, but a critical mass of productive researchers. Once the network has been created, it will be able to grow gradually, as it takes on a variety of projects. This last point is also important: when new members join the network, they need to let the executive committee know which strategic axis they want to be associated with.
- The network's organization chart includes regional sections. Two points should be mentioned: 1) the network is not an association of researchers that has to be represented in all regions; it would be more useful and natural to group researchers based on research themes rather than regions; 2) each network seems to have regional structures; I believe this presents a serious risk of duplication. There are certainly economies of scale to be made and infrastructures to be shared among networks.
- All members of a research network do not have the same role or the same professional activities. I suggest that those in charge of the network establish a range of statuses. For example, the *Réseau de santé et de sécurité du travail du Québec* has four different statuses: regular, associate, partner and student.

D. Identify the strong points and areas for improvements in the proposal, and any suggested modifications to the budget of the requested items.

Primary Reviewer Comments:

The network is on the right track and MSFHR's support is concrete. I am sure that all the conditions for success have been met.

Additional Reviewer Feedback

Primary Reviewer Madeline Boscoe: General comments for all network proposals

Executive Director, Canadian Women's Health Network (CWHN); Advocacy Coordinator, Women's Health Clinic, Winnipeg; Co-Chair, National Advisory Committee on Reproductive and Genetic Technologies; Member, Canadian Peri-natal Surveillance Advisory Committee, Steering Committee for the Centers of Excellence in Women's Health Research Program, and the Midwifery Implementation Council in Manitoba

- There is a lack of attention to the diversity of populations in *most* of the proposals, such as immigrants and refugees, gender, and people living in poverty, and with the impacts of social exclusion. This should be addressed in the scope and makeup of the advisory/network steering committees.

- Most of the proposals would benefit from strengthening their partnerships with voluntary organizations, which could include patient groups, NGOs with shared interests (e.g. environmental groups), as well as providers and health planners. Although community groups are mentioned, they are, for the most part, in minority positions. There are few active roles for this sector in terms of defining the research agenda, contributing to research, or most importantly, to knowledge exchange and uptake (i.e. KT). This is very important for patient groups and civil society. These relationships would support better knowledge exchange and outreach activities. Also, in some areas, these groups have links to, or are involved in, research funding themselves (e.g. children, mental health, etc.).
- All the networks should be encouraged to link to the relevant national voluntary organizations working in their health area.
- Community/patient engagement is an issue in every area of research now. The disability community, women's groups, First Nations and multicultural communities all have policy statements that seek, if not demand, new relationships with researchers. The Aboriginal community has developed this more clearly, but examples also exist in breast cancer, violence and mental health research. These models should be shared across the networks. I would recommend that successful relationships with community groups be included as one of the indicators of success.
- Knowledge diffusion should not be reduced to press releases and network marketing, but should include outreach, workshops, policy briefs, etc. These groups are involved in knowledge diffusion and uptake activities nationally and internationally.
- Dispute mechanisms including conflict resolution processes and/or arbitration processes need to be enhanced.
- There are no draft agreements for "ownership" of research ideas, findings and data, or the process for deciding authorship.
- Decision making processes need to be outlined more clearly. The PI model may work with some networks, but is not necessarily useful in all situations, especially if innovation is a key goal. This links into the question of who is a member and who gets to participate in decisions. Roles for young researchers, community groups, etc. need further elaboration.
- Competition between researchers and institutions, which is related to academic performance, evaluation and career advancement, can interfere with the establishment of these networks. There seems to be too much focus on institutions instead of the topic area. MSFHR should provide some leadership in addressing this issue.
- The idea of having the funding for the networks flowing through PHSA, as proposed by the child and youth and the women's networks, should be explored seriously. There is an added value here of engaging PHSA in terms of KT as well.
- The IT vision could be expanded. How could this program link into and enhance BC's telehealth and virtual learning capacity? Is this something that should be managed centrally? Should MSFHR work with BC Health to expand videoconferencing capacity to other facilities?
- Definitions of research are needed. There is generally a lack of emphasis on policy research, for example. There is also a need to increase capacity for research synthesis and systematic reviews.
- MSFHR should consider changing the criteria for use of funds to allow seed or research development grants for students, or to support career change, particularly in the more developing networks.
- There is a critical need to support demonstration funds for new intervention models of care that are not focused on drug and devices (e.g. exercise and depression that, although perhaps outside the scope of this program, need to be monitored). CIHR has this dilemma as well. Research without support for service innovation will not necessarily support innovation.

- Many proposals allude to community based researchers. I strongly support this concept but it needs further expansion. There are budget implications if the PI and other researchers don't have salaries provided in kind from their institutions. Traditional research programs often prohibit community based research leaders due to the salary issue.
- Given MSHRF's goals regarding economic benefits, I would strongly recommend that links to UBC's Centre for Health Services and Policy Research and to Cochrane Collaboration should be developed, as part of the research synthesis, agenda setting and methods, as well as KT activities. In projects that have health technology development (e.g. devices, imaging, drugs, etc.) as an aspect of their research plans, links to COHTA and Cochrane should be developed as part of the synthesis.
- Success indicators should be developed with the broader stakeholder community of these research networks.
- MSFHR should be sensitive to the reality that the networks are in very different stages of development and flexibility of approach will be needed.
- Success indicators for each network may be needed.
- What is the expectation or vision regarding the networks' role in BC's broader health community? Are they going to assume some broader leadership role as "experts" different than other researchers, NGOs or service providers? This should be carefully considered and may require a signal from MSFHR. What is the role of the networks vis-à-vis the foundation? Are they the leaders on their topic areas (i.e. senior advisory group for that domain of activity within MSFHR)? There could be some possible risks with this approach that would suggest it be given careful consideration.

List of Participants – November 25, 2004

| Affiliation | Name |
|---------------------------------------|-------------------------------------|
| Panel Member | Dr. Roy Cameron – Chair |
| Panel Member | Dr. Eva Kehayia – Co-Chair |
| Panel Member | Dr. Howard Bergman |
| Panel Member | Dr. Serge Rossignol |
| Panel Member | Madeline Boscoe |
| Panel Member | Dr. Jean-Pierre Brun |
| Panel Member | Dr. Kue Young |
| Panel Member | Dr. Gilles Paradis |
| Panel Member | Dr. Stephen Bornstein |
| Panel Member | Dr. Malcolm Ogborn |
| Co Leaders | |
| Aboriginal Health | Katharina Patterson – Presenter |
| Aboriginal Health | Monica Leung |
| Aging Health | Dr. Andrew Wister – Co-Presenter |
| Aging Health | Dr. Gloria Gutman |
| Aging Health | Dr. Lynn Beattie – Co-Presenter |
| Aging Health | Dr. Dawn Hemingway |
| Aging Health | Dr. Elaine Gallagher |
| Child and Youth Health | Dr. Stuart McLeod – Presenter |
| Child and Youth Health | Barbara Grantham |
| Environmental and Occupational Health | Dr. Craig Stephen – Presenter |
| Environmental and Occupational Health | Dr. Kay Teschke |
| Mental Health | Dr. Elliot Goldner |
| Mental Health | Dr. Richard Williams |
| Mental Health | Dr. William Honer |
| Mental Health | Val Embree |
| Disabilities Health | Dr. James Watzke – Co-Presenter |
| Disabilities Health | Dr. Theo van Rijn – Co-Presenter |
| Disabilities Health | Catherine Tadey |
| Disabilities Health | Caroline Abramson |
| Rural and Remote Health | Dr. Donald Voaklander - Presenter |
| Rural and Remote Health | Dr. Karen Kelly |
| Women’s Health | Dr. Lorraine Greaves – Co-Presenter |
| Women’s Health | Dr. Cecilia Benoit – Co-Presenter |
| Women’s Health | Dr. Nancy Poole – Co-Presenter |
| Women’s Health | Dr. Olena Hankivsky – Co-Presenter |

| Other | |
|--|-------------------|
| University of British Columbia | Dr. Joanna Bates |
| Provincial Health Services | Dr. John Miller |
| May Communications | Lisa May |
| MSFHR Staff | |
| President and CEO | Dr. Aubrey Tingle |
| Sr. VP Corporate Services and Programs | Tim Murphy |
| Network Coordinator | Bobbi Symes |
| Sr. Advisor to the President | Pat Evans |
| VP, External Affairs | Cherry Graf |
| Communications Manager | Alison Osborne |
| HSPRN Director | Pat Coward |
| Sr. Program Manager | Kathy Jang |
| Executive Assistant to Sr. VP | Aja Jardine |
| Research and Planning Analyst | Gidda Oldendorff |
| Developer, IS | Zoran Knezic |

List of Participants – November 26, 2004

| Affiliation | Name |
|---------------------------------------|--|
| Panel Member | Dr. Roy Cameron – Chair |
| Panel Member | Dr. Howard Bergman |
| Panel Member | Dr. Serge Rossignol |
| Panel Member | Madeline Boscoe |
| Panel Member | Dr. Jean-Pierre Brun |
| Panel Member | Dr. Kue Young |
| Panel Member | Dr. Gilles Paradis |
| Panel Member | Dr. Stephen Bornstein |
| Panel Member | Dr. Malcolm Ogborn |
| Co Leaders | |
| Aboriginal Health | Katharina Patterson |
| Aboriginal Health | Monica Leung |
| Aging Health | Dr. Andrew Wister - teleconference |
| Aging Health | Dr. Lynn Beattie |
| Aging Health | Dr. Dawn Hemingway |
| Child and Youth Health | Barbara Grantham |
| Environmental and Occupational Health | Dr. Craig Stephen |
| Mental Health | Val Embree |
| Disabilities Health | Dr. James Watzke |
| Rural and Remote Health | Dr. Donald Voaklander - teleconference |
| Women's Health | Dr. Lorraine Greaves |
| Women's Health | Dr. Nancy Poole |
| Women's Health | Dr. Olena Hankivsky |

| Other | |
|--|-------------------|
| May Communications | Lisa May |
| MSFHR Staff | |
| President and CEO | Dr. Aubrey Tingle |
| Sr. VP Corporate Services and Programs | Tim Murphy |
| Network Coordinator | Bobbi Symes |
| VP, External Affairs | Cherry Graf |
| HSPRN Director | Pat Coward |
| Sr. Program Manager | Kathy Jang |