



The Impact of SEARCH on Participating Organizations: **Evaluation Report**

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HIGHLIGHTS

- The most immediate impacts of the SEARCH program on the organization are **individual development (knowledge and skills)** and improved **access to information** through the **SEARCH network**.
- Optimum success in terms of influencing decision-making in the organization depends on:
 - **active engagement by senior management** throughout the project (from participant recruitment through dissemination);
 - alignment of SEARCH projects with **organizational priorities/needs**;
 - organizational support/value for **evidence-based decision-making as the way of doing business**;
 - the degree of other **competing opportunities** for capacity building;
 - **an influential mentor/champion** who can guide the participant ;
 - **infrastructure support for ongoing activity** following program completion;
 - **the participant's role and ability to influence**;
 - the **participant's ability** to transform information and evidence into something that is relevant and useful; and
 - the presence of **structures and processes** for effective dissemination, use and integration of information

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EXECUTIVE SUMMARY

Background and Purpose

The SEARCH (Swift Efficient Application of Research in Community Health) Program is a made-in-Alberta partnership program involving Alberta Heritage Foundation for Medical Research (AHFMR), regional and provincial authorities, universities and government. Designed to build capacity in the health system for producing and using research evidence to support health care planning and management decisions, SEARCH provides an opportunity to develop local expertise for collaborative applied health research and evidence-based decision-making.

Program goals as stated at the time of program inception in 1996 were:

0. To have health professionals in the health authorities and agencies use current, relevant and appropriate information to assist in identifying priority health issues and in making decisions on these issues based on research results.
0. To develop a collaborative network of expertise across Alberta to initiate and carry out health research on a local, regional, or provincial basis.
0. To create a culture in which policy-responsive research is both valued and supported.

In 2002, as part of a comprehensive evaluation framework, AHFMR commissioned On Management Ltd. to conduct an independent evaluation of the impact of SEARCH on participating organizations to determine:

0. To what extent involvement in the SEARCH program resulted in some measure of change or outcomes for the participating organizations?
0. To what extent did SEARCH meet related goals of participating organizations?
and
0. Factors that are predictive or suggestive of success.

Methodology:

Information was obtained through structured telephone interviews with thirty key informants representing one of the provincial and thirteen of the regional health authorities which participated in SEARCH between 1996 and 2001. Regional health authorities include the two large urban regions, five regional centres and six rural regions. Informants held middle, senior, or executive management positions in their organizations, and many also had supervised SEARCH participants during their participation in the program. All interviews were conducted in May and June 2003 by the same evaluation team member.

The survey instrument, developed by the evaluation team, was comprised of both open-ended questions and rated outcome measures. The questioning strategy was derived from evaluation questions identified in the Evaluation Framework (Blueprint) document, input from the SEARCH Steering Committee, and insights gained from the conceptual model theory work that preceded this survey.

Specific primary (direct) and secondary (indirect) outcomes assessed included:

Primary Outcomes:

- identification of priority health issues facilitated
- increased knowledge and skill levels of SEARCH participants
- increased collaboration with individuals in Alberta
- increased collaboration with organizations in Alberta
- increased access to resources
- increased supportive attitudes and values for research/evaluation
- information identification assisted and supported
- decision-making influenced
- health research and evaluation activities facilitated.

Secondary Outcomes:

- follow-up projects arising from SEARCH
- development of proposals in new areas
- enhanced knowledge or skills of employees not enrolled in SEARCH
- change in policy, operations or practice
- increased recognition of organizational expertise in research and evaluation.

The single major limitation was the variability across informants with respect to familiarity and personal experience with the SEARCH program. One-third of the informants acknowledged peripheral involvement, e.g. did not supervise or work closely enough with the SEARCH participants to understand the full impact of specific projects. This may have influenced their opinions of the overall impact of the program on their organizational unit and/or health region.

Key Findings

1. *To what extent has involvement in the SEARCH program resulted in some measure of change or outcomes for participating organizations?*

The level of impact on various primary and secondary outcomes can be summarized as follows:

Strongest Impact ($\geq 90\%$)	Strong Impact (50-89%)	Weakest Impact ($< 40\%$)
Increased knowledge and skill levels of SEARCH participants	Promoted supportive attitudes and values for research and evaluation	Influenced decision-making.
Increased access to resources (computers, search engines, databases)	Assisted with information identification	
Increased networks with individuals in Alberta (other SEARCHers)	Facilitated health research and evaluation activities	
	Proposal development	
	Follow-up projects	
	Enhanced knowledge/skills of other employees	
	Change in policy, operations, practice	
	Increased recognition of organizational expertise	

Informants from three rural regions identified that SEARCH influenced the creation of positions with research/evaluation mandates. Many of the regions were successful in acquiring new/additional funding based on proposals prepared or reviewed by SEARCH participants.

These results suggest that the most immediate impact of the SEARCH program on organizations relates to resource (staff) development and improved access to information (networks). Outcomes relating to priority health issue identification and influence on decision-making depend more on:

- the participant's exposure to or ability to influence senior management;
- the participant's role in the organization;
- SEARCH projects which address organizational priorities and needs;
- presence of an organizational culture which purposefully seeks to cultivate strategies for evidence-based decision-making as the way of doing business;
- the support of an influential supervisor or mentor in the organization who is closely involved as the participant undertakes the project; and
- the ability and willingness of the participant to engage in other research activities within the organization through direct participation as a designated researcher or planner; as a member of a Research Advisory Committee, or through the transfer of knowledge and skills to others.

As anticipated, the greatest impact occurred in the community or public health sectors, consistent with where the SEARCH participants were employed and the types of projects undertaken. Many of the informants referred to specific projects which impacted operations and practice. Examples included the Early Maternity Discharge Project, the Post-Partum Depression Scale, the Tobacco Reduction Project, and the Health Indicators Project.

1. *To what extent has SEARCH been able to meet the goals of its partners?*

- The majority of informants were satisfied with SEARCH's contribution to their organization (although it was not always clearly articulated what the aspirations of the organizations with respect to SEARCH were).
- Those who were less satisfied with results or felt that goals/hopes had not been achieved to any observable degree tended to attribute this to a lack of purposeful engagement at the senior management decision-making level.
- The high degree of satisfaction was more associated with the quality of skills and knowledge that the program imparted to the individual participants through its excellent academic training program and unique networking opportunities.

3. *When organizations sponsor participants in the SEARCH program, what factors are predictive or suggestive of success?*

- Close involvement by senior executive/managers of the organization from recruitment of participants to dissemination/communication of results.
- Alignment of SEARCH projects with organizational priorities/needs.
- Target individuals with related roles and responsibilities in planning, information analysis, quality improvement.
- Organizations that clearly support evidence-based decision-making as the way of doing business.
- Organizations which tend to have fewer competing opportunities for capacity-building.
- The presence of a mentor/champion in the organization who can support the participant (guide and expose the individual to senior management).
- SEARCH participants who are effective communicators and educators to ensure meaningful use of information and transfer of learnings.
- Infrastructure support for ongoing activity following graduation from the SEARCH program, e.g. research unit, research advisory committee, dedicated resources.
- The presence of structures and processes in the organization which can guide and influence the dissemination, use and incorporation of information in terms of policy and practice.
- The organization's (vs. the individual's) ability to access the SEARCH network for information and support.
- The individual's ability (knowledge and skills) to transform information and evidence into something that is meaningful and relevant to the organization

Recommendations

Recommendations are offered in the following areas:

Program Planning

- determination of the appropriate target unit for SEARCH participation.
- emphasis of projects that are of strategic importance to the participating organization/authority.
- proactive engagement of senior decision-makers in the organization.
- a member of the executive to serve as a mentor to maximize use and integration of project learnings and results.

Curriculum Enhancements

- develop knowledge and skills in the area of knowledge transfer to more effectively build capacity across the organizations.
- framing information in a way that is of practical use to the decision-maker.
- provide formal training on sustainability relating to the implementation of change.

Collaborative Relationships/Engagement

- create new relationships with other local experts and educators, e.g. University of Lethbridge.
- engage participation and buy-in from other relevant members in the organization.
- Provincial infrastructure support.
- develop a strategy and infrastructure to identify potential inter-regional/provincial study opportunities based on SEARCH networks.

Future Evaluation of Impact of SEARCH on Organizations

- specify unit of analysis
- consider development of a validated instrument or approach for assessing Organizational Research Capacity for ongoing assessment or broader application.

BACKGROUND AND PURPOSE

The SEARCH (Swift Efficient Application of Research in Community Health) Program is a partnership program to build capacity in the health system for producing and using research evidence to manage health services. This made-in-Alberta program provides a mechanism to help health regions support decisions about health care planning and priorities with sound, logically relevant evidence. The program involves a team of provincial organizations: The Alberta Heritage Foundation for Medical Research (AHFMR), health authorities, universities and government. SEARCH provides an opportunity to develop local expertise for collaborative applied health research and evidence-based decision-making. Since its establishment in 1996, the program has engaged more than twenty Alberta health organizations or private practitioners. SEARCH has involved approximately 75 health practitioners province-wide in the "how-tos" of conducting relevant research, accessing and assessing high quality information, and applying it to decision-making in ways that fit the unique needs and character of the local context.

Program goals as stated in 1996 were:

1. To have health professionals in the RHAs and agencies use current, relevant and appropriate information to assist in identifying priority health issues and in making decisions on these issues based on research results.
2. To develop a collaborative network of expertise across Alberta to initiate and carry out health research on a local, regional, or provincial basis.
3. To create a culture in which policy-responsive research is both valued and supported.
4. To conduct a formal evaluation of the SEARCH II program.

AHFMR has commissioned several independent, formative and summative evaluations of the SEARCH program. Based on the evaluation findings and results of the first two iterations of the program, AHFMR developed a comprehensive program evaluation framework, or blueprint, to guide evaluation endeavours in 2001. This blueprint proposes evaluation of the SEARCH program in terms of its impact on individual participants, participating organizations, and the health system as shown in Table 1.

Table 1: Potential Areas of Inquiry

Level of Change Locus of Change	Service Delivery (e.g. RHAs, MDs)	Academic (e.g. Universities)	Funding (e.g. AHFMR)	Citizens, Consumers
Individual				
Individual in Organization/Group				
Organization/Group	XXXXXXXX			
System (e.g. Group of RHAs)				
Trans-sectoral System				
SEARCH Governance and Management				

↑

In February, 2002 AHFMR conducted a request for proposal process to facilitate understanding of whether and how the SEARCH program has made an impact on the participating organization's ability to choose, use and create research information (research capacity). To this end, three specific program evaluation questions were posed:

- *To what extent has involvement in the SEARCH program resulted in some measure of change or outcomes for the participating organizations?*
- *To what extent has SEARCH been able to meet related goals of participating organizations?*
- *When organizations support participants in the SEARCH program, what factors are predictive or suggestive of success?*

Dr. Judy Birdsell and Petra O'Connell of On Management Ltd. were subsequently contracted to conduct the evaluation. Their approach consisted of two parts:

1. The development of a comprehensive conceptual framework through which to view the capacity of organizations in the health system to produce and use research evidence. This would ultimately shape the evaluation process and inform the interpretation of evaluation findings.
2. Program evaluation which offers answers to the three program evaluation questions and recommendations for future offerings of the SEARCH program from the perspective of sponsoring organizations.

THE ORGANIZATIONAL RESEARCH CAPACITY (ORC) MODEL

This section briefly describes the development of an Organizational Research Capacity (ORC) model and presents the model itself. As there has been no such model used within the program to this point, we hope this new model will be helpful on a go forward basis, in addition to helping to assess the impact of SEARCH to date on organizations.

The ORC model was developed incorporating input from three phases:

0. Development of conceptual frameworks during a workshop of experts (researchers and practitioners) in October 2002.
0. Refinement of the framework through six case studies.
0. Input from the results of a telephone survey of key informants in health organizations.

The processes and results of the first two phases are outlined in detail in a separate technical report¹. All three phases are described briefly below.

A workshop involving five organizational researchers, two practitioners and several managers from AHFMR was held in Banff in October, 2002. Two draft models were developed during this workshop. Although specifics varied somewhat, both models included variables in each of four general categories:

0. environmental factors (external to the organization)
0. formal organizational factors (structures and processes that could be easily observed)
0. informal organizational factors (e.g. norms and values)
0. political processes (factors relating to relationships among individuals and groups, power and influence)

¹ The technical report providing the results of the workshop deliberations is available from the AHFMR web site at <http://www.ahfmr.ab.ca/search/display.php?id=2h>.

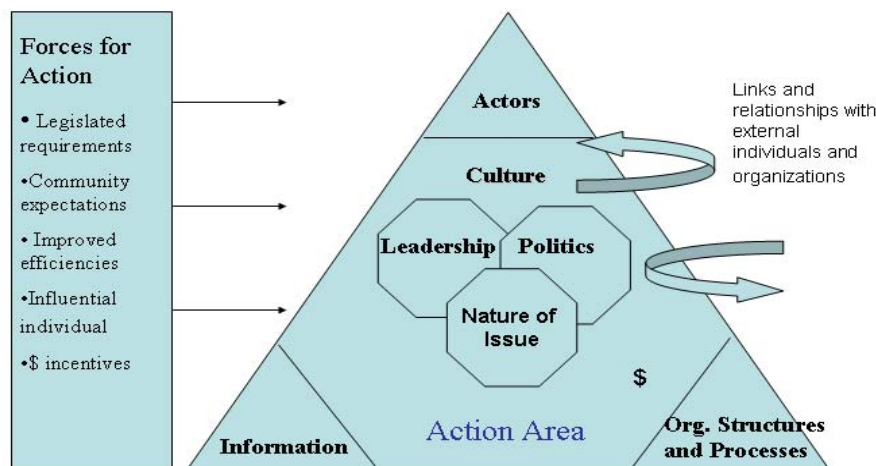
These models were used to develop a questioning approach that was used in six case studies done in early 2003 in health regions in the province. The six case studies involved regions of all sizes (rural, small urban and large urban) as well as regions that varied in their past involvement with research-related activities. Each case study focused on an 'action area' where the region had engaged in a change process which included an explicit attempt to incorporate consideration of existing knowledge. Analysis of the data collected during group interviews (and supplemented with individual interviews) in the six regions yielded observations focusing on six themes: resources, individual attributes, links and relationships, decision influences, organizational processes, and norms and values.

The telephone survey of key informants knowledgeable about the SEARCH program is described extensively in Section 3 of this report.

Data from all three phases was considered in concert to develop the Organizational Research Capacity model illustrated below. We hope this model increases understanding of how organizations choose, create, and use research evidence in their decision processes.

Brief highlights of the main components of the model are outlined following Figure 1.

Figure 1: Organizational Research Capacity Model



In essence, the case studies sought to understand what happened in a particular 'action area' where the region had recently experienced intentional changes.

Forces for Action These refer to those events or influences which cause the organization to 'attend to' a particular area.

Links and Relationships with External Individuals and Organizations External links were often the source of information. Personal relationships and mediated routes (i.e. internet) are key.

Three anchors: Actors, Organization Structures and Processes, and Information

Actors Actors can be individuals (such as a person holding a particular position in the organization), but consideration of 'groups' of actors (e.g. physicians) is also part of the mix which influences action in an area. If senior managers are closely involved in the issue, action is more likely. If there are individuals with specific responsibilities for research or relevant areas (e.g. planning, information analysis, quality improvement), action is enabled. Individuals with excellent communication skills enable progress.

Organizational Structures and Processes In essence, this refers to those aspects of an organization that one can 'touch and feel'. Co-ordinating committees, research policies or expectations of senior executive are examples.

Information Information is key to 'research transfer', as the results of research processes often materialize as information in one form or another. Information did not emerge as strongly as some other components of this model through the case studies, but given the particular focus of the model, it remains as an integral component.

Action Area This is the focus of attention and where decisions are being actively taken on a specific topic. It represents fluid and intangible dimensions such as organizational culture. Resources often come into play as 'enablers' in the action area.

Leadership In every case study, leadership was central to the action process. Leadership included such things as clear executive leadership through business plans; putting the focal issue on the agendas of key committees, and guiding participative processes.

Politics Social relations involving authority or power are inherently part of decision-making processes in complex organizations. Politics are often closely intertwined with leadership dimensions and characteristics of various actors (either individual or groups).

Nature of Issue If the issue under scrutiny is tightly coupled with organizational priorities, effective action is more likely.

The remainder of this report refers to the results from the Impact Assessment Telephone Survey, which was completed in the spring of 2003.

METHODOLOGY

Ethics Approval

The proposed evaluation design was approved by the Community Research Ethics Board of Alberta in October, 2002.

Data Collection

One member of the evaluation team conducted a total of 29 structured telephone interviews with key informants in May and June, 2003. The purpose of these interviews was to determine perceptions of the nature and extent of impact that participation in SEARCH has had on organizations, to elicit factors which contributed to the reported changes, and to determine the role SEARCH has played in meeting the research capacity goals of participating organizations.

The participating organizations were regional health authorities (as they existed prior to April 1, 2003) and one provincial health authority. All had supported staff member participation in the SEARCH program between 1996 and 2001.

Informants were invited in advance to participate by telephone. They received the questions by electronic mail at least one week in advance of the interview. Interviews took approximately 50 minutes to complete. One interview involved a teleconference call with two informants.

On average, informants from the same health region agreed with respect to their overall assessments. Any disagreements are explicitly reported in the findings.

Survey Instrument

The survey instrument was developed by the evaluation team. It is comprised of both open-ended questions and outcome measures for rating by the informants (see Appendix C).

The questioning strategy was derived from evaluation questions identified in the Evaluation Framework (Blueprint) document (see Table 2), input from the SEARCH Steering Committee, and insights gained from the conceptual model theory work that preceded this survey. The tool was piloted prior to use.

Table 2: Evaluation Framework (Blueprint)

Evaluation Framework (Blueprint) September, 2001 Areas of Inquiry
3. To what extent were SEARCH participants influential in causing changes in their immediate work environment?
3. To what extent and through what mechanisms has SEARCH lead to evidence-based decision-making within participant organizations?
3. What factors within RHAs predict success and the impact of SEARCH programs?
3. To what extent is SEARCH meeting the expectations / related goals of the participating organizations?
3. What is the nature and extent of the new or enhanced relationships which resulted from the SEARCH program?
3. What is the nature and extent of changes in participating organizations as a result of SEARCH?
3. To what degree is AHFMR fulfilling its role in public policy, R&D within the philanthropic sector through SEARCH?

3. Have there been any unintended consequences of SEARCH (+ or -)?

Selection of Survey Informants

Efforts were made to include two individuals from each health region that participated in the SEARCH program and the Alberta Mental Health Board (AMHB). In a number of cases, changes underway in targeted regional health authorities prevented recruitment of or contact with potential informants.

Thirty informants representing fourteen health authorities were interviewed. Informants represented a good cross section of large urban centres (Calgary and Capital), regional centres (Northern Lights, Palliser, Chinook, David Thompson, and Mistahia) and rural areas (Lakeland, East Central, Crossroads, Keeweenok Lakes, Headwaters, and Northwestern). Two informants were interviewed from each of the participating health regions in the majority of cases. Exceptions were Capital, East Central, David Thompson and Lakeland, where three informants were interviewed in each case, and Keeweenok Lakes and Mistahia, where only one informant was available from each region. Two informants from one of the two provincial health authorities also participated.

The team was unable to secure informants from Health Authority #5, or from the Peace or Aspen Health regions.

Wherever possible, senior management personnel familiar with the SEARCH program and supervisors of SEARCH participants from any of the three program iterations (SEARCH I, II or III) were targeted. The selection of informants was assisted by the concurrent evaluation work relating to individual participants and SEARCH program administration.

Limitations

The single major limitation was the variability in the informants' familiarity with or knowledge of the SEARCH program. Ten of the thirty informants had not supervised or worked closely with SEARCH participants, and had only a peripheral involvement in the program. Eight informants were only involved with the program in later iterations (e.g. SEARCH II or III), which may have influenced their opinions of the overall impact of the program on their organizations or health regions.

FINDINGS

Informant Profile

Appendix B provides a descriptive summary of the informants in terms of their affiliated organization or region, their title at the time of SEARCH participation, SEARCH years, and whether or not they supervised SEARCH participants.

The profile shows:

Areas of Responsibility

- Eight of the informants were in executive management positions (Vice-President, Chief Operating Officer or Chief Executive Officer). Six had broad responsibility for health services across the region while two had responsibility for public health services.
- Nineteen of the informants held senior management positions (Director, Senior Manager, Senior Leader). Eight had roles in public/community health. Seven had responsibilities in planning, corporate development, or research and evaluation, while four had responsibility for acute care health services including nursing.
- Three informants held middle management or Coordinator positions. All three had responsibilities in research/evaluation.

Duration of Exposure to SEARCH

- 21 (70%) of the 30 informants were familiar with the SEARCH program since its commencement (SEARCH I) in 1996.
- Five of the 30 informants were familiar with the program since SEARCH II (1998) while three informants were familiar with the program since SEARCH III (2001).

Relationship to a SEARCH Participant

- The majority of informants (17 or 57%) did not directly supervise SEARCH participants engaged in the program. They were more likely to be involved in the recruitment of participants or were aware of specific projects and results.
- Thirteen informants (43%) had directly supervised at least one SEARCH participant. Six of the 13 informants directly supervised more than one SEARCH participant.

Can you describe what the SEARCH program has included from your point of view?

Responses fell under three themes:

- ***Enables applied research and learning to take place in the workplace.***
 - *“It brings research into the organization on a more practical level.”*
 - *“It enables learning and education to happen in the workplace.”*
 - *“It brings theory about research and evaluation into the organization.”*
 - *“SEARCH is about introducing people in non-academic settings to applicable research. It points to the need for research outside of universities. It focuses on practical research to inform clinical practice.”*
- ***Enables individuals to objectively acquire, assess and adapt (use) information for better decision-making (practices and decisions based on evidence) and planning.***
 - *“SEARCH provides a framework or a more objective way of making changes (vs. knee jerk reactions to planning).”*
 - *“It focuses on practical research to inform clinical practice. SEARCH is a program designed to help health regions build capacity for evidence-based decision-making.”*

- *“The purpose was to build capacity for doing basic research and systems/business analysis and to improve decision-making from an evidence-based practice standpoint.”*
- *“It provides the ability to help an organization get better at critical questioning and thinking.”*
- ***Has led to new networks involving SEARCH participants and academic based researchers***
 - *“SEARCH helped build connections or networks with other people including other SEARCH participants and university based researchers.”*
 - *“It helped create a network among SEARCH participants across the regions.”*

How much, and which parts of the organization do you feel SEARCH has had an opportunity to influence?

Responses varied considerably.

- **Community or Public Health Sectors:** Twelve (40%) informants (from one UC², four RCs, three RAs) reported that SEARCH influenced the community or public health sectors the most compared to other service sectors in the region, based on the type of projects undertaken. Several commented that SEARCH's impact on organizations may have been more significant if it had more influence on acute care decision-makers, given the relatively large proportion of operating dollars available in acute care.
- **Research Advisory Committee Involvement:** Informants from two regional centres and one rural area identified the establishment of Research Advisory Committees which included former and present SEARCH participants as active members. These committees have ultimately increased the awareness of the importance of research across the organization. The committees also provide an infrastructure/framework to critically review research proposals/projects.
- **Individual Participant Influence:** Five informants (one UC, three RCs and the PHA) commented on the influence on the individual participants, noting that a number of them have since moved into positions of increased responsibility in other areas within the organization or have left the organization.
- **Raised Awareness/Culture:** Four informants (one UC and one RA) felt that participation in SEARCH helped raise the general awareness of the need for best practice evidence. One of these informants noted that there was very little understanding of or profile for the program until SEARCH III, and that their SEARCH III participant was the first person from acute care to participate. Another informant commented that the SEARCH experience had helped them to change their organizational culture through the integration of research processes into “everyday thinking”.
- **Influence on Senior Management Decisions:** Informants from three rural areas identified very significant influences on the senior levels of the organization and across all sectors in the areas of strategic planning (priority setting), health service utilization, and program evaluation frameworks for application across the organization.

² UC = urban centre; RC = regional centre; RA = rural area; PHA = provincial health authority.

Informants also listed factors that affected the ability of the SEARCH program to influence the organization. Two informants from the same regional centre felt that their organization's structure did not enable effective influence because SEARCH participants reported to the region's research structure, which was primarily dedicated to addressing specific questions within a small part of the public health domain. Therefore, research was not legitimized at the organizational level. Two other informants (from one RA and one RC) felt that there was too little support or understanding from senior management or the Board to amount to any real impact. Impact occurred more at the department or program level and depended on individuals calling upon SEARCH participants for assistance. One other informant, from a rural area, recalled the region's original strong support for SEARCH and noted a gradual decline in objective planning and evaluation over time due to shrinking operational resources and increasing acute care pressures.

One informant, from a large urban centre, who supervised two SEARCH graduates after they had completed the program, could not identify any specific influence that could be attributed to SEARCH. Another informant, from the other large urban centre, indicated that participation in SEARCH I achieved little impact, that there was no participant in SEARCH II, and that it was too soon to comment on the impact of SEARCH III.

Primary Outcomes

Table 3 is a summary of the ratings assigned by informants regarding the achievement of SEARCH program outcomes.

Table 3: Primary Outcome Results

Outcome	Significant	Somewhat	Low or Not at all	Not sure or Can't comment
Facilitated identification of priority health issues	15 (50%)	1 (3%)	10 (33%)	4 (13%)
Increased knowledge and skill levels of SEARCH participants	28 (93%)	1 (3%)	0	1 (3%)
Increased collaboration with individuals in Alberta	27 (90%)	0	2 (7%)	1 (3%)
Increased collaboration with organizations in Alberta	13 (43%)	5 (17%)	6 (20%)	6 (20%)
Increased access to resources	28 (93%)	0	2 (7%)	0
Promoted supportive attitudes and values (for research/evaluation)	17 (57%)	3 (10%)	8 (27%)	2 (7%)
Assisted with information identification	16 (53%)	7 (23%)	4 (13%)	3 (10%)
Influenced decision-making	11 (37%)	5 (17%)	12 (40%)	2 (7%)
Facilitated health research and evaluation activities	17 (57%)	4 (13%)	8 (27%)	1 (3%)

SEARCH has influenced the identification of priority health issues.

Here there were some discrepancies in ratings among informants from the same region (e.g. one UC, two RCs and three RAs). With the exception of informants from one rural area, informants who were more closely involved in specific projects or who supervised SEARCH participants tended to rate it higher than those who were more indirectly involved or those at more senior levels of the organization. One informant from a rural area, who had supervised SEARCH participants, felt that the influence in this area was seriously hampered by the lack of buy-in or value from senior management and the Board. In contrast, that informant's colleague, who was also an informant, felt that the SEARCH participant they supervised contributed significantly in identifying priority issues through the various business reports and performance measures.

Fifty percent (50%) of all informants (one UC, four RCs, five RAs and PHA) felt that SEARCH made a significant contribution in identifying priority health issues through the use of data and information from specific SEARCH projects. They also identified the contributions of SEARCH program graduates who assisted with strategic planning, annual business plans, and validation of health priorities identified by the organization. Seven informants recognized the SEARCH program as providing valuable skills for assessing community health issues and service needs (three RAs, PHA, two RCs). Three SEARCH projects (the Post-Partum Depression Scale Project, the Early Maternity Discharge Project and the Health Indicators Project) were repeatedly cited by informants from one large urban centre and three regional centres as providing useful information. They also noted that SEARCH program graduates were more likely to be closely connected to senior management or key decision-makers in the organization.

The ten informants who felt that SEARCH had little influence on the identification of priority health issues fell into two groups. One group, consisting primarily of informants from the two large urban centres and one regional centre, identified that other processes for priority health issue identification had been well established prior to SEARCH. The other group of informants, from two rural areas and one regional centre, felt that SEARCH's potential for identifying issues was not realized, either because of lack of buy-in from senior management teams or because SEARCH graduates were not connected to strategic or business planning structures/processes. Two of these informants (one RC and one RA) were uncertain of the impact that could be attributed to participation in SEARCH. They felt that a lot of this had been done prior to SEARCH.

SEARCH has influenced the knowledge and skill levels of SEARCH participants:

Twenty-eight (93%) of the informants identified that the SEARCH program has enhanced the knowledge and skill levels of SEARCH participants in research and evaluation. Specific comments included:

- *“Yes, all participants gained an appreciation about research and its use.”*
- *“All our participants are now capable of critically reviewing research proposals.”*
- *“All our participants showed considerable increase in knowledge.”*

- *“None of the participants were researchers before, but they saw a need to learn and succeeded.”*
- *“She now knows where and how to access data.”*
- *“This was definitely SEARCH’s biggest benefit ... building individual capacity.”*
- *“She learned about new databases and how to do literature searches.”*
- *“The SEARCH program gave her a step-by-step, logical approach to answering a question.”*
- *“Our only participant became the Health Research Officer for the Region. We did not need to participate in subsequent rounds of SEARCH because of her abilities, her strong networks, and support from SEARCH participants in other regions. She meets all of our needs.”*
- *“Particularly during SEARCH I when few were proficient in computer technology.”*
- *“She was utilized by the organization much more after she graduated from the program ... her skills continue to grow.”*

However, six informants (three RCs and one UC) also noted that the participants had previous Masters level training. They found it difficult to specifically attribute skills and knowledge to SEARCH participation over previous educational experiences.

Only one informant from a large urban centre felt that they could not assess this outcome because they were not directly involved with any of the participants.

Collaboration with individuals within Alberta:

Twenty-seven informants (90%) identified that SEARCH participants are engaged in networks with their peer SEARCH program colleagues across the province. The informants commented on the value of this network for benchmarking information and experiences, handling ethics reviews, and accessing information resources. Informants who were former SEARCH participants and who came from smaller rural regions noted the “social camaraderie” of this network was a significant benefit, in addition to valuable information/data sources. Two informants (PHA, one RA) felt that the network was valuable in breaking down barriers, particularly in more northern regions, where health professionals can experience a sense of isolation. Informants from three rural areas stated that organizations and potential SEARCH participants both see the “SEARCH Network” as a major incentive for involvement in the program. Many acknowledged that the Bi-annual SEARCH Conference was an excellent vehicle for networking and for profiling relevant research and evaluation work.

Three informants (two RAs and one RC) indicated the importance of the network with respect to Rural Physician and Early Maternity Discharge projects. However, two informants from other regions (one RA and one RC), while recognizing the active network of SEARCH participants across the province, felt that collaborative involvement on projects across regions for the purpose of integrating research into practice, had not occurred. Access to the SEARCH network tends to be limited to the SEARCH participants. Three informants (two RCs) observed that there has been no attempt on

the part of SEARCH participants to introduce the network to others in the organization, including senior management.

Collaboration with Organizations in Alberta

Overall, informants felt that there was less collaboration with organizations in Alberta than with individuals (e.g. other SEARCH participants). The Universities of Alberta and Calgary, Alberta Health and Wellness, and the Alberta Heritage Foundation for Medical Research were the organizations identified most frequently by informants. Four informants (from two RAs) identified collaboration with various community based groups and social service agencies on health promotion initiatives.

Access to Resources

Twenty-eight (93%) of the informants identified access to resources as a major benefit in participating in SEARCH. Twenty informants saw the laptops provided by the program as an important resource, particularly during SEARCH I, when staff access to computer technology was less common. Informants from smaller regions, which tend to have fewer resources available for information technology and resources, were particularly grateful for this opportunity. Thirteen informants listed additional resources, including: access to new library resources and library search engines and databases such as the Health Knowledge Network. Four informants noted the SEARCH participant network as a valuable source of information for the organization/region. Two informants identified that SEARCH raised the awareness of other grants and research funding opportunities in the organization, including travel funds and the Health Research Fund available through AHFMR. One informant from a rural area indicated that poor in-house information technology support posed a major challenge to the SEARCH participant. The SEARCH network was a tremendous aid in this regard.

Supportive Attitudes and Values

Seventeen (57%) of informants felt that participation in the SEARCH program helped to promote awareness of and value for research, evaluation, and evidence-based practice in their organization/region.

Four informants from rural areas observed that the introduction of SEARCH coincided with a new emphasis on quality improvement, program evaluation and needs assessment at the regional level. There was also a need for tools and processes for these purposes. Two informants noted that the SEARCH program was only one vehicle for raising this awareness over time. They observed that pre-regionalization (1995) Continuous Quality Improvement and Accreditation processes set the stage for best practice principles and values. SEARCH further served as a catalyst in helping organizations think more critically and objectively about what they were doing.

Four informants (two RCs and one RA) added that SEARCH's success in advancing research as part of the culture was very dependent on the support of a champion for research in a very senior position of influence within the organization. When this is the case, "*SEARCH becomes a tool to build research capacity in the organization.*" Three informants from rural areas attributed greater impact to SEARCH in the absence of other research capacity building initiatives. Some observed more of an impact on the public/community health sector than on the acute care sector.

Reasons varied among the eight informants who felt that SEARCH *achieved little* in terms of supportive attitudes and values. Four informants identified that SEARCH's

contribution was limited by its lack of promotion by and connection with senior management levels and the Board; another felt that the health region had a strong value for research prior to SEARCH. One informant was frustrated with the region's limited research agenda, which was primarily driven by an "academically motivated" researcher in the organization rather than by senior management. One informant felt that the program's outcome was highly dependent on the SEARCH participant's personality ("*needs to be outgoing and a good communicator*") and level of influence in the organization or region. Yet another informant felt that his particular region "*feared*" (or was still sceptical of) the true value of research and its implications.

One informant, who rated the outcome as *somewhat achieved*, based this rating on the need for additional SEARCH participants (a critical mass) in order to achieve a significant impact. Another informant who rated it as *somewhat achieved* suggested a variety of other initiatives that contributed to the culture, including the Family Physician Research Network, the implementation of research structures into the organization/region, and building relationships with the local university.

Identification of Current Relevant and Appropriate Information

Twenty-five informants (76%) felt that participation in the SEARCH program significantly or somewhat facilitated the identification of current, relevant and appropriate information. Informants specifically identified an increased understanding of databases and library search engines, access to the SEARCH network for benchmarking, finding literature on best practice, critical assessment/thinking skill-sets, survey construction, and finding validated tools for program evaluation.

Nine of these informants indicated that this ability was generally confined to the SEARCH participants and, in a few cases, was practiced within the participant's circle of colleagues. One informant identified that there was greater impact in SEARCH I and II.

Four informants rated the achievement of this outcome as *low*. One felt that the region, a large urban centre, had sufficient capacity already in place. Two informants from the same regional centre expected the transfer of skills and knowledge to other staff; instead SEARCH participants were identified as the sole experts in information identification and acquisition. One informant, from another regional centre, felt that the SEARCH participant was unable to relay information in a meaningful, useful or efficient way to busy decision-makers.

Decisions Influenced by Research Results

Sixteen (54%) informants rated that decisions were significantly or somewhat influenced by research results in their organization/region at some level. Informants from four regional centres and three rural areas indicated that specific projects by SEARCH participants influenced decisions in the organization. Examples included the adoption of results from SEARCH projects such as the Post-Partum Depression Scale Project and the Early Maternity Discharge Project. Informants also listed projects undertaken in their region by SEARCH participants, including:

- a Home Care Service Review (one RC)
- Tobacco Reduction and Injury Prevention initiatives (one RC)
- the development of a needs assessment tool for prioritizing health service priorities, and the development of an Asthma Clinical pathway (one RA)
- a Home Care service assessment tool (one RA)

- implementation of a new eye surgery program based on a utilization review (one RA)
- establishment of the Health Status Report Card (one RA).

Two informants from two regional centres felt that research influenced decisions were more evident in the community or public health sectors. One of these informants cited health promotion initiative funding as an incentive for establishing needs based evidence. Two informants from both large urban centres felt that this was more evident at the individual or unit level. In contrast, informants from one rural area felt that there had been a conscientious effort from senior management and the Board to move in the direction of evidence-based decision-making. In this case, the SEARCH participant played a key role in gathering and presenting evidence.

Informants who did not feel that SEARCH had a significant impact identified other factors as being more influential, including:

- the scope of authority of the individual
- political pressures external to the organization including leaders in the community
- physician influence
- the historical decision-making “habits” of senior management/Boards.

Three informants (one RC and one RA) provided examples of programs which continue to operate despite objective evaluation results which would indicate discontinuation or change.

Carrying out health research and evaluation activities

Twenty-one informants (70%) felt that participation in SEARCH significantly or somewhat helped their organizations to carry out health research and evaluation activities. They identified an increased awareness and appreciation for research and evaluation. Specifically, participation in SEARCH has enabled participants to develop and carry out health needs assessment surveys, secondary data analysis, satisfaction surveys, program evaluation, business plans, annual reports, and proposals, using appropriate methods and tools.

Four informants (two RCs and one RA) felt that SEARCH's influence was relatively low because research tended to be limited to the participant's or supervisor's research interests, rather than supporting the priorities of the organization/region. Broader involvement in research and evaluation activities across the organization has not occurred. Other informants (both UCs and one RA) felt that SEARCH's influence was low because resources needed for research and evaluation were inadequate or because these activities were relatively new and in the early stages.

Led to the creation of new positions in research and or evaluation.

Agreed that SEARCH influenced the creation of new positions	Disagreed that SEARCH influenced the creation of new positions	Not sure or unable to comment
6 (20%)	21 (70%)	3 (10%)

Twenty-one (70%) informants identified that participation in the SEARCH program had not led to the creation of new positions with a role or mandate in research or evaluation.

However, the informants from one rural area felt that SEARCH enhanced data retrieval and analysis skills of those in existing positions.

One informant from the provincial health authority identified that one of the SEARCH participants moved into a more developed research and evaluation role after completing the program.

Both informants from a rural area identified that the Research Officer position had not existed prior to SEARCH and probably would not have been created had it not been for SEARCH. The SEARCH participant currently occupies this position. They also felt that the one position was adequate given the size of the region.

The SEARCH Coordinator position in another rural area was originally created to host the SEARCH participant. The incumbent continues her role in research and evaluation for the region. One of the informants identified the desire for a similar position linked with each of the core health sectors in the region.

Another rural area created a Health Research position in response to the introduction of the SEARCH program.

Two SEARCH participants (both from the same RA) worked in the region's Health Information and Outcome Research Unit following completion of the program. This unit operated for approximately one year and was abolished during regional restructuring. It has not been replaced.

Three informants were not certain as to the origin of research or analyst positions in their organization/region.

What was your organization hoping to achieve through its participation in SEARCH?

Twenty-two (73%) informants described their organization's hopes and goals for participation in SEARCH. Eight informants (AMHB, one regional centre, two rural areas, and one large urban centre) either did not know or did not think that the organization had articulated specific hopes or goals for participation.

Four informants (one RA, one UC, PHA) felt that their organizations did not have a good understanding of the concept but did not want to miss out on potential resources or an opportunity that peers in other regions were involved in. One informant (who did not know the goals from an organizational standpoint) felt that it was an excellent professional development opportunity and presented an opportunity for more localized evidence-based decision-making.

Four informants indicated that hopes or goals for participation in SEARCH have changed over time. Initially, they were not necessarily sure what to expect from the program. They were to some extent pre-occupied with other major changes in the system, e.g. regionalization. One informant from a rural area felt that, during SEARCH III;

“the emphasis shifted from research to becoming a regional resource to help others with systematic reviews, to build the culture.”

Another informant from a large urban centre indicated:

“At the beginning, we did not have a clue but it looked interesting. We were struggling with regionalization.... Now we understand SEARCH as a vehicle for evidence-based practice at different levels.”

Another informant from a regional centre observed:

“Initially it was to develop a culture to do research and evaluation at the grassroots level. But, after having gone through accreditation and with the emphasis on quality improvement and score cards, our challenge now is to identify and track appropriate outcome measures.”

Another informant reported:

“At the time of SEARCH I it was hoped that the individual would help management make appropriate corporate/clinical decisions. Back then the participants helped at the departmental level. Now (SEARCH IV) the goal is to embrace capacity across the organization ... knowledge and skill dissemination.”

Informants identified many different organizational goals/hopes for participation in the SEARCH program:

General goals³:

- An opportunity for a small region with limited resources to increase their capacity to do research (3)
- To become part of a broad network of researchers across regions that conducts research, helps others conduct research, and provides information for evidence-based practice province-wide
- To instill a culture/awareness that embraces the need for research and best practice at all levels (5)
- To facilitate better decision-making in public and community health in order to sustain the health system.
- To move towards a more systematic approach; a best practice framework.
- To support a learning organization through knowledge and skill dissemination.

Specific goals identified:

- To help us analyze utilization data (3).
- To help us collect evidence for decision-making (3).
- To help with regional planning including priority setting.
- To validate a specific service that we felt was needed.
- To establish new partnerships (e.g. with universities).
- To identify a research framework.

To what extent was each of these hopes/goals achieved?

Significant	Somewhat	Not at all – Low	Not sure or unable to comment
13 (43%)	2 (7%)	8 (27%)	7 (23%)

Fifteen (50%) informants felt that organizational hopes/goals had been somewhat or significantly achieved through participation in the program.

³ Numbers in brackets indicate multiple responses.

Here there were some discrepancies in ratings among informants from the same region/organization (PHA, one UC and one RA).

Thirteen (43%) informants (both UCs, one RC, and three RAs) felt hopes/goals had been *significantly achieved*. One informant noted that they were still not using the skills and knowledge to the best of their ability at the very senior levels of the organization, due in part to long-standing ways of doing business. Another felt that more had been achieved in terms of planning and evaluation but less in terms of a framework for research, partly because of fiscal restraints and partly because it was not seen by all as a priority. One informant noted that the organization could only achieve so much from the two individuals who participated. Another attributed the high level of goal achievement to their champion, a member of the executive management groups, who supported both the SEARCH program and participant.

Two (7%) individuals, both from rural areas, indicated that goals were achieved to *some degree*. One informant identified the need for a much larger number of SEARCH graduates and a longer period of time to assess the program's true results. The other informant felt that SEARCH really benefits the individual more than the organization, and that senior managers still tend to be more politically motivated in rural regions.

In contrast, eight (27%) informants (from four RCs, one RA, and one UC) felt that goal achievement was *limited* or had not met their expectations. The majority of these informants did not attribute this to any weakness in the SEARCH program, but rather to the organization or region, either because of too little engagement on the part of senior management, or because of an inability to provide adequate time/resources for participants to engage in SEARCH. Two informants from the same regional centre felt that the SEARCH program did not place enough emphasis on knowledge dissemination across the organization, in order to build capacity.

Of the seven (23%) who could not comment, five informants (from two RAs, one RC and PHA) did not know of specific organizational goals/hopes, while two informants (one UC and one RA) felt that it was too early to judge because their experiences were limited to SEARCH III.

It is interesting to note that none of the informants identified any significant changes over SEARCH iterations in terms of goal achievement.

Secondary Outcomes

Table 4 is a summary of the rating assigned by informants regarding other areas which SEARCH program participation may have influenced.

Table 4: Secondary Outcome Results

Outcome	Yes	No	Not sure or Unable to comment
1. Follow-up projects arising from SEARCH	19 (63%)	11 (37%)	

2. Development of proposals in new areas	23 (77%)		7 (23%)
3. The acquisition of new/additional funding	13 (43%)	7 (23%)	10 (33%)
4. Enhanced knowledge or skills of employees not enrolled in SEARCH	22 (73%)	8 (27%)	
5. Change in policy, operations, or practice	18 (60%)	7 (23%)	5 (17%)
6. Increased recognition of organizational expertise	19 (63%)	7 (23%)	4 (13%)

Follow-up projects arising from SEARCH projects (Yes or No)

Nineteen (63%) informants identified follow-up projects or related works. The majority of informants identified ongoing use of information acquired from SEARCH projects. One regional centre continues to use the Post-Partum Depression Scale (a SEARCH project) and one of the rural areas has recently implemented it. The same regional centre also receives inquiries from other provinces about it. Informants from another regional centre referred to the Falls in Seniors Project, the Crisis Assistance Network, the Tobacco Reduction Initiative and the Workplace Wellness Project. Informants from the PHA and one rural area referred to the Tele-psychiatry Project.

Informants commented on the ongoing value of the Performance Indicators Project (two RAs); the Medication Access project (one UC); development of a regional research guide and evaluation tool kit (one RA); and the Early Maternity Discharge Project (one UC and one RC). Informants from one regional centre and AMHB indicated extensive publications and presentations by SEARCH participants of their project work.

Eleven (37%) informants could not identify any follow-up projects or works related to former SEARCH projects.

The development of proposals in new areas (Yes or No)

Twenty-three (77%) informants indicated that SEARCH has contributed to the development of proposals in some manner. Five informants (from two RCs and two RAs) remarked on the assistance provided by SEARCH participants as Research Officers or members of Research Advisory Committees. Informants also identified specific proposals/grant applications prepared by SEARCH participants (e.g. Health Canada, Alberta Cancer Board, Alberta Health and Wellness, Health Innovation Fund applications, the primary Care capacity building initiative). Informants from a rural area indicated that one of the SEARCH participants had developed an Evaluation Guide for the region while another SEARCH participant from a rural area prepared a document for staff on proposal writing.

One informant from a regional centre specifically referred to a workshop on proposal writing given by the Alberta Consulting Health Research Network in their response.

One informant from a rural area felt that proposal writing skills need to be better integrated across the organization rather than exclusively by former SEARCH participants. Three informants added that the participants were able to write proposals prior to SEARCH, however, one also noted that SEARCH perhaps sharpened these skills. Two informants from the same regional centre felt that the SEARCH participants developed proposals that served their particular research interests, but not necessarily those of the organization/region.

Seven (23%) informants could not recall any proposals that could be attributed to participation in SEARCH.

The acquisition of new/additional funding (Yes or No)

Seventeen (57%) informants did not recall any funding or were not sure that funding could be specifically attributed to participation in the SEARCH program.

Thirteen (43%) informants identified that SEARCH participants have been successful in acquiring new/additional funding in some manner. Informants from one regional centre and one rural area identified receiving funding (e.g. federal grants, Alberta Cancer Board Foundation, research grants, Home Care funds) for proposals reviewed by former SEARCH participants. One informant from a regional centre indicated that their health region received the greatest amount of funding from the Primary Care Capacity Building Initiative fund (\$4.2million). The informant attributed this to the excellent quality of proposals developed by SEARCH program graduates. Other informants from one regional centre and four rural areas also identified receiving new/additional funding from sources including AHFMR, Alberta Health and Wellness Health Innovation Fund, Health Canada Health Promotion initiatives and the Wildrose Foundation. One informant from a rural area indicated that one of the former SEARCH participants had a role in grantmanship in order to keep the organization apprised of external grant opportunities and requirements.

Enhanced knowledge or skill of employees who were not enrolled in SEARCH. (Yes or No)

Twenty-two (73%) informants felt that the SEARCH program enhanced the knowledge or skill of employees who were not enrolled in the program in varying degrees.

Informants (from two RCs and one RA) identified that SEARCH participants were able to transfer skills and knowledge more broadly either through their role on Research Advisory Committees or through their own role and responsibility for research co-ordination (four RAs) through workshops, in-services, the development of tools and guides, and providing advice. Two informants (from one RC and one RA) observed that the degree of transfer depended on the personality and role of the SEARCH participant in the organization. They noted that some participants seemed to prefer working independently on projects while other participants preferred to work with and help others. One informant from a rural area found Pub Med, literature searches, and the SEARCH Light publication to be extremely helpful to staff. Another informant from a regional centre identified the transfer to be more obvious in the case of SEARCH I and II, and less so in subsequent iterations (dose effect).

Five informants (both UCs and one RA) identified that the transfer of skills and knowledge were largely confined to the participant's immediate circle of colleagues/work associates.

Seven (24.1%) informants (both UCs, two RCs and one RA) did not feel that the knowledge or skills of other employees have been noticeably enhanced. One informant felt that this requires a champion at the helm who understands the value and application of research. She observed that many in that rural region view *“health promotion or research as someone’s job rather than everybody’s job.”* Others felt that the experience has been very limited. One informant questioned whether the role of the SEARCH graduate was to do research or to facilitate it. They would like to see their research unit

engaged more in the co-ordination of the development of research capacity in the organization than in undertaking research projects of limited interest.

Change in policy, operations or practice (Yes or No)

Seventeen (57%) informants attributed some change in policy, operations or practice to the SEARCH program. Twelve informants (from four RCs, three RAs and PHA) identified specific changes in programs, practice and policy.

Clinical practice/operation changes were influenced by the following projects:

- Use of Post-Partum Depression Scale (RC)
- Home Care services review (RC)
- Early Maternity Discharge Program (RC)
- Tobacco Reduction Project (RC)
- Falls Among Seniors (RC)
- Wellness at the Workplace (RC)
- New Eye Surgery Program (RA)
- Tele-psychiatry Services (PHA)
- Early Maternity Discharge Project (RC)
- Tobacco Reduction Initiative (RA)
- Rural Physician Project (RA)
- Breast Cancer and Diabetes Research (RA)
- Home Care Service Needs Assessment Tool (RA)
- Sexual Health (RC)

Corporate practices were also influenced as follows:

- Development of health needs assessment/prioritization tool for strategic planning (RA)
- Development of a Health Status Report Card (RA)
- Identification of key performance indicators (RA)
- Development of program evaluation guide (RA)
- Annual Health Of The Region Report (RA)
- Various Program evaluations (Regional Immunization Program, Cardiac Rehab Program, Home Care RIT Tool (RA)

Thirteen (43%) informants did not feel or were unsure that the program affected change in these areas. One felt that this was because SEARCH participants were never linked to decision-makers. Another felt that change was highly dependent on the authority of the SEARCH participant in the organization, and to what extent they are “an opportunist.”

Increased recognition of organizational expertise (Yes or No)

Nineteen (63%) informants felt that there was increased recognition of expertise. However, the type and audience identified varied widely across the group.

Five of the informants (both UCs, one RA and PHA) identified that recognition of expertise was generally limited to the unit or department that the participant was working in.

Three informants (two RCs and one RA) specifically identified that the expertise of SEARCH participants is recognized throughout the region, e.g. as research officers or advisors on research committees. Another informant from a large urban centre indicated that the current SEARCH participant was receiving recognition for her project from across the region.

Informants from one regional centre remarked on greater recognition from the academic community. They noted that two former SEARCH graduates continue to publish and give presentations in North America and Europe (on community capacity indicators). In fact, they felt that there was more recognition from outside of the region (nationally and internationally) than from within.

Informants from another regional centre indicated interest and receiving calls from outside the province about the Post-Partum Depression Scale.

Two informants from a rural area reported recognition from Alberta Health and Wellness, where their work was used as an example for other regions (e.g. Health Status Report Card). An informant from another rural area identified Health and Wellness Canada and other external consultants as being impressed with some SEARCH projects.

One informant from a rural area identified that the SEARCH graduate served as a key resource person for a high level group of community leaders, representing all community services. She added that The Alberta Cancer Board has also disseminated this graduate's work. This individual was singled out by several informants from other regions for her reputation in research, noting her many presentations and awards at provincial and national conferences.

One informant from a regional centre felt that the program has contributed to a general recognition within and outside the region of the importance of taking risks and trying things out to improve performance. The region is generally recognized for its expertise in research and evaluation.

Eleven (36%) of the informants did not sense or were uncertain of any increase in recognition of organizational expertise. One informant from a rural area suggested that the SEARCH program might gain more recognition if it were marketed as an applied business-learning model similar to the Banff School of Business or the University of Athabasca model.

Can you describe how your organization/unit/program viewed the SEARCH program?

Informants (from PHA) felt that the program greatly improved the skills of the participants, but one faulted the organization for not maximizing on the potential of SEARCH participants.

One informant (RC) expressed concerns over the difficulty in relieving SEARCH participants from their duties to participate in the program, as more often than not they are in management/leadership roles.

One informant (RC) felt that SEARCH supported the development of a learning organization. The CEO established it as a tool that supports the direction the region

wants to move in. The program is very popular, and there is a very competitive recruitment process. SEARCH is regarded as a perk by staff.

Informants from five rural areas felt that the value of SEARCH appears to be greater when SEARCH participants serve in corporate functions/roles. More people at different levels within the organization/region had access to them and their skill-sets. They tended to provide more in-services and disseminate information more broadly across the organization. In a number of instances, participation in SEARCH led to changes in research, planning and evaluation processes.

Informants from one regional centre felt the program offered tremendous opportunity and was well supported by senior officials, but participants were more interested in pursuing their own research interests than those of the organization.

One informant from a large urban centre initially felt that SEARCH would be a good opportunity but cannot attribute any changes in her area of responsibility to it.

Four informants felt that they could not answer this accurately on behalf of their organization, while three informants felt that this was a repetitive question.

Can you describe the role and contribution of SEARCH participants in the organization and how that changed over time?

Fourteen (47%) informants identified significant changes in responsibility and/or career advances among SEARCH participants. Many involve promotion from a front-line position (health record analyst or public health co-ordinator position) to a management position within community health or corporate services for the region (both UCs, two RCs and four RAs). One informant from a large urban centre observed that these promotions were more a reflection of individual characteristics, e.g. leadership qualities, communication skills, prior education and experience.

One informant from another large urban centre identified that the participant who is currently engaged in the SEARCH program was considered to be a “star” in the organization. Supporting her though SEARCH was one way that the organization could recognize her contributions and value to the organization.

A potential downside for the unit/program is the relocation of the individual to another area within the organization or to another organization. Four informants reported that participants have left for other educational or career pursuits.

Eight informants (from two RCs, one UC and one RA) did not sense any change in SEARCH participant roles or responsibilities in the organization. Informants from one regional centre attributed this to a disconnect between the research priorities of the research unit and those of the organization. Others attributed the lack of change to either the absence of purposeful linkages with decision-makers in senior management, or to the presence of legitimate structures (e.g. research units) within the organization.

What support did the organization provide the SEARCH participants?

Nineteen (65.5%) informants identified some means of support for SEARCH participants.

Some forms of support occurred while participants were engaged in the SEARCH program, while others continued beyond the program. Examples given included:

- Integration of SEARCH participants with the region’s Administrative Residency Program. This provides all residents in health and business administration graduate studies with opportunities to link directly with senior management for the purpose of presenting projects and attending presentations given by key speakers in the field.
- The establishment of a regional Research Advisory Committee where participants are exposed to different types and levels of research proposals.
- Many identified on-going support to attend SEARCH meetings and annual SEARCH Conferences. One informant indicated that a participant was supported to attend other conferences (out-of-province) to give that individual more exposure and extend their networking opportunities.
- Facilitated access to other individuals in the organization.
- Protected time to engage in SEARCH projects.
- Assistance with the Ethics Review Process, which was much more complicated than anticipated.
- Videoconferencing.
- Mentoring support.

Three informants could not recall specific support while four informants said that SEARCH participants were largely left to their own devices to develop networks and find the information they required. One informant felt that it was too early to say, while two informants felt this question was repetitive.

Overall, how satisfied is your organization (unit) with SEARCH’s contribution to your organization (unit)?

Significantly - A great deal	Somewhat	Not at all – Low	Not sure or unable to comment
18 (60%)	2 (7%)	3 (10%)	7 (23%)

Eighteen (60%) informants indicated that they were very satisfied with SEARCH’s contribution to the organization. Four informants, however, felt that the impact could have been greater if SEARCH had been better supported by senior management and more closely aligned with their business needs/priorities (two RCs and PHA). One added that it did not lead to building capacity in utilization of research or program evaluation, which are two business priorities (one RC). One informant from a large

urban centre felt there was still more work required in the dissemination of research into the broader organization.

One informant from a rural area, who was somewhat satisfied with SEARCH's impact, reported that while there were some short term benefits to the organization, sustainable changes to how the organization does business did not occur.

Three informants, all from different regions, were less satisfied with SEARCH's impact at the organization level. One informant from a regional centre felt that it had a much greater impact on the individual participants. Another informant from a rural area felt that more time is required for proper assessment because it takes longer to influence change and thinking. They suggested that participant projects should be aligned with organizational issues to ensure ongoing support. During SEARCH I, their participants tended to choose projects that they were personally interested in rather than projects that reflected the interests of the organization. The third informant from another rural area felt that the positive impact on the organization/region during SEARCH I had diminished over time, and attributed this to changes in regionalization, leadership, and financial difficulties.

Seven (24.1%) informants did not provide a satisfaction rating. Three (one RC, one UC, and one RA) felt that their personal experiences with the program were too limited to make a fair assessment of satisfaction. Two informants (RA and UC) felt that it was too early in the process (SEARCH III) to assess. One informant from a different rural area felt that they could not distinguish participant attributes from SEARCH program attributes because their participants tend to be high performers and good communicators.

How important would you say SEARCH has been in influencing your organization's ability to use evidence in decision-making relative to other programs or opportunities designed for this purpose? (Rate 1 to 7)

Significantly - A great deal	Somewhat	Not at all – Low	Not sure or unable to comment
9 (30%)	3 (10%)	4 (13%)	14 (47%)

Fourteen (47%) informants were not sure or could not compare SEARCH to any other programs or opportunities.

One informant from a regional centre felt that there may be merit to recruiting people with the desired skill-sets, citing the Masters in Public Health postgraduate degree as likely providing a broader knowledge of health care and research. He was not sure how the two programs compared in terms of contacts or links with universities.

Another informant from a large urban centre felt this question was very difficult to answer because different types of decisions are constantly occurring at different levels within the organization. *“So much involves knowledge brokering/transfer. One person cannot do it all. You need a team of people to identify the need, identify data sources, and collect, analyze and interpret the information. Ultimately your level of influence or authority in the organization is very important.”*

Another informant highlighted the many factors impacting decision-making in rural regions, including the influence of local community leaders, economics, and

sustainability issues. One informant indicated that the region was in the process of hiring an evaluation team. Another felt that with so much recent change, it was difficult to attribute changes in decision-making to the SEARCH program.

The majority of the nine (30%) informants who felt that SEARCH had a significant influence did not compare it to other programs. Comments were made acknowledging:

- the ongoing nurturing, support and celebration of the participants.
- the good connections among participants across iterations.
- being introduced to the Health Knowledge Network Database.
- the ongoing usefulness of some of the projects (e.g. indicator development).
- the value of the annual oral and poster presentations.
- the program's ability to reduce staff fears over doing research.
- the program's influence on a culture that values research and evaluation.

Only two informants compared SEARCH with, and preferred SEARCH to, other long distance learning and workshop based programs.

Four informants rated SEARCH's influence on decision-making as being relatively low. One informant identified the on-line Health Canada Epidemiology Surveillance Program as a useful program. One felt that SEARCH's impact was limited by the lack of integration into decision-making at higher levels of the organization. Another informant felt that the program cost the organization too much in terms of time and resources, and that its focus was more on the individual than on the organization. This informant felt it was not reasonable to engage many people in the organization in the SEARCH program, and that participants should be in roles which complement SEARCH learnings.

Have there been any unanticipated consequences (positive or negative) from your involvement in SEARCH?

Seventeen (57%) informants identified some unanticipated positive or negative consequences from participating in SEARCH.

Eight informants (from both UCs, three RAs, and two RCs) commented that the demand on the participant's time was greater than anticipated. Backfilling positions can be difficult. It was a real challenge for organizations to replace people of this calibre or to redirect duties during the program. Different parts of an organization can handle absences differently. In general, it was easier to release those individuals whose primary role or function in the organization related to research and evaluation. Another informant from a regional centre added that SEARCH appears to be designed for ambitious individuals with professional degrees who are interested in information management. The informant felt that some web-site training programs are more user-friendly, allowing individuals to work at their own time. One informant felt that AHFMR had been clear about its expectations, but that the organization was not really supportive of this level of time commitment.

One informant commented on resentment from peers, who felt that *"they (SEARCH participants) were just going to the big city for some fun, while others stayed behind to work."*

One informant identified that SEARCH was a bit of an unknown in the organization, particularly in the beginning. It was not clear how research questions were selected. The selection process did not seem to involve the organization.

Two informants from the same regional centre assumed that projects would have been more closely aligned with organizational needs, and they felt research was instead driven by the SEARCH participant. There should have been more organization-legitimized research. These informants became frustrated when they learned of projects done in other regions which would have been of greater interest to them.

Two informants commented on the complexity of the Ethics Review processes, particularly those involving group projects.

One informant commented on the lack of administrative support and questioned the Ethics Review process. She felt that SEARCH's training phase was good, but that projects were overall too demanding and should have been of lower impact or smaller in scope. Clinical supervisors within an organization do not have the research expertise to serve as mentors for this scope of project. More supervision should have been provided by the Faculty. The informant suggested that senior members with research experience within the organization or, alternatively, Faculty members should serve as mentors and provide close supervision.

Seven informants identified the following unanticipated benefits:

- The wealth of information provided through the SEARCH networks.
- Former participants identified belonging to a *“community of dear friends”* (the SEARCH network).
- SEARCH was viewed *“as a perk by staff.”*
- SEARCH was regarded by management *“as an investment to advance the career of a valued employee.”*
- The amount of recognition that the participant and the region attracted from other regions.
- *“We now have a new program and our thirst for research continues.”*
- *“The excellent support from the academic team, a provincial program, very well organized program ... if you took SEARCH away there would be a huge public outcry.”*
- Linkages with other community based partners/associations.

Thirteen (43%) informants did not identify any unanticipated consequences.

What advice would you give to other regions contemplating participation in SEARCH?

Informants were generally positive about the SEARCH program and would encourage contemplating participants to engage in the program.

Comments generally fell under three themes:

Organization Needs and Priorities:

- Assess the region's strengths and weaknesses in terms of capacity for evidence-based decision-making and for evaluation to determine the specific

need for participation in SEARCH (strategically assess the potential value of SEARCH from the organization's perspective).

- The organization should take a lead role in the identification of projects to ensure they are aligned with organizational goals and priorities. The organization must engage fully and understand the nature and details of projects.
- Learn about the potential benefits of the SEARCH program from past projects to determine what the organization could potentially achieve.
- SEARCH may be of greater benefit to rural regions where opportunities and research expertise are generally more limited.
- SEARCH may offer greater benefits to the Public Health sector where there are comparatively fewer guidelines and benchmarks.

Participant Selection

- Select individuals whose roles/functions in the organization align to what SEARCH offers to ensure ongoing and sustainable learning (e.g. Planners, Health Information analysts, and Quality Improvement specialists rather than direct care providers).
- Individuals should be effective communicators and be able to teach/inform others.

Organizational Support

It is imperative that the organization provide support in terms of:

- Protected time for participants to properly engage in the program. The employer must fully understand the time commitment.
- A supervisor who is dedicated to the concept, who can coach and mentor the individual through the program, and who has a clear understanding of project details and outcomes.
- Linking the participant into the organization, preferably at the senior management level, so they are able to have a real impact on decision-making.
- An individual in a position of influence and authority who serves as a champion within the organization to ensure buy-in from senior administration and the Board.
- Clerical and IT support (if required).
- A strategy for sustaining acquired skills and knowledge, e.g. establishment of research and evaluation units or positions.
- Understanding Ethics Review processes and implications.
- Realising that optimum benefits will require a critical mass of people with these skill-sets and knowledge, plus adequate time (five to ten years).

What recommendations would you make to AHFMR about potential roles it may play to improve an organization's capacity to use research knowledge in their operations?

Eight informants offered no suggestions and were very satisfied with AHFMR's role and organization. One informant felt that the program should be doubled to enable more participation.

Twenty-one (70%) informants offered suggestions as to how AHFMR might help organizations improve research capacity. Comments can be summarized under the following themes:

Needs Assessment

- With the recent change in regional boundaries, it is timely for AHFMR to discuss specific needs and capacities in this area with each region. AHFMR needs to understand what research talents and infrastructures are in place in the new regions.
- There may be new opportunities for population health research given the larger regional population bases. There may be an opportunity to explore the possibility of teaching health units where SEARCH participants and students in graduate studies could do focused work in health assessment and population health research. Alberta currently does not have a strong population health program.
- AHFMR should explore specific interests in this area with individual regions.

Project Focus and Support

- SEARCH projects should be based on organizational needs and priorities. AHFMR should engage organizations in the process of project selection.
- Continue to provide organizations with methodologies, frameworks, tools, and guidelines for evaluating programs.
- It is of critical importance to maintain ongoing faculty support and mentoring from the Universities of Calgary and Alberta. Build new linkages with other schools including the University of Lethbridge and research organizations such as the Alberta Child and Family Research Centre.
- Be clear with regions about expectations of the organization and of the participant.
- Develop a strategy for broader dissemination of projects and results to decision-makers at the senior administrative and Board levels.
- Disseminate information in a more concise and user-friendly manner so practitioners can also benefit from the latest evidence.

Opportunities for Collaboration

- AHFMR could lead the development of a mechanism for more collaboration on answering inter-regional questions.
- Survey rural regions for common areas of interest to ensure more efficient use of limited resources.
- There should be more collaborative working opportunities for the SEARCH network at the provincial level to develop a provincial resource. This remains a largely untapped resource!
- Present SEARCH project results at annual meetings where health authority CEOs and Board Chairs are present.
- There needs to be a more formal relationship between AHFMR, Alberta Health and Wellness and the Regional Health Authorities involving the setting of guidelines for dedicating a portion of the annual operating budget towards research.

Recognition by the Academic Community

- The SEARCH program should be linked into a degree granting process that is recognized towards a master's degree. The academic community will not currently recognize work of this nature.
- Consider how participants can develop their skills further without having to quit and return to graduate school. Perhaps link to Masters level courses in statistical analysis, survey design, project management, organization development, and interdisciplinary team development.

Other Comments

Five (17%) informants offered additional comments.

- One informant felt that it was very difficult to infer cause and effect with respect to the SEARCH program. She noted that the past six years had been very tumultuous and that the region had experienced at least three re-organizations. SEARCH's overall impact was small given its relatively large size and the magnitude of resources dedicated to evaluation and research. She felt that an effective way to raise SEARCH's profile in the region would be to involve someone very senior from the region to participate on the Steering Committee.
- One informant observed there has been a vast improvement in the quality of information presented to senior executive management in general.
- One informant felt that the concept of SEARCH was very good but the challenge was having adequate resources to carry it out. The acute care sector tends to move quickly and has intolerance for long research projects. They need quick responses to questions.
- One informant was not certain that the SEARCH program should continue, suggesting that there needs to be a proper assessment of regional and provincial needs to determine how to obtain the greatest value.
- One informant felt that any committee examining the future of the SEARCH program should include sceptics as well as supporters.

CONCLUSIONS AND DISCUSSION

In reference to the three program evaluation questions, it can be concluded from the interviews that:

1. To what extent has SEARCH been able to meet the goals of its partners?

The majority of organizational sponsors were satisfied with SEARCH's contribution to their organization, but fewer than half felt that their organization's goals and hopes for participation in the program had been significantly achieved. Those who were less satisfied with the results or who felt that goals and hopes had not been achieved to any observable degree tended to attribute this to a lack of purposeful engagement at the senior management decision-making level. Informants who reported a high degree of satisfaction associated it more with the quality of skills and knowledge that SEARCH had imparted on individual participants through its excellent academic training program and unique networking opportunities.

Positive experiences were most often associated with those program participants who had been involved in projects that were of relevance to the larger organization (e.g. Community Health Needs Assessment, Health Indicators, Early Maternity Discharge Project, Workplace Wellness). Less positive experiences resulted when projects were primarily designed around the interests of individual participants.

The participants themselves typically worked in complementary positions in the organization in planning, quality improvement/education, data/information analysis and evaluation. Many already had post-graduate education when they participated in the SEARCH program, and many were recognized as demonstrating "leadership" qualities and initiative prior to participating in SEARCH. The participants tend to move up within or out of the organization. In many cases, they become members of a designated research unit or assume regional responsibility for planning, research or evaluation-related activities.

Satisfaction and goal achievement were also related to some extent to the level of influence and authority of the participant's supervisor. In other words, SEARCH's contribution to the organization depended to a large degree on the commitment of the participant's supervisor to the project, and on the supervisor's ability to influence senior decision-makers to take notice (a champion).

Generally, smaller urban and rural centres could more easily attribute influences to participation in the SEARCH program than their larger urban region counterparts could. In smaller centres, there tends to be fewer resources or opportunities for securing research skills. A change in the abilities of one or two people in the organization is much more visible, and can have a more profound effect than in larger urban centres, where there are generally more resources and opportunities for the generation and use of information.

2. To what extent has involvement in the SEARCH program resulted in some measure of change or outcomes for participating organizations?

With respect to primary outcome measures, the great majority of informants (over 90%) identified:

- significant increases in the knowledge and skill levels of SEARCH participants
- collaboration (networking) with other SEARCH colleagues across the province
- access to resources including computers, library resources, databases, and faculty.

Over 50% of the informants also felt that the SEARCH program had a significant impact on:

- promoting supportive attitudes and values for research and evaluation in the organization
- facilitating health research and evaluation activities
- providing strategies for appropriate information retrieval and assessment.

Fifty percent or fewer felt that SEARCH had a significant impact on facilitating the identification of priority health issues or increasing collaboration with organizations in Alberta. Thirty-seven percent felt that participation in the program had a significant influence on decision-making.

With respect to secondary outcomes, the majority of informants (over 50%) felt that the SEARCH program:

- resulted in follow-up projects based on the original SEARCH project.
- contributed to the development of proposals in new areas.
- resulted in some change in policy, operations, or practice. This included clinical practices as well as corporate practice and the review of proposals.
- enhanced knowledge or skill of employees who were not involved in the program.
- resulted in an increased recognition of organizational expertise.

Informants from three rural areas identified that SEARCH influenced the creation of positions with research/evaluations mandates. Many regions were successful in acquiring new/additional funding based on proposals prepared by or reviewed by SEARCH participants.

These results suggest that the most immediate and relatively independent benefit of the SEARCH program to the organization relates to resource (staff) development and access (information). Outcomes relating to priority health issue identification and influence on decision-making depend more on:

- the participant's exposure to or ability to influence senior management;
- the participant's role in the organization over time;
- projects which address organizational priorities and needs;
- the presence of an organizational culture which purposefully seeks to cultivate strategies for evidence-based decision-making as the way of doing business;
- the support of an influential supervisor or mentor in the organization who is closely involved throughout the participant's project;
- the ability and willingness of the participant to engage in other research activities within the organization, whether through direct participation as a designated

researcher or planner, or as a member of a Research Advisory Committee, or through the transfer of knowledge and skills to others.

Time is another important variable to consider when assessing the contribution of this type of program to an organization. A number of informants felt that it was too early in the process to unequivocally state the impact of the SEARCH program on the organization. However this may be more of an indicator of other factors such as their indirect involvement with the program, or the influence of other capacity building opportunities, or the sheer size and complexity of the organization.

3. When organizations sponsor participants in the SEARCH program, what factors are predictive or suggestive of success?

The following factors are inferred from informant interviews and case study learnings:

- Close involvement by the organization's senior executive and managers throughout the project, from the recruitment of participants to the dissemination/communication of results;
- Alignment of SEARCH projects with organizational priorities/needs;
- Targeting individuals with related roles and responsibilities in planning, information analysis, and quality improvement;
- Organizations that clearly support evidence-based decision-making as the way of doing business;
- Organizations which tend to have fewer competing opportunities for capacity building;
- The presence of a mentor/champion in the organization who can support and guide the participant, and who can expose the individual to senior management;
- The recruitment of individuals who are effective communicators and educators to ensure meaningful use of information and transfer of learnings;
- Infrastructure support for ongoing activity following graduation from the SEARCH program, e.g. Research Unit, Research Advisory Committee, dedicated resources;
- The presence of decision-making co-ordinating committees in the organization which can guide and influence the dissemination, use and incorporation of information in terms of policy and practice;
- The organization's (vs only the individual's) ability to access the SEARCH network for information and support; and
- The individual's ability (knowledge and skills) to transform information and evidence into something that is meaningful and relevant to the organization.

Reflections on the ORC model and the SEARCH program

In addition to providing answers to the three questions originally posed with respect to the program's impact on participating organizations, it was instructive to consider the ORC (Organizational Research Capacity) framework that has been developed during the process of this work, and reflect on how that model relates to the activities of the SEARCH program to date. The SEARCH program has evolved, and this framework has been developed during the past year. On a go forward basis, it will be instructive to view the activities inherent in the SEARCH framework from the perspective of the ORC

model. Appendix 5 contains some reflections on the relationship between the ORC framework and the SEARCH program.

RECOMMENDATIONS

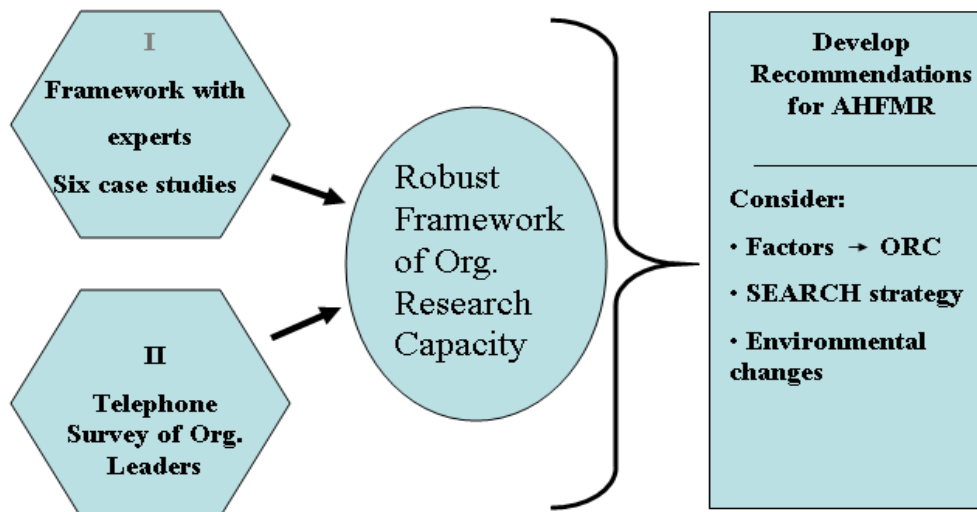
The final task of this project is to provide recommendations that will inform forward planning with respect to enhancing the research capacity of organizations in Alberta's health sector.

The recommendations which follow have been influenced by two primary sources of information:

4. Evaluation of the impact of the SEARCH program on participating organizations (the focus of this report)
4. A comprehensive framework describing factors contributing to organizational research capacity (described briefly earlier in this report and extensively in a separate document).

A schematic diagram of the process used to develop both the Organizational Research Capacity (ORC) model and our recommendations for AHFMR is shown below.

Figure 2: The Approach to Developing Recommendations



Program Planning

The SEARCH program needs to be adapted in order to respond more effectively to recent changes encountered by participating organizations (especially health regions) and to incorporate knowledge gleaned through evaluation projects looking specifically at organizational impact.

We recommend that a meeting be held with principles from all stakeholder groups (including health regions, relevant provincial and federal agencies, Councils of Health Region CEOs and Board Chairs) to discuss:

- the appropriate target unit for participation in each case, ranging from the local level (such as an individual department or service area) and the sector level (e.g., acute care, community health) to the regional and, in some cases, provincial levels.
- the most appropriate mechanism within the SEARCH program for choosing, initiating, and supporting projects that are of strategic importance to regions. A project's impact is highly dependent on the participating organization's perception that it is key to the organization and consistent with organizational goals and priorities. Despite efforts to enable this connection, there is still room for improvement.
- pro-active engagement by organizations with the SEARCH program at all phases, including participant recruitment, project identification, project status reporting, project completion, and dissemination and use of results.
- support for participants in terms of dedicated time, timely access to necessary data/information, and access to executive decision-makers. Informants identified engagement by senior decision-makers as a major factor in impact within the organization.
- Mechanisms whereby a member of the executive serves as a mentor to a SEARCH participant, ensuring effective access to key personnel in the organization who are in the best position to identify opportunities for the use of project results and the integration of these results into the organization.

Curriculum Enhancements

The SEARCH program could be improved through enhancements to the curriculum. It is recommended that the curriculum include the following:

- knowledge and skills which participants can use to develop mechanisms for engaging organizational colleagues in SEARCH projects and to expand research capacity across the organization through non-SEARCH participants.
- experience in identifying key stakeholders and organizational priorities
- experience in framing information in a way that is of use to the decision-maker. It should be consistent with the organization's specific information needs and appeal to the various audiences who must contemplate the information.

- Participants should receive formal training on sustainability relating to the implementation of change.

Collaborative Relationships/Engagement

The establishment of a network among the SEARCH community is highly valued. Links and relationships with external (to the organization) people and networks are valuable sources of information. We recommend that:

- SEARCH create new relationships with other local experts and educators (e.g. University of Lethbridge).
- Engage the participation and buy-in of other appropriate members in the participating organization to ensure awareness and appreciation of the project from commencement through completion.

Provincial Infrastructure Support

It is not adequate to examine the impact of SEARCH while attending only to what happens within an organization. Activities and relationships between organizations are also important. It is recommended that:

- A strategy and required infrastructure be developed to identify potential inter-regional/provincial study opportunities based on SEARCH network participant and organizational networks. This should lead to more visible improvements to the health system.

Evaluation of Impact of SEARCH on Organizations in Future

Although many valuable lessons have been learned from the current evaluation process, it is anticipated that future evaluation results would be viewed with much more confidence if the evaluation strategy were articulated early in the process. Although no attempt has been made to describe a comprehensive evaluation strategy on a 'go forward' basis, there are some observations worthy of note, in the event that AHFMR wishes to evaluate the impact of SEARCH on organizations in future iterations. Points to consider:

- The 'unit of analysis' (the part of the organization where it is reasonable to expect some degree of impact) needs to be clearly specified up front.
- The 'theory of action' underlying the SEARCH program design and curriculum should continue to be more explicitly articulated and used as an aid to planning a comprehensive evaluation approach. This 'theory of action' could be based at least partly on the ORC framework developed during this process.
- Consideration could be given to the development of an instrument/approach to assessing ORC which could be used routinely to assess the impact of SEARCH in a specific organization unit or sub-unit, but would also have application much more broadly. This could be done in collaboration with other agencies (such as CHSRF, which has already done foundation work in organizational capacity assessment. Neither their work nor the present work has led to a validated instrument, but perhaps enough groundwork has been done to consider doing that). Having a

validated instrument would also assist in assessing the 'pre-intervention' level of ORC. It was clear in some responses to the survey that SEARCH's lack of impact in certain areas was attributed to the fact that the organization was already performing quite well in those areas.

APPENDICES

APPENDIX A: SEARCH Program Description

SEARCH has a variety of strategies to meet its goals. These strategies are included below as they were described in the SEARCH Program Evaluation, Research and Development Blueprint developed in 2001.

Strategies were described as follows in the Program Overview document⁴:

Interactive Learning Strategy, including the residential experience and mentored research projects.

Advocacy and Consultation Strategy, working with health system and academic organizations; and with individual practitioners and university faculty members who create individual nodes of the collaborative research network. Activities in this strategy also support changes to reward and recognition strategies of universities and health system organizations.

Ongoing Support and Development Strategy, for long-term capacity of participants and their organizations.

Recognition and Reward Strategy, to enhance value of this work.

Research & Development Strategy, which highlights SEARCH's commitment to contributing to the evidence base for activities aimed at changing the culture of the health system to an evidence-based approach. Activities in this strategy may include both the research projects completed by SEARCH participants as part of their learning strategy, and contract research to develop evidence on organizational culture change.

Strategies were described as follows in letter of invitation to health organizations:

Regional support: health organizations select and support SEARCH participants and pre-select priority topics for projects.

Interactive learning modules: seven weeks of intensive residential instruction and team building.

Technology supports: state-of-the-art computer hardware and software, including a shared virtual workspace.

On-line learning and communications: a range of electronic knowledge and communication resources.

⁴ SEARCH Program Framework: Planning Discussion Document 1: Program Overview, November 2000.

Collaborative project work: at least two applied research projects by each participant, relevant to each organization, learning, and knowledge sharing.

Network of expertise: ongoing involvement in a province-wide group of like-minded individuals for collaboration, learning and knowledge sharing.

Recognition: SEARCH Program Recognition Awards acknowledge important contributions to the peer learning, mentoring, projects, teamwork, and organizational vision that make the program work.

Health organizations include the regional and provincial health authorities and private practice professional corporations who are supported by entities such as the Primary Care Research Network or the Rural Physician Action Plan. Participants from the health organizations are established health professionals from many areas in health care: nursing, family medicine, dietetics, social work, community health, health promotion, epidemiology, health inspection, mental health, and health records. They range from front-line clinicians to senior managers. Some are full time in positions focused on research, outcomes or evaluation; others integrate this way of thinking into their daily responsibilities for programs and patients. Roles have included: research/information officers, program managers, staff educators, clinical practitioners, and knowledge brokers.

SEARCH faculty mentors are health researchers and teachers from a number of different disciplines, with a wide range of expertise and interests. They come from the departments of community and public health at Alberta's universities, as well as from nursing and business; and from the private management and policy-consulting sector. SEARCH also accesses a range of provincial and national experts and contributors.

The SEARCH goals have been revised slightly since the first SEARCH program in 1996. However, the changes have not been substantive, but rather in presentation and organization. The last goal as stated in 1996 is substantively of a different nature than the first three. As this was perhaps the first time AHFMR was involved in sponsoring a program such as this, it was important to make evaluation a very clear commitment.

SEARCH Evaluation Blueprint

In the Evaluation, Research and Development Blueprint (2001), a matrix was developed showing potential areas for enquiry that would inform overall SEARCH program development and evolution.

The Current Evaluation Project in Relation to the Whole

The current project is focused on the evaluation of the impact of the SEARCH program on those entities involved in service delivery (most often health authorities).

Several other evaluation projects are underway concurrently focusing on most of the other cells of the matrix noted above.

APPENDIX B: List of Key Informants In Impact Assessment Survey

Informant	Organization/ Region	Title	SEARCH Year(s)	Direct Supervision of SEARCH participants
#1	Calgary	Director of Health Promotion & Disease Prevention	Was aware of program since commencement	No, but SEARCH participants now report to her.
#2	Northern Lights	(1)Chief Executive Officer (2)Vice-President, Health Services	SEARCH I (Did not participate in SEARCH II and had to withdraw from SEARCH III)	Yes, supervised 2 SEARCH I participants.
#3	Northwestern	SEARCH participant	SEARCH III	No
#4	Palliser	Vice-President of Community Development and Health Promotion	Involved in SEARCH I, II and III. Participant in SEARCH II moved during program. Sent no one to SEARCH IV	Yes, supervised. Participants from all 3 years (Community health sector)
#5	Alberta Mental Health Board	Director of Research and Evaluation Unit	SEARCH I, II, III.	No, was not directly involved in any projects.
#6	Chinook	Director of Women's and Children's Health (an integrated community acute care program)	Involved since SEARCH I	Involved directly in SEARCH I project.
#7	Palliser	Vice-President of Human Resources and Regional Programs	Aware of program since SEARCH I.	No
#8	David Thompson	Manager of Research and Evaluation (Public Health)	Aware of program since commencement	Yes, participants in SEARCH I and III
#9	Lakeland	Director of Health Services	Involved since SEARCH I	No, involved as member of senior management
#10	Alberta Mental Health Board	Clinical Director Tele-Mental Health Services	Involved in SEARCH I project	No direct supervision
#11	Capital Health Authority	Director, Clinical Performance, Information and Research Unit	SEARCH III	No, involved as a member of senior management
#12	Northwestern	Vice-President, Health Services	SEARCH III	No formal involvement

Informant	Organization/ Region	Title	SEARCH Year(s)	Direct Supervision of SEARCH participants
#13	East Central	Director of Nursing, St. Mary's Hospital	SEARCH II	Yes, SEARCH II participant
#14	Keeweenok Lakes	Chaired Research Committee. Responsible for long term care, special projects, quality improvement, strategic planning, health services planning	Since SEARCH I inception	Yes, SEARCH I participant. Participated in SEARCH III (for part of it). Had to withdraw due to additional responsibilities as CEO.
#15	Crossroads	Regional Director for Health Promotion	Since SEARCH I	No, only minimal involvement. Helped select participant. Has worked with SEARCH participants
#16	David Thompson	Director of Corporate Planning	Since SEARCH I	No
#17	David Thompson	Director of Public Health	Since SEARCH II	No
#18	Calgary Health Region	Director of 8 th and 8 th Health Centre, Calgary	SEARCH II	No, two participants reported to her following SEARCH. Not involved in selection of candidates.
#19	Chinook	Vice-President of Public Health and Medical Officer of Health. Chaired/co-chaired Research Committee	Since planning/inception	Has supervised all participants (SEARCH I-IV) to some extent.
#20	Capital Health Authority	Senior Director, Patient Care, Surgery/Transplant, University of Alberta Hospital	SEARCH III	Supervises SEARCH III participant
#21	East Central	Director of Development, Senior Leadership Team	Since SEARCH II	Supervised SEARCH II and SEARCH III participants
#22	East Central	Vice-President of Health Services	Since SEARCH II	No
#23	Capital Health Authority	Chief Operating Officer for RSS and Community hospitals/Executive Nursing Office**	SEARCH I	Yes, supervised a SEARCH I participant.

Informant	Organization/ Region	Title	SEARCH Year(s)	Direct Supervision of SEARCH participants
		(current title)		Since then is aware through senior executive.
#24	Lakeland	SEARCH I participant	SEARCH I participant. Helped recruit SEARCH II and III participants	No
#25	Mistahia	Senior Manager of Community Health Services	SEARCH I (No one participated in SEARCH II or III)	No, was not directly involved as a supervisor
#26	Headwaters	Executive Leader of Strategy, Communication and Research	Since inception of SEARCH	Supervised SEARCH I and SEARCH III participants
#27	Headwaters	Senior Community Health Leader	Since inception of SEARCH	Supervised a SEARCH I participant. Informant #26 reported to him as well
#28	Lakeland	Medical Officer of Health Director of Planning and Evaluation	Since inception of SEARCH	No, but was familiar with work of participants from SEARCH I and II.
#29	Crossroads	Director of Regional Community Services	Since inception of SEARCH	No, but created the position and helped select the participant

APPENDIX C: Questions For Survey Of Health Regions About The Impact Of The SEARCH Program

We are doing a survey of individuals in health regions in Alberta who have some familiarity with the SEARCH program. As you may know, this program has been supported by the AHFMR for the past several years. Your name was suggested to us by one of the SEARCH participants that worked with you at some point in the past six years.

The purpose of the survey is to assess what difference the program has made in health regions. We are interested in learning how the program has influenced your organization generally (e.g. not limited to the specific activities that may have happened with respect to one or more SEARCH projects).

Contextual information:

1. In order that we might understand your responses accurately, could you please tell me what your experience with or exposure to the SEARCH program has been (e.g., how long have you known about it, and what has been your involvement?)

Your relationship to SEARCH participant and Senior Management? Involvement of informant in SEARCH sponsored activities (e.g. attendance at annual meetings, etc.)?

1. Can you describe what the SEARCH program has included from your point of view?
1. How much, and which part(s) of the organization has SEARCH had any opportunity to influence?

SEARCH Program Outcomes:

As you may know, SEARCH is a program that was created six years ago to build capacity in the health system for producing and using research evidence to manage health services.

To this end, SEARCH may have influenced a variety of things, such as: skill in doing research, accessing existing information, and using evidence to ensure quality, accountability and innovation in health service delivery. In this section we are interested in learning how SEARCH has affected a number of activities.

Using a seven point scale⁵ (where 1 = *Not at all* and 7= *A great deal*), how has each of the following dimensions increased as a result of SEARCH? (Make sure informant is attributing to the SEARCH projects, and indicate that there is a section following where we want to ask about effects that extended BEYOND the SEARCH projects). Provide a rationale/example to support the rating.

⁵ Approach used will be asking for a numerical rating, but then asking for a narrative explanation of the basis for that rating. Similar to approach used in Marin and Bertrand Evaluation Manual: Evaluating Operations Research Utilization: Guidelines for Assessing Process and Impact. Tulane University (USAid Project)

Activity	Score
4. Identification of priority health issues	
Rationale:	
5. Knowledge and skill levels of employees (SEARCH participants)	
Rationale:	
6. Collaboration with individuals within Alberta.	
Rationale:	
7. Collaboration with organizations within Alberta.	
Rationale:	
8. Access to resources, e.g. computers, library information, etc.	
Rationale:	
9. Supportive attitudes and values.	
Rationale:	
10. Identification of current relevant and appropriate information.	
Rationale:	
11. Decisions influenced by research results.	
Rationale:	
12. Carrying out health research and evaluation activities .	
Rationale:	

13. Did your organization's participation in SEARCH lead to the creation of new positions with a research or evaluation mandate or role?

Yes No

Please explain: _____

Hopes and Goals:

14. What was your organization hoping to achieve through its participation in SEARCH?⁶
15. To what extent were each of these hopes/goals achieved? (Scale 1-7)

Other SEARCH outcomes

Now I would like to learn from you how the SEARCH program influenced things beyond the designated SEARCH projects and participants. Are you aware of any of the following outcomes that were influenced by SEARCH, although not formally part of it.

Outcome of interest	Y/N	Comments
16. Follow-up projects arising from SEARCH Projects.		
17. The development of proposals in new areas.		
18. The acquisition of new or additional funding.		
19. Enhanced knowledge or skill of employees who <u>were not</u> enrolled in SEARCH.		
20. Change in policy, operations or practice.		
21. Increased recognition from those outside of the organizational expertise in research within your unit		

To this point, I have been asking questions relating to the SEARCH program and the impact of the actions that it took. Now I'd like to focus on the reaction and response of your organization (unit/program) to the SEARCH program.

22. Can you please describe how your organization (unit/program) viewed the SEARCH program. Did you do anything differently in your (unit) as a result of the SEARCH participants and their projects?
23. Can you describe the role and contribution of the SEARCH participant(s) in the organization and how that has changed over time? (e.g. level of employee, nature and extent of involvement with health regional operations, scope of influence) (e.g. with respect to individuals) To what extent do you feel this was influenced by their SEARCH experience?
24. What actions did your region/organization take to facilitate interactions between SEARCH participants within the region or across SEARCH program iterations?

⁶ We have some knowledge of this from review of documents (See Addendum 1; have on hand for interviews.)

25. Overall, how satisfied is your organization (unit/program) with the contribution your organization's involvement in SEARCH has made to your organization? (1= *Not at all* to 7= *Very*)
26. How important would you say SEARCH has been in influencing your organization's ability to use evidence in decision-making relative to other programs or opportunities? (1= *Not at all* to 7= *Very*)

Unexpected Consequences and Future Directions:

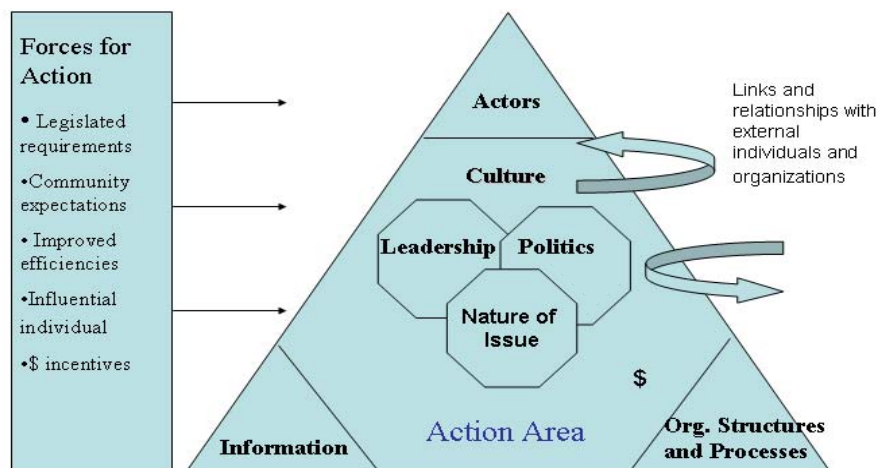
To close, I would like to ask you a few questions about unanticipated consequences and future directions.

27. Have there been any unanticipated consequences (positive or negative) from your organization's involvement in SEARCH? (Benefits and challenges)
27. What advice would you give to other regions contemplating participation in SEARCH?
29. What recommendations would you make to AHFMR about potential roles it may play to help improve organizations' capacity to use research knowledge in their operations? (Your comments about the SEARCH program specifically are welcomed but don't feel restricted to that program.)
30. Is there anyone else in your region that you think we should definitely talk to get a complete sense of what the SEARCH program has meant to regions?
31. Do you have any other comments?

APPENDIX D: The ORC Framework and the SEARCH Program

Comments linking the SEARCH program activities to the various components of the framework follow. The descriptive comments about the various framework components are provided along with interpretive comments in italics.

Figure 1: Organizational Research Capacity Model



Forces for Action These refer to those events or influences which cause the organization to 'attend to' a particular area.

The SEARCH program was initiated at a time of great change in the health system in Alberta. Key leaders at AHFMR and elsewhere recognized the opportunity to introduce change which was consistent with a move to 'evidence based' and more effective health care delivery which also overlapped with the mandate of AHFMR to support the impact of health research on Albertans. On an ongoing basis, despite focused efforts, there remains a sense that projects done by SEARCH participants are not 'central' to the interests of most employing organizations. Enhanced efforts to understand what forces for action are really at play in health authorities may help to support SEARCH participants in choosing projects that are seen as central to their employers.

Links and Relationships with External Individuals and Organizations External links were often the source of information. Personal relationships and mediated routes (i.e. internet) are key.

This dimension has been absolutely central to the SEARCH curriculum. Residential modules with colleagues from other regions and faculty from several faculties; computer hardware and software which brings the power of the internet to SEARCH participant's

desktops, have been acknowledged in several evaluation initiatives as key contributions of the SEARCH program.

Three anchors: Actors, Organization Structures and Processes, and Information

Actors Actors can be individuals (such as a person holding a particular position in the organization), but consideration of ‘groups’ of actors (e.g. physicians) is also part of the mix which influences action in an area. If senior managers are closely involved in the issue, action is more likely. If there are individuals with specific responsibilities for research or relevant areas (e.g. planning, information analysis, quality improvement), action is enabled. Individuals with excellent communication skills enable progress.

In essence, the mechanism of action fundamental to the SEARCH program is to intervene primarily through one group of actors (i.e. mid managers and professionals engaged in the health delivery system). There has always been a conscious attempt in the SEARCH program to engage influential people (CEOs and supervisors of SEARCH participants) and these efforts have been greatly enhanced in the recent iterations. This direction is important. In the course of doing this work, some skills have been identified that it is important for an individual SEARCH participant to have e.g. the ability to frame and present information in such a way that it ‘makes sense’ to the recipient of the information. The assertion that if there are individuals with specific research responsibilities within regions that action is enabled is noted; in some sense, SEARCH has created that ‘presence’ with some regions (usually smaller regions). It is not clear whether it is possible (or appropriate) for the SEARCH program to identify the creation of positions with research responsibility in regions as a goal. There are many other factors at play here.

Organizational Structures and Processes In essence, this refers to those aspects of an organization that one can ‘touch and feel’. Co-ordinating committees, research policies or expectations of senior executive are examples.

A deep understanding of the organizational context within which a SEARCH participant works is central to efforts to influence the use of research knowledge in decision-making. This aspect of research uptake has been strengthened in the SEARCH curriculum in recent iterations.

Information Information is key to ‘research transfer’, as the results of research processes often materialize as information in one form or another. Information did not emerge as strongly as some other components of this model through the case studies, but given the particular focus of the model, it remains as an integral component.

Access to information has also been a central component of the SEARCH program, and considerable effort and resources (and development work) have been an integral part since SEARCH I. Interestingly, this aspect has been much more predominant in the SEARCH program than it was profiled in the other work that has been done in the process of developing this framework. Most attention has been paid in the SEARCH program to making external and codified knowledge available to SEARCH participants. It could be argued that less attention has been paid to the ‘tacit’ knowledge that is inherent in participants and their colleagues; and perhaps

inadequate attention has been paid to understanding the usual means by which decision-makers access, assess and incorporate knowledge into their thought processes. There is interesting information about this aspect emerging from the Research Utilization Surveys being lead by Rejean Landry from Laval, and done in Alberta.

Action Area This is the focus of attention and where decisions are being actively taken on a specific topic. It represents fluid and intangible dimensions e.g. organizational culture. Resources often come into play as 'enablers' in the action area.

Leadership In every case study, leadership was central to the action process. Leadership included such things as clear executive leadership through business plans; putting the focal issue on the agendas of key committees, and guiding participative processes.

It could be said that the leadership issue has been the 'sleeper' within the SEARCH program agenda. In the case studies, leadership was clearly a central factor in having research evidence incorporated into decisions and subsequent operations. Although leadership as an explicit topic has not been on the SEARCH agenda, participants have reported (in other evaluation work) that enhanced leadership abilities has been an important outcome of their participation. So, although perhaps unacknowledged within the program, it has been an unintended consequence, and apparently a very important one.

Leadership by the participating organizations is also important. Leadership is relevant at many levels. Some regions were rather 'passive recipients' with respect to the SEARCH program. Others proactively engaged with the process and tried to capitalize on the opportunity it presented to move forward on important strategic initiatives.

Politics. Social relations involving authority or power are inherently part of decision-making processes in complex organizations. Politics are often closely intertwined with leadership dimensions and characteristics of various actors (either individual or groups).

Politics and understanding the context within which SEARCH participants work has been a larger part of the curriculum recently. It seems essential for actors within a delivery organization to have an excellent sense of respective roles and influencing ability of the various players in the region.

Nature of Issue: If the issue under scrutiny is tightly coupled with organizational priorities, effective action is more likely.

If one reflects on some of the topics that have caught the attention of participating organizations in the recent past, it seems clear that having SEARCH participants engage in topics that are strategically important to regions helps to ensure their impact. Two examples of this are the health indicators project which was initiated during SEARCH I. Health authorities had just been created and charged with assessing needs of their population. This project supported that mandated direction in a direct way. Another example is the Taber Primary Care project in the Chinook Region. This project has a high profile in the region, and several SEARCH

participants have been involved in it. In this particular case, some of the impetus for having SEARCH involved has come no doubt from the region itself, which reflects the initiative taken by the region to take advantage of opportunities to support innovation.