

The Swift Efficient Application of Research in Community Health (SEARCH)

Project Tracking Report

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Submitted to:



Submitted by:



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Highlights from Interviews with SEARCH Participants

- ✓ **Project findings have been applied by SEARCH participants and their organizations.**

SEARCH project findings have been applied at various levels both within and beyond organizations. Findings have been applied by individual practitioners, departments, and entire organizations. Findings from some SEARCH projects have helped to shape the development of the overall health system in Alberta. However, examples of how project findings were used at higher levels (e.g., the overall health system) were less frequently provided than examples of application at the individual program level.
- ✓ **Project findings were often used to plan, implement, and modify individual programs and services.**

The majority of examples provided to illustrate the application of findings from SEARCH projects were at the individual program delivery level of application. For example, participants described the use of SEARCH project findings to plan, implement, and modify the delivery of individual programs and services.
- ✓ **Skills developed through the process of completing SEARCH projects were applied extensively in practice.**

Interview participants reported that the skills developed through the process of completing SEARCH projects were used extensively (e.g., literature search skills and knowledge of the research process). The *process* of learning how to conduct research was often reported as more important than the *outcome* or specific findings of a given SEARCH project.
- ✓ **Several factors facilitated the application of SEARCH project findings. These included:**
 - organizational support;
 - organizational culture;
 - resources to support project completion, dissemination, and application of findings;
 - participant characteristics (e.g., level of authority, interest, and motivation);
 - politics;
 - timing;
 - leadership;
 - key player involvement and buy-in;
 - nature of project findings; and
 - “fit” between the individual SEARCH participant (e.g., interest, motivation, autonomy) and the sponsoring organization.
- ✓ **For future consideration and program planning:**

SEARCH participants recommended the ongoing development of guidelines and standards regarding the requirements and expectations for SEARCH projects, as well as timelines to monitor project progress and completion.

Executive Summary

Purpose

The purpose of the current project was to assess the extent to which SEARCH projects initiated during the first two iterations of the SEARCH program (i.e., SEARCH I and II) have been applied or used in practice. The project also assessed the extent to which SEARCH projects have made a difference for participants, their organizations, and the overall health system.

Methods

Primary data collection was conducted via in-person interviews, telephone interviews, and/or e-mail communication with previous SEARCH participants (depending on the preference, geographic location, and availability of each participant). Additional information gathering (secondary data collection) included a review of existing data sources, websites, and selected SEARCH project reports.

Participant Response Rate

Overall, 77% of SEARCH I and II participants (n=37) participated in the current evaluation. This included 8 in-person interviews, 26 telephone interviews, and 3 e-mail responses.

Findings

Verification and Supplementation of Existing Database Information

Participants provided verification and supplementation of existing database information regarding SEARCH I and II projects (e.g., completion rate, project methods, scope of analysis, and availability of final reports). In some cases, participants reported additional projects undertaken during the SEARCH program not identified during the secondary data review. Not all projects were formally completed as initially envisioned by SEARCH participants; however, various stages of project completion were described.

Facilitators and Barriers to Project Completion

Factors that facilitated project completion included: protected time, organizational support, committed group membership, participant characteristics such as previous research experience, motivation and interest, faculty support and encouragement to complete projects and/or submit findings for publication, and the availability of resources to work on projects (e.g., travel costs to meet with group members) and to disseminate findings. Factors perceived as barriers to project completion included: lack of protected time, lack of organizational support for the project, inconsistent/undedicated group membership, participant characteristics such as lack of experience or significant professional and/or personal role changes during the program, lack of program deadlines/contingencies for project completion, and lack of resources to cover project expenses.

Dissemination, Application and Use of SEARCH Project Findings

SEARCH project findings were disseminated to a broad range of audiences (e.g., community coalitions, community groups, non-profit agencies, corporations, government ministries, and

health regions) using a variety of mechanisms (e.g., media releases, internal presentations within organizations, conference presentations, and peer-reviewed journal publications). The extent to which project findings were disseminated was more readily described than the application of project findings. Nonetheless, most participants were able to provide insight regarding the perceived application of findings from SEARCH projects.

The majority of examples provided to illustrate the application of findings from SEARCH projects were at the **individual program delivery level** of application. For example, participants reported how SEARCH project findings were used to modify the delivery of a program for which he or she held primary responsibility.

Examples of how SEARCH projects were applied at **higher organizational levels and/or the overall health system level** were less frequently provided.

SEARCH participants also reported that the findings from SEARCH projects were not always applied in practice, but the **skills** developed through the process of completing the project were extensively applied (e.g., literature search skills and knowledge of the research process).

Barriers and Facilitators to the Application of Project Findings

Factors that **facilitated** the application of project findings included:

- organizational support for the project (e.g., management approval);
- organizational culture/atmosphere that valued evidence-based decision making;
- resources (such as funding and personnel) to support project completion, dissemination, and application of findings;
- SEARCH participant characteristics such as level of authority within the organization, “fit” with the project and individual job responsibilities, interest and motivation;
- politics and timing (e.g., strong political will for an initiative, readiness, and “good timing”);
- leadership (e.g., existence of a project champion);
- key player involvement (e.g., buy-in from physician groups; need for and direction of project identified by potential users of the information); and
- nature of project findings (e.g., evidence of a “successful” program or process was perceived as more likely to be applied in practice than a project that did not demonstrate success).

Factors perceived as **barriers** to the application of project findings included:

- lack of organizational support for the project and/or evidence-based decision making;
- lack of resources (e.g., staff and budget cuts);
- SEARCH participant characteristics such as lack of decision-making authority within the organization;
- politics and timing (e.g., overall political climate inconsistent with project goals; lack of readiness at project sites);
- lack of direction and leadership for the project (including key participant turnover);
- lack of key player involvement (e.g., lack of buy-in from potential users of the information, need for and direction of the project not determined by those expected to implement results); and
- nature of project findings (e.g., less likely to apply project findings perceived as negative or potentially threatening to an organization, program, or project).

Perceived Impact of SEARCH Projects

The perceived impact of SEARCH project findings was more difficult to assess than both dissemination and application of findings. In addition, overlap was reported between the application of findings and the impact of findings. For example, if project findings were used to change the way a program was delivered, the application was considered to have impacted the functioning of the program.

Several projects were considered to have had **no impact** at the individual, organizational, or health system levels. In some cases, the opposite of project recommendations were implemented. For example, participants reported the discontinuation of programs found to be successful and in some cases the reverse of service delivery recommendations.

Other projects were considered to have resulted in an **individual level impact** for SEARCH participants. Types of impact included general research skill development (e.g., ability to conduct literature reviews, design and analyze surveys, and an overall understanding of the research process) as well as specific content related knowledge gained from the results of a specific project.

Other SEARCH projects were considered to have resulted in **organizational level impacts** such as improved data collection; increased evidence to support the continuation or discontinuation of funding for services; improved understanding of issues; changes/confirmation to the format and structure of existing programs; changed caseloads/service delivery patterns; support for a new way of primary care delivery; increased profile of program areas; increased capacity to provide patient care (e.g., reduced duplication of physician time); integration of evidence-based decision making within an organization; increased cross-regional communication, and increased attention to shared issues and opportunities for collaboration with other regions/organizations.

Many SEARCH participants expressed reluctance to overstate the potential impact of the projects with which they were involved. For example, "*it was one little piece of information*" within a bigger context. The SEARCH projects were considered "*one small piece of a complex puzzle*".

Limitations

The present study relied on data collected before the project began as well as retrospective interviews with participants regarding projects that had been completed several years ago. In addition, not all participants provided data for the evaluation and thus specific examples and complete data is not available for all SEARCH projects.

Future Directions

The SEARCH program has continuously evolved and modified data collection processes throughout its duration. Future directions with respect to SEARCH projects include the ongoing monitoring of project progress, application, use, and perceived impact at regular intervals over time.

1.0 Introduction

One of the core components of the Swift Efficient Application of Research in Community Health (SEARCH) program includes the completion of at least one individual project relevant to local needs as well as a group project addressing a cross-regional issue. More than 50 individual projects and 12 group projects were initiated by SEARCH participants during the first two iterations of the program. Background information regarding SEARCH projects (e.g., project title, topic, and investigator) has been maintained electronically since the program inception in 1996. However, systematic follow-up regarding whether or not projects were implemented or completed as planned had not yet been fully conducted before the initiation of the current project. Similarly, the extent to which evidence generated from SEARCH projects has been applied or used in practice, and what difference SEARCH projects have made, had not been formally assessed.

1.1 Objectives

The objectives for the current project included:

- 1.1.1 To identify and review existing sources of data regarding SEARCH I and II projects;
- 1.1.2 To assess the extent to which evidence generated from SEARCH I and II projects has been applied, used, and disseminated throughout the province; and to assess the impact SEARCH projects have had at the individual, organizational, and delivery of health services levels; and
- 1.1.3 To recommend measures and processes for the periodic assessment regarding the application of SEARCH project findings (i.e., to assess the level of application of evidence from SIII projects, SIV, SV, etc.).

1.2 Methods

In order to achieve the above three objectives, the following data collection methods were employed.

1.2.1 Secondary Data Review

To identify and review existing sources of data regarding SEARCH I and II projects, a secondary data review was conducted. The consultant met with representatives from the Centre for Health Evidence to request and review existing sources of data regarding SEARCH I and II projects. Additional secondary data sources included the SEARCH long term participant survey results (SPSS data regarding project completion rates and reports), Hirex3 databases maintained at the Centre for Health Evidence, hard copy and/or electronic final reports, Power

Point presentations, and the Alberta Heritage Foundation for Medical Research Five Year Report¹.

The background information contained in the AHFMR Five Year Report represented the most complete source of information regarding SEARCH I and II projects. Project information within the Five Year Report was supplemented, where possible, with information contained in the CHE Hirex3 database.

1.2.2 Primary Data Collection

To assess the extent to which evidence generated from SEARCH I and II projects has been applied, used, and disseminated throughout the province, and to assess the impact SEARCH projects have had at the individual, organizational, and delivery of health services levels, individual interviews with SEARCH participants were conducted to follow up on gaps remaining following the secondary data review. In addition, participants were asked to comment on the perceived application, use, and/or dissemination of project findings as well as the perceived impact of SEARCH projects.

The majority of interviews were conducted in-person or by phone depending on availability, preferences, and location of participants. In some cases participants responded to the questions electronically via e-mail.

1.2.3 Processes for the Periodic Assessment of SEARCH Project Application

To discuss measures and processes for the periodic assessment regarding the application of SEARCH project findings (i.e., to assess the level of application of evidence from SIII projects, SIV, SV, etc.), the evaluator met with a representative from the Centre for Health Evidence to discuss and review the existing format of the SEARCH database and project tracking mechanisms. The addition of fields regarding project completion, dissemination, application, and impact were requested. Some of these fields were already under development.

1.3 Piloting of Interview Questions

Preliminary interviews were conducted with four previous SEARCH participants. In addition, comments were invited from the Evaluation Steering Committee prior to full implementation of the data collection strategy. A few wording changes and clarifications were recommended and implemented.

Given that the overall content of the interview questions did not change significantly following the pilot interviews, data collected from the initial four participants were included in the final analyses.

¹ Using Research to Improve Health: Five Years of Activity at AHFMR (1995-2000). Alberta Heritage Foundation for Medical Research.

1.4 Participant Response Rate

In total, 37 of 48 SEARCH I and II participants (77%) participated in the Project Tracking evaluation. This included 8 in-person interviews, 26 telephone interviews, and 3 e-mail responses. Overall, participants expressed interest and support for the long-term evaluation of the SEARCH program. The acceptance of evaluation, including high response rates for participation in surveys, focus groups and interviews, was described by one participant as *“part of the culture of SEARCH.... SEARCH was a group of really engaged people. We think it’s valuable so we want to support it.”*

Of the remaining 11 SEARCH participants (23%) who did not participate in the evaluation, 6 had left the organization, province, or country. Attempts to locate new contact information for these participants were not successful. In addition, 1 participant was on leave during the study period; 2 were not available; 1 had retired; and 1 did not reply to multiple requests to schedule an interview appointment.

2.0 Results

2.1 Participant Profile

Interview participants included 31 females and 6 males, 19 SEARCH I and 18 SEARCH II participants. At least one participant from each health region (except Regions 8 and 17), and most of the additional participating organizations, contributed to the evaluation.

2.2 Verification of Project Information

Participants were asked to verify and update information retrieved from the various sources of secondary data. Data regarding number of projects both initiated and completed (gathered during the survey and secondary data review) was verified for the 37 participants. Where it was not determined through the secondary data review, participants were further asked to describe the methods used for each of their individual and group research projects, scope of analysis used, and the status and availability of a final report.

Table 1 outlines the total number of SEARCH projects described in the current ACCESS database. The database includes information regarding projects initially identified in the Five-Year Report (52 individual projects and 12 group projects), corresponding fields extracted from the Hirex3 database for each of these projects where available, and additional project information described by interview participants (for each of the previously identified projects where applicable as well as 12 additional individual projects and 3 group projects).

Table 1. Number of SEARCH Projects Described in the Project Tracking Database (2003)

Type of Project	SI	SII	Total
Individual Projects in Five-Year Report (2000)	35	17	52
Additional Individual Projects Reported During Interviews (2003)	8	4	12
Group Projects in Five-Year Report (2000)	5	7	12
Additional Group Projects Reported During Interviews (2003)	1	2	3
Total	49	30	79

Each interview participant was asked to identify the number of projects initiated as well as the number of projects completed. Participants reported completion of 52 of 57 individual projects² initiated (i.e., 91% completion rate). Fourteen participants (38%) reported they did not complete a group project or the group project was still in progress. These results were consistent with the long-term survey findings in which the overall completion rate for individual projects (83%) was higher than that for group projects (55%). A key difference between the survey results and interview results, however, was the identification of various levels of project completion ranging from not completed to complete. Participants that had completed all elements of a project but not formally presented or published results may have been likely to report “not completed”.

² Note: This number does not sum to the total number of individual SEARCH projects because not all participants were interviewed.

However, projects were often not perceived as either completed or not completed but rather as part of a process of a larger scale application of skills and a foundation for additional research.

2.3 Barriers and Facilitators to SEARCH Project Completion

When projects were not completed as planned, participants were asked to identify the barriers to project completion as well as what could have been done differently, if anything, to help facilitate project completion.

Identified barriers to project completion included:

- lack of dedicated work time to complete the project (e.g., within casual or front-line service delivery positions);
- lack of supervisor support and understanding and in some cases a direction from management to discontinue work on a specific project;
- competing priorities;
- lack of readiness of sites/organizations to implement tools required for specific projects;
- lack of agreement on project focus among group members (stalled the development and subsequent completion of group projects);
- lack of closure on data analysis and final report writing phases (stalled the completion of group projects);
- concerns regarding whether or not findings would make a difference in practice reduced motivation for project completion;
- participant role and/or organization changes (for both personal and professional reasons);
- methodology concerns (e.g., insufficient sample sizes as basis for discontinuing a project);
- change in management or organizational governance;
- perceived lack of commitment on behalf of other team members including difficulty contacting team members;
- turnover (group members and faculty turnover perceived as disruptive);
- lack of firm deadlines (e.g., for selection of group project topic and for project completion within the 2 year timeframe of SEARCH); and
- lack of required submission of final report to receive certificate for completion of SEARCH.

Some participants noted that the expectation to complete a project was not always an expectation of their organization. In addition, participants expressed that *“it’s not about finishing a project, but going through the process”* and learning to apply new skills in practice.

Other participants noted that some projects were still in progress and expressed the intention to formally complete the project at some point in the future.

Identified facilitators to project completion included:

- control over work time and/or protected time for SEARCH;
- being in a designated research role;

- having a previous masters' degree;
- previous experience producing major documents;
- projects with a smaller scope and clear focus;
- project alignment with primary job responsibility;
- proportion of group members taking initiative to complete a project;
- leadership, direction and internal regional support;
- perceived value in the project; and
- available funding (e.g., for administrative costs of the project such as mailings).

In some cases of organizational change and instability, participants reported that nothing else could have been done to facilitate project completion.

The above categories of barriers and facilitators were further classified by the overall themes outlined in Table 2 below.

Table 2. Barriers and Facilitators to Project Completion

Theme	Barrier	Facilitator
Time	<ul style="list-style-type: none"> • lack of protected time 	<ul style="list-style-type: none"> • participant control of own work time • organizational commitment to protected time
Organizational Support	<ul style="list-style-type: none"> • lack of organizational support for the project • lack of organizational expectation for completing a project 	<ul style="list-style-type: none"> • support of immediate supervisor • support at upper management levels • alignment of project with organizational goals • organizational leadership
Group Membership	<ul style="list-style-type: none"> • group member turnover • lack of consensus among group members • lack of commitment • lack of reaching closure on a project (e.g., losing steam) 	<ul style="list-style-type: none"> • clearly defined roles and responsibilities of group members • high degree of commitment • in some cases, availability of members within the group to take initiative and fulfill leadership roles/continue projects through to completion
Participant Characteristics	<ul style="list-style-type: none"> • lack of experience • uncertainty regarding 	<ul style="list-style-type: none"> • previous research experience

Theme	Barrier	Facilitator
	applicability of project findings in practice <ul style="list-style-type: none"> significant professional and/or personal role changes within the duration of training 	<ul style="list-style-type: none"> previous graduate education motivation and interest in the project designated research role
SEARCH Program Structure	<ul style="list-style-type: none"> lack of deadlines to monitor project progress completion of overall SEARCH Program not contingent on completion of individual/group projects. 	<ul style="list-style-type: none"> faculty support and encouragement to complete projects in some cases, additional support and encouragement to submit findings for publication
Resources	<ul style="list-style-type: none"> in some cases, lack of resources (e.g., for administrative costs) 	<ul style="list-style-type: none"> availability of resources to work on projects (e.g., travel cost reimbursements through SEARECH) availability of resources to disseminate findings

2.4 SEARCH Project Methods and Scope of Analysis

Participants were asked to describe the methods used to complete each SEARCH project. Categories included primarily quantitative, primarily qualitative, or both quantitative and qualitative. Results are outlined in Table 3 below.

Table 3. SEARCH Project Methods

Method	Number of Projects	% of Projects
Both Qualitative and Quantitative	34	43%
Primarily Quantitative (e.g., surveys)	31	39%
Primarily Qualitative (e.g., interviews, focus groups)	14	18%
Total	79	100%

Participants were also asked to identify the scope of analysis used for their SEARCH projects. Quantitative analyses were classified as primarily descriptive (e.g., frequency distributions, means) or inferential (e.g., t-test, risk ratio calculations, multiple regression). Qualitative projects were classified as primarily descriptive or in-depth thematic analysis.

Responses for quantitative, qualitative, and mixed projects were analyzed together; results are classified according to “basic” and “in-depth” categories in Table 4 below. Several projects including in-depth analysis often also consulted external support (e.g., data analysis expertise).

Table 4. SEARCH Project: Scope of Analysis

Method	Number of Projects	% of Projects
Basic (e.g., primarily descriptive presentation of quantitative data such as frequencies or qualitative description of themes).	36	46%
In-depth (e.g., both descriptive and inferential statistics such as multiple regression, or in-depth qualitative thematic analysis).	24	30%
Not stated or analyses not completed	19	24%
Total	79	100%

2.5 Availability of Final Reports and PowerPoint Presentations

Twenty-three PowerPoint presentations are available electronically as delivered at the SEARCH Conference (2000). Links to identify the location of these presentations are included in the current ACCESS database. A few participants forwarded electronic copies of final reports following the project tracking interview; other participants reported that copies of final reports are available upon request. Some participants reported that final reports had been submitted to AHFMR at the time of project completion and that electronic files had since been deleted. Other participants were not sure about the status of final reports as they had changed positions or left the organization at the time the final project report would have been prepared. Overall, very few final reports were available electronically. The process for obtaining a copy of each project report at this time would likely be an onerous request for many SEARCH participants, particularly those that have changed roles and/or organizations. It would be beneficial, in future, to mandate the submission of electronic status reports at the time of program completion (discussed further in the recommendations section).

2.6 Dissemination, Application, and Use of SEARCH Project Findings

Participants were asked to describe the dissemination and perceived application or use of SEARCH project findings. The first two participants were asked to specify the level of application including individual, organizational, and the delivery of health services. The intention of the third category (delivery of health services) was at a macro level of broader system change as opposed to individual organizations. However, the distinction between organizational level change and delivery of health services was not always clear, and participants perceived overlap between the two categories. Thus, remaining participants were asked to comment on the dissemination, application, or use of findings at any level. The flow of the interview improved when the question remained open-ended. Responses were subsequently categorized according to the identified levels of individual, organizational, and delivery of health services.

These findings are described in the next section.

2.6.1 Dissemination

SEARCH project findings were disseminated to a broad range of audiences using a variety of mechanisms. Findings were shared with community coalitions and community groups, non-profit

agencies, corporations, government ministries (provincial and national), and health regions. Dissemination mechanisms included media releases (e.g., generating local newspaper coverage), internal presentations within organizations (e.g., to program staff, board members and CEOs), conference presentations (at local, national and international venues), and peer-reviewed journal publications.

These findings were consistent with the long-term survey results which also identified a broad range of dissemination activities. The purpose of the project tracking interviews was to identify the extent to which findings had been disseminated on a project-specific basis, as well as to further identify the extent to which disseminated findings were applied in practice. For example, it is possible to look up a specific project in the current database to identify the extent to which its findings were disseminated (based on feedback from the participant interviews).

2.6.2 Application in Practice

The *dissemination of findings* and the subsequent *application of findings* into practice are two different things. The extent to which project findings were disseminated was more readily described than the application or impact of project findings. The extent to which findings were used by those requesting copies of final reports, for example, was not always known. In addition, some participants commented that the retrospective assessment of projects initiated as far back as 1996 was a somewhat difficult task. Nonetheless, most participants were able to provide insight regarding the perceived application of findings from SEARCH projects.

Participants provided examples of how project findings had been used by them individually, their immediate program area (i.e., a micro level of the organization), their overall organization (i.e., a macro level of the organization), and in some instances at a broader system level (e.g., to support ongoing funding and expansion of a given program both within an organization and across health regions).

Micro level application within an organization included the use of findings to develop a specific policy for a program area but not necessarily used by the entire organization. Macro level application included the use of project findings at higher levels within an organization (e.g., to develop organization-wide policies).

Each of these categories is described in more detail below.

Individual level application included the use of findings to modify the delivery of a program for which the SEARCH participant held primary responsibility. For example, SEARCH project findings had the following individual-level applications:

- “...informed a health promotion staff member in her work”;
- “...provided a better understanding of the population I was dealing with”; and
- “...formed the basis of developing other programs or projects”.

Furthermore, SEARCH participants reported that it was not always the findings from SEARCH projects that were applied in practice, but the skills developed through the process of completing the project that were most often applied. For example, participants described the ability to apply learnings regarding the process of research. The application of skills often occurred through the

development of other spin-off projects that would otherwise not have happened without the knowledge gained from SEARCH.

Examples of how project findings were used at the **program delivery level** included:

- “...to determine what area to focus on” (e.g., review of injury statistics);
- “...to plan work schedules” (e.g., allocation of 1 day week service delivery within specific geographic area based on findings from an individual SEARCH project);
- “...to justify discontinuation of a service demonstrated to be not financially feasible, and to continue other services demonstrated to be financially feasible”;
- “...to set up programs based on findings”;
- “...as one piece of information to decide how to organize community care services”;
- “...for orientation and training of staff”;
- “...as a basis for making decisions about programs and funding”;
- “...to support the development of other programs and services”; (e.g., Health Promotion and Resource Centre);
- “...as a planning tool”;
- “...to support the continuation and funding of a program”; and
- “...to support continuing interest in a program area”.

There was some overlap between program level application of findings and broader organizational level application (e.g., findings used by program staff as well as board members as a basis for decision making about programs and funding). However, examples of how project findings were used at **higher organizational levels** were less frequently provided. Findings from one project were used “... to develop organizational protocols” (e.g., hand-washing protocols for staff); however, the majority of examples provided to illustrate the application of findings from SEARCH projects were at the program delivery or individual level of application.

System level application, such as the use of project findings to inform the delivery of health services at a provincial level, was less frequently identified. For example, one participant reported that there was little to no application at the health system level because new provincial classification systems were introduced shortly after the completion of a SEARCH project, rendering the project out of date and not applicable at a broader level.

The exception was the application of findings and learnings that emerged through the process of participation within two “*seminal*” (as labeled by SEARCH participants) group projects. These projects (*Health Indicators*, SEARCH I; and the *Integrated Team Approach to Primary Care*, SEARCH II) were considered foundational in that they laid the groundwork for additional projects, discussions, and the delivery of health services. For example, findings from the *Health Indicators* project led to discussions that had not occurred previously regarding the lack of shared and consistent health indicators across the province. The format of the *Primary Care* project has been used as a template for other primary care projects and as an overall approach to the management of primary care patients (i.e., integrated team approach).

2.7 Challenges, Barriers, and Facilitators to the Application of Project Findings

Participants also identified various challenges, barriers, and facilitators to the application and use of findings from SEARCH projects.

Challenges and barriers included:

- organizational change, instability, and budget cuts;
- political climate/agenda inconsistent with project findings;
- lack of support and/or time for ongoing dissemination and activities to encourage uptake of information;
- lack of credibility for the project or topic (e.g., if inconsistent with organizational priorities);
- lack of financial support or resources to sustain program;
- lack of buy-in from potential users of the information;
- low perceived need for the project;
- lack of organizational support (time and resources) for implementation of recommended programs;
- low priority among decision makers or those in position to implement the findings (e.g., new management)
- potentially negative and/or threatening findings;
- difficulty applying results that differ from the status quo (e.g., managing the change process);
- direction of the project not determined by potential users of the information; and
- decisions based on other factors (e.g., *sometimes decision makers don't want to use the evidence; sometimes decisions are based on who is yelling the loudest; project findings showed that some findings can be ignored such as canceling a program that was found to be successful.*)

Facilitators to the application and use of project findings included:

- level of authority and decision making power within the SEARCH participant's role/position in the organization (i.e., some participants reported being in a better position to "*push things through*" than other colleagues);
- timing (e.g., a well-timed project, one that is consistent with organizational priorities and political climate, will more likely be utilized than a project that doesn't fit with current priorities and political climate; being at the right place at the right time; e.g., discussions regarding health indicators were timely during the period immediately following regionalization);
- organizational support (e.g., supportive supervisor or champion to bring things to the table at higher organizational levels, projects supported or selected by the region, executive buy-in);
- credibility for SEARCH projects within the organization;
- relationship between project area and role of the SEARCH participant (e.g., it was directly related to what I did in my job and thus it was easy to apply the findings);
- key participant buy-in (e.g., "*even the physicians were interested*" in the project);

- leadership;
- evidence that the project was successful (i.e., “that it worked, people saw positive things”);
- multiple sources of evidence demonstrating the same finding;
- support for dissemination (including financial support through SEARCH and other sources);
- political will;
- potential users (e.g., organization, community coalition or group) identified the need for a project; and
- interest at upper management levels.

The above categories of barriers and facilitators were further classified by the overall themes outlined in Table 5 below.

Table 5. Barriers and Facilitators to Application of Project Findings

Theme	Barrier	Facilitator
Organizational Support	<ul style="list-style-type: none"> • lack of provision of dedicated time, resources, and encouragement to apply findings • organizational change and instability • low perceived need or relevance of project findings 	<ul style="list-style-type: none"> • organizational buy-in and support • interest at upper-management levels
Resources	<ul style="list-style-type: none"> • budget cuts • (overlaps with organizational support to provide dedicated time and encouragement) 	<ul style="list-style-type: none"> • ongoing financial support for dissemination • human resources and support networks
SEARCH Participant Characteristics	<ul style="list-style-type: none"> • lack of decision-making authority within the organization • significant personal and/or professional role changes 	<ul style="list-style-type: none"> • level of authority within the organization • “fit” with the project and primary job responsibilities • interest and motivation
Politics and Timing	<ul style="list-style-type: none"> • overall political climate inconsistent with project goals • lack of readiness at project sites 	<ul style="list-style-type: none"> • strong political will • readiness and “good timing” (e.g., indicators project after regionalization)

Theme	Barrier	Facilitator
Emphasis on Evidence-Based Decision Making	<ul style="list-style-type: none"> • decisions based on factors other than evidence • lack of commitment to use evidence for decision making 	<ul style="list-style-type: none"> • value placed on evidence • triangulation of findings
Leadership	<ul style="list-style-type: none"> • lack of direction and leadership for a project (including key participant turnover) 	<ul style="list-style-type: none"> • existence of a project “champion”
Key Player Involvement	<ul style="list-style-type: none"> • lack of buy-in from potential users of the information (including the participant’s organization as well as external organizations, community groups and coalitions). • lack of buy-in = project topic seen as low priority by potential user groups • need for and direction of project not determined by those expected to implement results. 	<ul style="list-style-type: none"> • key participant buy-in (e.g., physician groups) • need for and direction of project identified by potential users of the information
Nature of Project Findings	<ul style="list-style-type: none"> • project findings perceived as negative or potentially threatening to an organization, program, or project. 	<ul style="list-style-type: none"> • evidence of a “successful” program or process.

2.8 Perceived Impact of Findings

The perceived impact of SEARCH project findings was more difficult to assess than both dissemination and application of findings. In addition, overlap was reported between the application of findings and the impact of findings. For example, if project findings were used to change the way a program was delivered, the application was considered to have impacted the functioning of the program.

2.8.1 No Impact

Several projects were considered to have had no impact at the individual, organizational, or health systems levels. In some cases, the opposite of project recommendations were implemented (e.g., participants reported the discontinuation programs found to be successful and in some cases the reverse of service delivery recommendations; *“it makes you wonder if people read evidence”*).

2.8.2 Individual Level Impact

The focus of the current report was on the perceived application and impact of SEARCH projects, including but not limited to the impact of projects on individuals. The individual level impact of SEARCH overall is described more fully elsewhere. During the project tracking interviews, participants reported two key levels of individual impact of SEARCH projects. These included general skill development and specific content-related knowledge.

- **General research skill development** included increased ability and skills gained through the process of participation in SEARCH (e.g., ability to conduct literature reviews, design and analyze surveys, and overall understanding of the research process).
- **Specific content-related knowledge** included increased knowledge and competence gained from the results of a specific project or through the process of participating in the project.

2.8.3 Organizational Level Impact

As stated previously, the perceived impact of SEARCH project findings was more difficult for participants to assess than both the dissemination and application of findings. Overlap was reported between the application of findings and the impact of findings. Participants were asked to distinguish between application (i.e., “how were project findings used?”) and impact (i.e., “what difference did the project make?”). In some cases, participants were asked to further consider “what difference did the project make for you, your organization, or the delivery of health services?”

While it was often difficult to provide examples of what difference SEARCH projects had made, some participants added that it was not the projects themselves but the process for participation in the projects and in the SEARCH program overall that made a difference to them and their organizations. Furthermore, some projects were still in progress at the time of the project interview and thus it was difficult to fully determine the extent of their impact. Similarly, participants reported spin-off projects that may ultimately have more impact than the original SEARCH project upon which they were based. Many SEARCH participants expressed reluctance to overstate the potential impact of the projects with which they were involved. For example, “*it was one little piece of information*” within a bigger context – one small piece of a complex puzzle.

Overall categories of perceived organizational level impact, from the perspective of participants, are presented below.

- improved quality of data collection;
- increased evidence to support the continuation or discontinuation of funding for services;
- improved understanding of issues;
- changed, or confirmed, the format and structure of program delivery;
- changed caseloads/service delivery patterns;

- support for new way of primary care delivery;
- increased profile of program areas;
- increased capacity to provide patient care (e.g., reduced duplication of physician time);
- operationalized evidence-based decision-making within the organization (e.g., provided concrete examples of what evidence-based decision-making means and how it can be used in practice);
- increased cross-regional communication; and
- increased attention to shared issues and opportunities for collaboration.

2.9 Comparison with Other Evidence-Based Projects

Participants were asked to compare participation in SEARCH projects with participation in other evidence-based projects. Several participants noted that there was **no difference** between SEARCH and other evidence-based projects. Others reported they **could not compare** because they had not been involved in any other evidence-based projects similar to SEARCH projects either before or after SEARCH participation. Other participants indicated that it was **difficult to separate** SEARCH from non-SEARCH projects.

Nonetheless, several key differences emerged to distinguish participation in SEARCH with participation in other evidence based projects. These included the perceived slow **pace** required to complete a SEARCH project; the diversity and expertise of **human resources** (e.g., other SEARCH participants and faculty members); the availability of **electronic resources** (e.g., the desktop, database access, and technical support); and the availability of **financial support** (or project administration and dissemination).

Each of the above categories is described in more detail below.

2.9.1 No Difference

Some participants reported no difference between participation in SEARCH projects and other evidence based projects. For example, participants reported use of the same methods with no less attention to design in SEARCH compared to non-SEARCH projects. However, some of these participants further added that while there was no difference methodologically, the difference within SEARCH was related to “*the people involved*” (described under human resources and networking, below).

2.9.2 Cannot Compare

Some participants reported that they had not been involved in projects similar to SEARCH projects before or after SEARCH participation and thus were not able to provide comparisons.

2.9.3 Difficult to Separate

Some participants reported it was difficult to separate SEARCH from non-SEARCH projects. For example:

- *“It’s difficult to separate out what’s SEARCH and what’s not SEARCH. I don’t know how you’d say it’s SEARCH-related or not because SEARCH is really a network of people.”*
- *“It’s difficult to comment because there is overlap between what’s considered a SEARCH project and what stemmed from SEARCH.”*

2.9.4 Pace

Some participants expressed frustration with the pace of SEARCH project work versus the rapid timelines required to produce results in the work place. For example:

- *“I haven’t been involved in other evidence-based projects. My work is more on the information management side, which has similar aspects, but there is no other comparison. The focus on ‘a project’ versus ‘real life’ was difficult because what’s a question today is not a question tomorrow... so that ‘swift’ part of SEARCH was somewhat of a struggle.”*

2.9.5 Human Resources and the “SEARCH Network”

Many participants reported that the difference between SEARCH projects and other evidence-based projects related to the diversity and expertise of the people involved. SEARCH projects, and participation in the SEARCH program in general, afforded a broader diversity and expertise of people than non-SEARCH related projects.

Several participants described the diversity and value of human resources available through the SEARCH network. One of the key differences between SEARCH and other projects, as described by one participant, was the diversity of professional and academic backgrounds of the other SEARCH participants. Through working closely with other SEARCH colleagues, one participant reported an increased appreciation for the benefits of group work and peer review. Another participant reported there was essentially no difference in the project work itself; the available network and “*people resources*” distinguished SEARCH from participation in other evidence-based projects.

2.9.6 Electronic Resources and Financial Support

Several participants differentiated their participation in SEARCH projects from other evidence based projects based on the availability of electronic resources (such as the desktop, databases, and technical support). These additional resources were often limited or not available to participants outside of SEARCH.

2.9.7 Financial Support

Finally, several participants reported appreciation for financial support available through SEARCH that was not typically available for other projects. Financial support often facilitated project completion and dissemination activities. In other cases, lack of financial support was cited as a barrier to project completion and dissemination.

2.10 Identification of Key Informants

In addition to providing feedback about the perceived application and impact of SEARCH projects, participants were also asked to recommend the names of 2 to 3 key informants able to reflect on the long-term impact of SEARCH at an organizational level. Relevant contact information was gathered to assist with the sampling strategy for the concurrent organizational capacity study (Birdsell, O'Connell, and Zerbe, 2003).

The identification of key informants was a somewhat challenging task. Participants commented that many people within health regions had shifted positions and/or left organizations, and that it may be difficult to locate individuals able to comment on SEARCH over time. Nonetheless, SEARCH participants recommended a number of potential key informants to participate in the organizational capacity study. Contact information was shared with the Birdsell team to facilitate the data collection process.

3.0 Recommendations and Future Directions

Recommended processes for the periodic assessment regarding the application and impact of SEARCH projects in the future, as well as general recommendations for program delivery based on the current findings, are described below.

It should be noted that the following recommendations were based on feedback provided by SEARCH participants who had completed SEARCH in its early phases (first two iterations). Given that SEARCH was well into its fourth iteration during the current data collection period, the recommendations based on these data have in some cases already been considered by the SEARCH program. The following recommendations were shared with both AHFMR and CHE representatives for review and discussion. It was determined, based on discussions with CHE, that elements of some recommendations were already being considered and/or in place.

3.1 Mandatory Final Project “Status” Reports

Whether or not projects are completed as initially envisioned, each participant should be required to submit a final individual status report for each individual project undertaken during the SEARCH training upon completion of the two-year period. The status report may or may not include all results from the initiative, but should contain an update regarding the “final status” at the time of program completion.

Similarly, whether or not projects are completed as initially envisioned, each group should be required to collectively submit a final group status report upon completion of the two-year period.

Standard content areas for final reports should be required including, for example, background, purpose, methods, key findings, and future directions.

Project reports should be archived electronically and referenced in the database maintained by the Centre for Health Evidence.

3.2 Timelines and Guidelines

Recommended timelines to assess progress should be monitored and enforced at the discretion of SEARCH faculty within the two-year training period. In addition, provisions for changing focus and direction of projects, as well as modifications to methodology where necessary (e.g., to prevent a project from stalling/stopping if initially proposed methods become impractical) should be clearly communicated to participants. In addition, guidelines and timelines should be established for components of projects that extend beyond the two-year period.

It may be useful to consider a group project “charter” that outlines the roles and responsibilities of each group member and his/her respective organization throughout the duration of the training program, and beyond training where applicable.

3.3 Recognition of SEARCH Training and Project Completion

Based on feedback from SEARCH participants regarding the process for participation and completion of SEARCH projects (including participants that completed projects as well as those that did not formally complete a project), it is recommended that the SEARCH program consider two levels of program completion/graduation. For example, program completion may be recognized at one of the following two levels of achievement:

- (a) completion of the training program, and
- (b) submission of final project status reports.

3.4 Project Reports Submitted Electronically

To facilitate ongoing program monitoring and evaluation, final reports should be submitted electronically including the specified content areas and headings described above.

3.5 Follow-up with SEARCH Participants (Timing and Methods)

To minimize evaluation fatigue, follow-up with participants should be concise, targeted, and limited to once every two years. Follow-up should be streamlined and include areas of interest within the same study including, for example, an assessment of individual progress as well as impact of SEARCH project findings over time. Participant surveys represent an efficient mechanism for reaching a broad audience; however, general survey questions do not always adequately assess the depth and breadth of the SEARCH program. It is recommended that a sample of participants be interviewed during each follow-up period in addition to general surveys. Response categories may build on the themes identified in this report for the dissemination, application, and impact of projects.

3.6 Other Key Informants

Given the limited examples of application and impact beyond the individual participant and program delivery level provided by SEARCH participants, it may be beneficial to direct these questions to key informants at broader levels including senior administration in the future.

3.7 Organizational and Individual Interests and Commitment

Given the influence of organizational support, commitment, and interest, as well as personal motivation and commitment to complete and apply findings from SEARCH projects, it is recommended that projects be selected based on consideration of both organizational and individual factors. That is, emphasis should be placed on projects with a high organizational priority as well as high participant interest and motivation, as well as projects that are aligned with participants' primary job responsibilities wherever possible.

Appendix A: Participant Questions

Verification of Database Information

1. We have on record that you conducted the following individual and group projects (<list by number of projects and titles>). Is this accurate? Are there other projects that should be on the list? [*Participants were asked to report what they would consider to have been a formal SEARCH project, undertaken (but not necessarily completed) during formal SEARCH participation.*] Are there projects that were started but not completed?
2. <For each project> What were the primary methods of data collection used? Would you say primarily quantitative, primarily qualitative, both, or other?
3. <For each project where quantitative methods were used> What was the scope of analysis? Would you say primarily descriptive or inferential?
4. <For each project> Is a final report available? If so, in what format and location?

Dissemination, Application, and Impact

5. <For each project> To what extent were findings disseminated?
6. <For each project> To what extent were findings used or applied? What were the challenges/barriers to the application of findings from projects? What were the facilitators?
7. <For each project> What difference, if any, did the project make? (<probes where necessary included impact at the individual, organizational and broader systems levels>)

Comparison with Other Evidence-based Project Experience

8. How has your experience with the SEARCH project compared to other evidence-based projects in which you have been involved? Please describe the differences, challenges, and benefits between the SEARCH and non-SEARCH project involvement.

Barriers to Project Completion

9. What were the barriers to project completion?
10. What would have helped, if anything, to facilitate project completion?

Recommendation of Additional Key Informants

11. Can you suggest the name or names of 2-3 other individuals who might be able to provide insight regarding the application of evidence from SEARCH projects, or the impact of SEARCH overall at an organizational level, whose names I may provide to the On Management evaluation team? <Request name, position at time of SEARCH involvement, current position/contact information, reporting relationship, and number iterations of SEARCH exposure>