Western and Northern
Health Human Resources Planning Forum

"Developing Sustainable Interprofessional Collaborative Practice and Learning Environments"

FINAL PROJECT REPORT
September 2011

Developing Interprofessional Collaborative Practice and Learning Environments across the Continuum of Care in Western and Northern Canada

Production of this document has been undertaken with the support and collaboration of the Western and Northern Health Human Resources Planning Forum and its member jurisdictions, and has been made possible through a financial contribution from Health Canada.

Internet Access: This project report is available via the Western and Northern Health Human Resources Planning Forum's website: www.hhrpforum.com and via the electronic community of practice site located on the homepage of the Forum's website: www.icple.com.

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EXECUTIVE SUMMARY

The focus of the Developing Interprofessional Collaborative Practice and Learning Environments across the Continuum of Care in Western and Northern Canada project (ICP & LE project) was the development, implementation and evaluation of innovative and effective interprofessional collaborative practice and learning approaches to healthcare delivery in a variety of practice settings. The project was administered by the Western and Northern Health Human Resources Planning Forum and funded through a grant from Health Canada.

The Project Vision was:

- To establish and implement interprofessional collaborative practice and learning environments (ICP & LEs) in a variety of multijurisdictional sites across the continuum of care.
- The ICP & LEs will exhibit innovation in interprofessional patient centred practice and workforce optimization, promoting high quality care and improved patient outcomes.
- The ICP & LEs will serve as capacity centres to provide the essential tools, resources, processes and learning opportunities to facilitate replication of the successful interprofessional and change management practices for other clinical sites and settings in the future, as well as to provide the opportunities for learning for future students and healthcare practitioners.

Specifically, the project aimed to build ICP & LE capacity and support evidenced based knowledge transfer.

A total of nine sites were selected in the four western provinces. Each jurisdiction established projects that reflected their individual needs and priorities for building interprofessional collaborative practice and learning environments. The project sites were (each is described in detail in Part III of the report):

Manitoba:

- The Mature Women's Health Clinic (Winnipeg Regional Health Authority)
- Home Care Community Stroke Care Service (Winnipeg Regional Health Authority)
- River Park Gardens (Winnipeg Regional Health Authority)

Saskatchewan:

- Rural West Primary Health Care Team (Sun Country Health Region)
- Women's Wellness Centre (Sun Rise Health Region)

Alberta:

- Northwest Mental Health Clinic (Alberta Health Services)
- The Sheldon Chumair Centre Active Treatment Team (Alberta Health Services)

British Columbia:

- SARIN: Seniors At Risk Integrated Network (Vancouver Island Health Authority)
- TLAB: The Lodge at Broadmead (Vancouver Island Health Authority)

A project infrastructure was developed to support the participating sites. Key elements (these are also project deliverables) included:

- Establishing the governance structure – included oversight (e.g. Project Steering Committee) and working committees (e.g. evaluation).
- Developing a comprehensive project charter – outlined the project scope and symbolized the commitment of partners.
- Supporting the work of the core team (project staff, working committee chairs, site facilitators and researchers, etc.) – in person meeting, bi-weekly teleconferences, knowledge exchange events designed to build capacity across the various sites and highlight opportunities for collaboration among participants.
- Developing a memorandum of agreement with each of the participating health regions – ensured funds flowed to the sites to support project activities.
- Conducting a social network analysis (SNA) – an intervention designed to assess current status of the network across the project and foster further linkages.
- Establishing and supporting the electronic community of practice (eCoP) – an intervention designed to support project participants in completing and sustaining their work.
- Developing an evaluation framework – outlines the program theory and logic model; the common evaluation framework includes short term, intermediate and long term indicators.
- Completing the phase one evaluation – the evaluation activities that were conducted focused only on implementation and also describes some limited early outcomes.

The project was initiated at a Value Management Review (VMR) held on March 25th and 26th 2010 at the Inn at Laurel Point in Victoria, BC. The VMR was a collaborative process that brought together, in an intensive 1 1/2 day workshop, representatives of all key stakeholders, the project team (many of whom were the project design team at the time), and other key players, allowing the benefit of input from a wider range of participants than was available during the initial design phase. Project infrastructure activities began in earnest in April/May 2010. The four participating jurisdictions were at different stages in their own site selection process meaning that not all the sites began their work at the same time. The Project Steering Committee met monthly by teleconference through the duration of the project, proving overall guidance and support for the project activities.

Two documents were adopted by the Project Steering Committee in September 2010 as essential frameworks for the work being completed within the ICP & LE project:

- WHO Framework for Action on Interprofessional Education and Collaborative Practice (2010)[1]
- The National Interprofessional Competency Framework developed by the Canadian Interprofessional Health Collaborative (2010)[2]

These frameworks provided a common lens and language with which to approach activities across the project and at the specific sties. In particular, the CIHC framework identifies the six competencies required for effective interprofessional collaboration. These competency domains highlight the knowledge, skills, attitudes and values that shape the judgments essential for interprofessional collaborative practice:

1. Interprofessional communication
2. Patient/client/family/community centred care
3. Role clarification
4. Team functioning
5. Collaborative leadership
6. Interprofessional conflict resolution

"Operationalizing" these competency domains was an integral part of the work undertaken at the different project sites. This included pre- and post-assessment of staff's capacity relative to each domain. Essentially the key project staff at each site (facilitators and researchers) worked in collaboration with site staff to determine the changes required to improve capacity in these competency domains. Each site identified a myriad of interprofessional interventions[3] that could be introduced to improve collaborative practice, focusing on:

- Education interventions - when two or more professions learn interactively to improve collaboration and the quality of care. They comprise formal education sessions of any type taught to pre-licensure and post-licensure learners using different teaching approaches (including action based, simulation, interactive, and e-based opportunities). They include interprofessional clinical practicum experiences for students.
- Interprofessional practice interventions - post-licensure interprofessional activities or procedures incorporated into regular practice routines to improve collaboration and the quality of care.
- Organization interventions - interprofessional procedures (i.e., space, staff mix changes, policy) at the organizational structure or the systems level to improve collaboration and the quality of care.

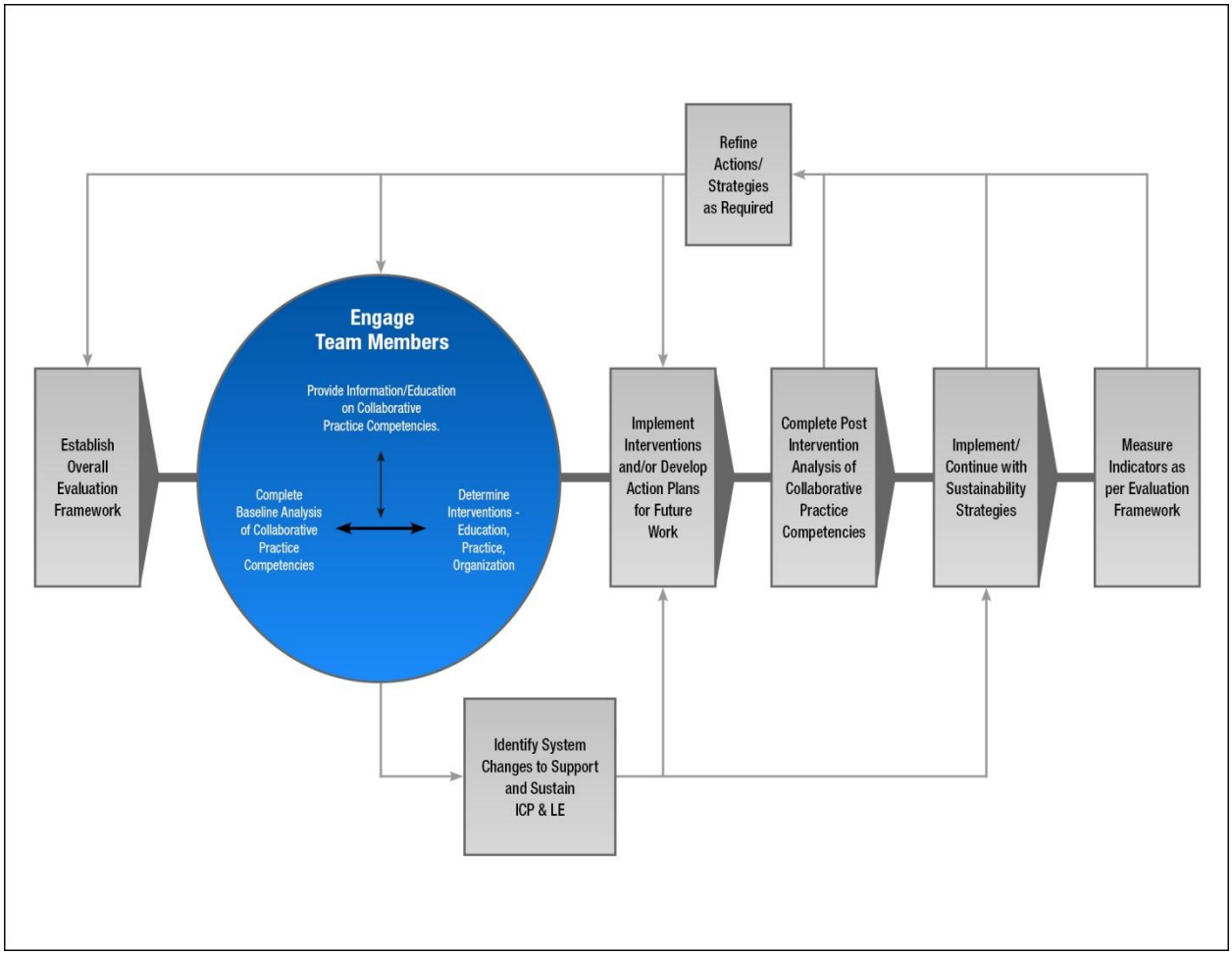
Based on the work completed by each of the participating teams a generic site development plan was created. Guidelines, tools and resources have been aligned with the overall process and specific elements of this generic development plan. The guidelines proposed have been developed to reflect the evaluation outcomes as well as

[1] available at www.who.int/hrh/resources/framework_action/en/index.html
[2] http://www.cihc.ca/files/CIHC_IPCompetencies_Feb1210r.pdf
[3] Reeves S., Goldman J., Zwarenstein M., Gilbert J., Tepper J., Beradall S., Silver I. and Suter E. 2009. An empirically developed framework for classifying interprofessional interventions.

discussions held with the Core Team and Project Steering Committee. The tools and resources identified are examples of those used by the various sties as they completed their work.

The purpose of the generic site intervention plan with its associated guidelines, tools and resources is to provide a platform or toolkit that could be used by others to replicate an interprofessional collaborative practice and learning environment.

A Generic Site Development Plan



The proposed guidelines are summarized below (a full description along with the associated tools and resources can be found in Part VI of the report).

Overall process:

- Ground the work within the CIHC and WHO Competency Frameworks.
- Employ dedicated facilitators to work with teams.
- Begin the work with those who demonstrate willingness to change their practice.
- Identify and foster links to other elements of the organization's strategic agenda.

- Identify and establish leaders/champions at many levels.
- Utilize multiple methods of communication.
- Incorporate principles of continuous quality improvement.
- Engage a Knowledge Broker in the process.

Identify system changes to support and sustain ICP & LE:

- Work simultaneously in different parts of the system.
- Begin sustainability discussions early in site development.

Establish overall evaluation framework:

- Link improvements in collaborative practice to improvements for clients/patients and their families.

Engage team members – complete baseline analysis and determine interventions:

- Consider providing education and information on the competencies for collaborative practice prior to conducting a baseline analysis with team members.
- Utilize a methodology/process that allows for critical self/team assessment.
- Identify a variety of interventions.
- Engage and actively involve physicians.

Implement interventions:

- Establish a timeline for implementing the interventions.
- Move to establish some 'quick wins'.
- Ensure a focus on activities that enhance workforce optimization.

With respect to the final guidelines and the focus on workforce optimization, it is important to note that the original project proposal raised the concept of workforce optimization as central to the reform and redesign of the Canadian healthcare system. This translated into a main element of the vision for the ICP & LE project:
"The ICP & LEs will exhibit innovation in interprofessional patient centred practice and *workforce optimization*, promoting high quality care and improved patient outcomes."

As the project was implemented it was clear that workforce optimization was not well or consistently understood by many of the participants. Specifically, it was challenging to make the connection between two concepts in the project proposal—interprofessional practice and workforce optimization.

The subject was pursued in a number of project venues - Core Team Workshop in December 2010; during a knowledge exchange event in February 2011; Evaluation Working Committee meetings/discussions; with the Project Steering Committee; through an ad hoc working group.

As a result, the project adopted the following definition of workforce optimization, adapted from Carl Ardy Dubois:[4]

Workforce optimization enables organizations to optimize patient outcomes while ensuring the most effective, flexible and cost effective use of human resources. It is the product of multiple, integrated and interacting organizational interventions focused on: (i) appropriate staff mix; (ii) continued education to ensure health service provider continued competency in a changing health system, (iii) optimal deployment of staff members' competencies; and (iv) optimal practice environments.[5]

Further, it was identified that a linking point between interprofessional practice and workforce optimization is that both are seeking improvements in collaborative practice - note the similarities between the language used in the Dubois definition and the six CIHC competency domains. Focusing on improving collaborative practice competencies could be a key element of workforce optimization and broader health system and service redesign.

As noted earlier, completing the phase one evaluation was key element of the project infrastructure and an important project deliverable. The Evaluation Working Committee used the ICP & LE Multi-Site Evaluation Framework, guided by the program theory and logic model, as the basis for developing the Phase One ICP & LE Multi-Site Evaluation (phase one evaluation). The phase one evaluation focused on the three primary areas of activity defined in the program theory: 1) jurisdictional programs focusing on collaborative practice, 2) the overall project activities created to support sites and jurisdictions, and advancement of collaborative practice, and 3) support for system change at all levels.

Findings from the phase one evaluation are described in detail in Part V of the report. Overall the results were positive and the evaluators noted that all four jurisdictions successfully implemented intervention approaches designed to establish collaborative practice and learning environments. However they also cautioned that given the project's timeline it is too early to conclude whether or not these approaches have been established to the extent that they will be sustained for any period of time.

Despite this limitation there are important gains that have been made in terms of insight regarding factors that facilitate and hinder implementation of an ICP & LE intervention in clinical settings. There have also been important lessons learned from implementing this multi-site project, as well as key products that will provide a foundation for the next generation of multi-site projects.

[4] This was the definition used in the Forum project - Increasing Awareness and Resources to Facilitate the Improvement of Effective Productivity in the Health Care Workforce in Western and Northern Canada, November 2010 to March 2011.

[5] Dubois, CA. and Singh, D. (2009). From staff-mix to skill-mix and beyond: towards a systemic approach to health workforce management. Human Resources for Health. 7 (87): p. 1-19.)

Though long term outcomes were not achievable in the life of this ICP & LE project, the jurisdictions and their related sites appear to be well positioned to achieve a major element of the project vision which was for the sites *to serve as capacity centers to provide the essential tools, resources, processes and learning opportunities to facilitate replication of successful interprofessional and change management practices for other clinical sites and settings in the future.*

In order for this to be fully realized and sustained, both within the participating health regions and within their respective provincial health systems, continued leadership and resources will be required at the policy and practice levels. Additionally, integrating and improving collaborative practice into ongoing service delivery model redesign, perhaps through the linkage with workforce optimization, will be required.

PART I: INTRODUCTION

PROJECT OVERVIEW

PROJECT RATIONALE AND INCEPTION

The focus of the Developing Interprofessional Collaborative Practice and Learning Environments across the Continuum of Care in Western and Northern Canada project (ICP & LE project) was the development, implementation and evaluation of innovative collaborative models of service delivery in each of the partner jurisdictions of the Western and Northern Health Human Resources Planning Forum (the Forum).

Each jurisdiction was invited to identify a minimum of 1-2 clinical sites for inclusion in the project and select a site(s) in keeping with its own needs and priorities. All the sites would be linked through the development of an integrated project framework and the creation of an infrastructure to promote shared learning throughout the duration of this "action research" based initiative.

It was intended that, individually and collectively, the project sites could provide practical information for decision makers about the process, as well as the tools/resources needed, to implement and sustain exemplary patient centred, interprofessional collaborative practice and learning models that promote high quality care by optimizing the knowledge and skills of all members of the healthcare team, while enhancing work life satisfaction, recruitment and retention.

The project proposal was submitted by the Forum, on behalf of the member organizations, being the ministries of health and the ministries of advanced education from the four western provinces (British Columbia, Alberta, Saskatchewan and Manitoba) and the three northern territories (Yukon, Northwest Territories and Nunavut). The proposal was submitted to Health Canada in the fall of 2009.

The submission was made in partnership with the Western Canadian Interprofessional Health Collaborative, which is a network of academics, applied researchers and decision makers from across the four western Canadian provinces who are bound by shared experience, passion for continuous practice improvements and commitment to interprofessional collaboration and who work to improve interprofessional education and collaborative practice in healthcare across the region.

A key part of the project's inception was the Value Management Review (VMR) held on March 25th and 26th 2010 at the Inn at Laurel Point in Victoria, BC. Essentially the purpose of the VMR was to undertake a "reality check" of the detailed feasibility and process of the project at the earliest point prior to initiating key operational activities. Given the complex nature of the project, the relatively short development phase and the importance of ensuring complete "buy in" by all partners, a VMR was considered to be essential for this project.

The Value Management Review was a collaborative process that brought together, in an intensive 1 1/2 day workshop, representatives of all key stakeholders, the project team (many of whom were the project design team at the time), and other key players, allowing the benefit of input from a wider range of participants than was available during the initial design phase. It enabled the consideration of project alternatives that could yield increased efficiency, increased effectiveness and/or to identify project challenges to overcome or avoid along the way. The VMR process was a management tool to ensure that the necessary functions and essential characteristics of the design were achieved in the most cost effective manner, without sacrificing quality and long term sustainability.

One of the other benefits of the VMR was the opportunity to discuss, with key partners and stakeholders, the potential for additional financial and in kind contributions to the operational requirements of the project. This was an important component of identifying the full range of resources that would be available, but more importantly, at this early project stage, it indicated the level of commitment that the partners and key stakeholders were prepared to contribute. This level of commitment also served as a good indicator of the potential for sustainability of the project.

VISION AND OBJECTIVES

Vision

To establish and implement interprofessional collaborative practice and learning environments (ICP & LEs) in a variety of multijurisdictional sites across the continuum of care.

The ICP & LEs will exhibit innovation in interprofessional patient centred practice and workforce optimization, promoting high quality care and improved patient outcomes.

The ICP & LEs will serve as capacity centres to provide the essential tools, resources, processes and learning opportunities to facilitate replication of the successful interprofessional and change management practices for other clinical sites and settings in the future, as well as to provide the opportunities for learning for future students and healthcare practitioners.

Objectives

The specific project objectives include the following:

Establish project structure and processes

1. Sign off on Project Charter by all partners.
2. Document project processes and results.

Build ICP & LE capacity

3. Define an interprofessional collaborative practice & learning environment (ICP & LE) and associated terms (teams, sites, IP, CP, patient centred care; learning

environments; collaborative competencies; HHR outcomes, electronic community of practice, etc).

4. Clearly describe the process for developing an ICP & LE including the change management processes and learning strategies & resources to be applied to each site.
5. Develop and implement at least one innovative model of interprofessional collaborative practice in each participating jurisdiction

Evaluate the ICP & LE models

6. Establish a minimum set of evaluation and outcome indicators to be used in measuring the impact of the projects especially on patient outcomes and HHR issues. Describe the evaluation process that will be established to enable ongoing monitoring and evaluation of the development process.
7. Document the process of implementation, lessons learned, successes and challenges, barriers and facilitators, and recommendations for creation of new sites of interprofessional collaborative practice and learning environments.

Support Knowledge Transfer (KT)

8. Develop a collaborative HHR planning and research network facilitated and supported by an electronic platform or electronic community of practice (eCoP). This Network would comprise all key partners, stakeholders, ICP & LE site teams and others as appropriate to ensure the success of the project and the effective dissemination of all learning and tools that are derived during the project. The electronic platform will build on existing developments where appropriate.
9. Develop an integrated KT plan that promotes application of evidence to improve long term practice/behaviour, which is “generalizable” across project sites, as well as across other potential new sites with differing contexts.

Deliverables

- Successful completion of a 2 day Value Management Review meeting of all partners and key stakeholders including documentation of all decisions made during the meeting.
- Completion of a detailed work plan.
- Successful establishment of the project team, Project Steering Committee and project governance structure.
- Development of an HHR planning and research network to support the project, including the development and moderation of an electronic community of practice to facilitate communication and knowledge translation and exchange.
- Development of a knowledge translation (KT) and dissemination plan.
- Common criteria for selection of project sites and desired outcomes are developed, documented and agreed by partners.
- Common guidelines for development of ICP & LE and workforce optimization approaches are developed, documented and agreed by partners.
- Development and documentation of generic site intervention plan and logical process for implementation.

- Essential tools and resources sourced and/or developed and then documented and housed on the eCoP for sharing with all project partners.
- Project sites selected and established.
- Development, documentation and signing of a memorandum of agreement (MOA) outlining governing rights, responsibilities, commitments and levels of support required by all key partners and stakeholders, as appropriate, for each site.
- Baseline scans and analysis undertaken and documented for each site.
- Initial change development plans for each site developed and documented.
- Evaluation framework developed and documented, including development of minimal evaluation indicator set.
- Evaluation plan documented and initiated.
- Phase one report and updated guidelines on how to develop sustainable ICP & LEs completed and submitted to Health Canada at end of first 12 months.

PROJECT STRUCTURE

SPONSORING ORGANIZATION

The Western and Northern Health Human Resources Planning Forum is a collaboration of the ministries of health and advanced education from across the four western provinces and the three northern territories. The member jurisdictions are British Columbia, Alberta, Saskatchewan, Manitoba, Yukon, Northwest Territories, and Nunavut. Special observer status for the Forum is extended to Health Canada, the Ontario Ministry of Health, and the Atlantic Advisory Committee on Health Human Resources (AACHHR).

The Forum was established in 2001 and was initially involved in information exchange, networking, and communication on issues related to health human resources. Since then, the Forum has matured and is now implementing wide ranging collaborative multijurisdictional projects. To date, more than thirty projects have been successfully completed. More information on the Forum is available on its website: www.hhpforum.com.

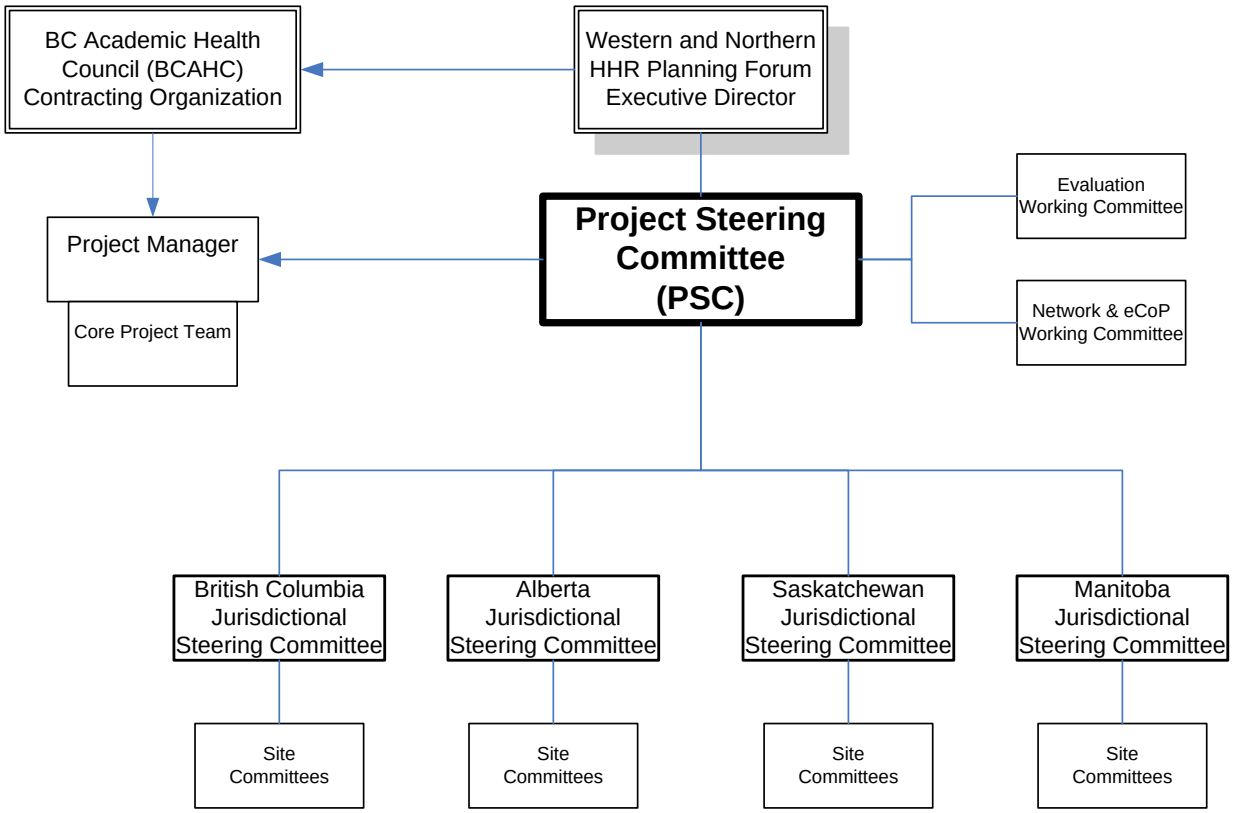
PARTICIPANTS

Sites were selected in organizations (health regions) within the four western provinces. The three northern territories were not able to participate. The sites are described in Part III of the report.

GOVERNANCE MODEL

The overall project governance structure is shown in the model below. A listing of the membership of the Project Steering Committee (PSC) is provided in Appendix A.

Figure 1 – Project Governance Model



TIMELINES

The original project proposal was based on an eighteen month timeline. By the time the contribution agreement was signed and the money from the funder arrived, only 12 months remained for project implementation. A 6 month, no cost extension was received; however, there was a substantial reduction of committed funding ($152,000 ~67percent of extension funds) which seriously compromised the project.

PROJECT CHARTER

The project charter (Appendix B) was an agreement among the various partners participating in the ICP & LE project to work collaboratively in achieving the project vision and objectives. The project charter was endorsed by the Project Steering Committee in Winnipeg, Manitoba on September 29 and 30, 2010. By endorsing the charter, the individuals, organizations, and governments accepted the overall intent and principles of the Charter and agreed to do their part to pursue the goals.

EVALUATION PLAN

An external evaluator was contracted to Chair the Evaluation Working Committee (EWC) and work collaboratively with the EWC and the Project Steering Committee to: 1) develop the program theory and logic model, 2) develop a common evaluation framework including short term, intermediate, and long term indicators, 3) evaluate operational infrastructure activities, 4) identify common lessons learned across

jurisdictions, and 5) identify system structures and processes that support collaborative practice based on overall findings of the initiative.

One of the products of this project is a common evaluation framework that extends far beyond the life of this project (Appendix C). The evaluation activities that were conducted focused only on implementation and also describe some limited early outcomes. The evaluation examines both across jurisdictions and within the operational infrastructure: (1) the extent to which project activities were implemented as intended (2) the factors that helped or hindered implementation, and (3) the lessons learned. The evaluation activities and results are described in Part V of the report.

KNOWLEDGE EXCHANGE AND TRANSLATION PLAN

Supporting knowledge translation and exchange (KTE) was an important component in the project and to capture its importance and ensure it was enabled throughout the project, a plan was created followed by a report on the achievements and effects of the approach (Appendix D).

At the onset of the project, the deliverables indicated that a collaborative HHR planning and research network facilitated and supported by an electronic community of practice would be developed. It was envisioned that this network, comprising of all project participants would ensure the effective dissemination of all learning and tools that were used and derived during the project. Subsequently, the knowledge translation and exchange plan would promote the application of evidence to improve long term practice/behaviour, which would be generalizable across the project and beyond.

The complexity of this project entailing the involvement of multiple target groups with project benefits expected across these groups was also recognized from the beginning and thus the need for a comprehensive plan. The overarching goal of the KTE component was to integrate collaborative practice and learning environments into the best practice design for new health services delivery initiatives and for revitalizing ongoing initiatives. It was recognized that the work undertaken in this project would contribute to an existing body of knowledge on interprofessional collaborative practice. The ICP & LE project used a hybrid approach to KTE, following definitions provided by the Canadian Institutes for Health Research (CIHR). The primary focus for the project was “integrated KT,” with a secondary focus on the more traditional” end-of-grant KT” perspective. These approaches, activities and rationale can be found in the plan and report.

Details of the KTE report specifically include indications of the target audiences for knowledge exchange, a description of the barriers and facilitators to communication and discussion on the role of the knowledge broker and eCoP moderator. It lists the KT activities that the project undertook, the audiences targeted by those activities and the effect that the activities had. Finally, the report reviews the KTE framework and messaging, concluding with knowledge translation and exchange lessons learned and recommendations for the future.

PART II: DEFINITION OF KEY TERMS

This section of the report introduces the key terms used throughout this project.

INCORPORATING THE COMPETENCY FRAMEWORKS

In 2008, the World Health Organization (WHO) formed its Study Group on Interprofessional Education and Collaborative Practice to research and highlight the current status of interprofessional collaboration around the world, identify the mechanisms that shape successful collaborative teamwork, and outline action items that policy makers can apply within their local, regional and national health systems.

The Study Group published its findings and recommendations in 2010 as the WHO Framework for Action on Interprofessional Education and Collaborative Practice (available at www.who.int/hrh/resources/framework_action/en/index.html).

The WHO Framework recommends approaches for the development of effective interprofessional collaboration in each of three action areas:

1. Interprofessional Education
2. Collaborative Practice
3. System Level Supportive Structures

The National Interprofessional Competency Framework developed by the Canadian Interprofessional Health Collaborative (CIHC) identifies the competencies required for effective interprofessional collaboration. Six competency domains highlight the knowledge, skills, attitudes and values that shape the judgments essential for interprofessional collaborative practice (available at http://www.cihc.ca/files/CIHC_IPCompetencies_Feb1210r.pdf).

The six competency domains are:

1. Interprofessional communication
2. Patient/client/family/community centred care
3. Role clarification
4. Team functioning
5. Collaborative leadership
6. Interprofessional conflict resolution

These documents were adopted by the Project Steering Committee in September 2010 as essential frameworks for the work being completed within the ICP & LE project. They have been extensively used in all aspects of project activities.

KEY CONCEPTS AND DEFINITIONS

The following terms were used during the project:

Collaborative practice in healthcare occurs when multiple health workers from different professional backgrounds provide comprehensive services by working with patients, their families, carers and communities to deliver the highest quality of care across settings. Practice includes both clinical and nonclinical health related work, such as diagnosis, treatment, surveillance, health communications, management and sanitation engineering. (WHO framework)

Electronic community of practice (eCoP) is an online tool providing space for network members to share information and support collaborative work and learning from others. (InSource)

Facilitators and researchers are the key project staff who work with the teams to determine what needs to change, what interventions are required, and the methodology for evaluating the impacts. (Proposal)

Interprofessional collaboration is a partnership between a team of health providers and a client in a participatory, collaborative and coordinated approach to shared decision making around health and social issues. (CIHC framework)

Interprofessional collaborative practice and learning environments (ICP & LE) are leading examples (capacity centres) for interprofessional patient centred collaborative practice, collaborative learning, and workforce optimization. (Proposal)

Interprofessional education occurs when two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes. Professional is an all encompassing term that includes individuals with the knowledge and/or skills to contribute to the physical, mental and social well being of a community. (WHO framework)

Interprofessional education interventions occur when two or more professions learn interactively to improve collaboration and the quality of care. They comprise formal education sessions of any type taught to pre-licensure and post-licensure learners using different teaching approaches (including action based, simulation, interactive, e-based opportunities). They include interprofessional clinical practicum experiences for students. (Reeves S., Goldman J., Zwarenstein M., Gilbert J., Tepper J., Beradall S., Silver I. and Suter E. 2009. An empirically developed framework for classifying interprofessional interventions.)

Interprofessional organization interventions are interprofessional procedures (i.e., space, staff mix changes, policy) at the organizational structure or the systems level to improve collaboration and the quality of care. (Reeves S., Goldman J., Zwarenstein M., Gilbert J., Tepper J., Beradall S., Silver I. and Suter E. 2009. An empirically developed framework for classifying interprofessional interventions.)

Interprofessional practice interventions are post-licensure interprofessional activities or procedures incorporated into regular practice routines to improve collaboration and the quality of care. (Reeves S., Goldman J., Zwarenstein M., Gilbert J., Tepper J., Beradall S., Silver I. and Suter E. 2009. An empirically developed framework for classifying interprofessional interventions.)

Local champion is a person in a position of authority to affect change and who are clearly supportive of the project and its underlying philosophy and principles. (Proposal)

Patient/family centred care is a partnership between a team of health providers and a patient where the patient retains control over his/her care and is provided access to the knowledge and skills of team members to arrive at a realistic team shared plan of care and access to the resources to achieve the plan. (CIHC framework)

Social network analysis (SNA) examines relationships between organizations within a network, or network of networks, to identify patterns of interactions, diagnose areas of strengths and weaknesses, and generate ideas for improving system performance. (InSource)

Workforce optimization – see below.

LINKING WORKFORCE OPTIMIZATION TO THE COMPETENCIES REQUIRED FOR EFFECTIVE INTERPROFESSIONAL COLLABORATION

The original project proposal raised the concept of workforce optimization as central to the reform and redesign of the Canadian healthcare system. Here is some of the language used in that document:

- *"Federal, provincial and territorial governments recognize that healthcare is continually changing and that achieving a sustainable health system that provides timely access to quality health services will require modification of existing models of health service delivery and greater flexibility in the deployment and utilization of health professionals." (page 2)*
- *"The growing shortage of health professionals and recent economic downturn will continue to place increasing pressure on healthcare organizations to manage their resources efficiently and effectively." (page 2)*
- *"There is a growing body of evidence that indicates that all members of the healthcare team are not effectively utilized. What is lacking is detailed information about how the shared and distinct knowledge and skill of individual categories of care providers can be brought together to synergistically influence the quality outcomes of the client/patient care provided." (page 2)*

Further, the proposal also suggested that as the project continued, the participating sites would:

- *"Where appropriate and possible, staff mix and operational protocols will be changed to facilitate collaborative practice and shared patient assignments based on evidence relating to workforce optimization." (page 14)*

This translated into a main element of the vision for the ICP & LE project:
"The ICP & LEs will exhibit innovation in interprofessional patient centred practice and *workforce optimization*, promoting high quality care and improved patient outcomes."

As the project was implemented it was clear that workforce optimization was not well or consistently understood by many of the participants. Specifically, it was challenging to make the connection between two concepts in the project proposal—interprofessional practice and workforce optimization.

Workforce optimization was discussed at the Core Team Workshop in December 2010 and again during a knowledge exchange event in February 2011. Jeanne Besner (then of Alberta Health Services) proved to be a valuable resource due to her previous work in this area.

Examples of Tools and Resources Utilized: www.icple.com

Resource Title	Author	ICP & LE Website Location
Workforce Optimization Knowledge Exchange Teleconference Notes - Feb20_2011(pdf)	Knowledge Broker	Resources/ICPLE Universal Documents/ Project Framework Documents
Workforce Optimization: Core Team Workshop Discussion Notes - December_2010 (pdf)	Knowledge Broker	Resources/ICPLE Universal Documents/ Project Framework Documents
Role Optimization: Competency Based Approach to Clarifying Roles of RNs Presentation to RNs at LTC Invitational Symposium (ppt)	Jeanne Besner	Resources/ICPLE Universal Documents/ Project Framework Documents

The Evaluation Working Committee recommended that a definition of workforce optimization be developed that reflects the purpose/aims of the overall project. The Committee felt a definition was needed for purpose of the evaluation and would contribute to knowledge base in interprofessional practice. It was further proposed that the CIHC competencies be used as a framework for exploring the concept. The Project Steering Committee endorsed this approach and a small group of volunteers were assigned the task of meeting to provide recommendations.

The resulting small group discussion on operationalizing workforce optimization (May 2011) yielded the following:

- The concept goes by different names for example, workforce management, skill mix, scope of practice and other related concepts
- There isn't a lot of literature specifically on workforce optimization to draw from.
- What does "appropriate" staff mix mean and "optimal" practice environment mean?
- Competencies are relevant; however, need to think more broadly. There are milestones being achieved within teams that will contribute to workforce optimization at the organizational and operational levels that aren't reflected in competencies.

- Need to keep a systems perspective, being mindful of the different levels of the system that have to be addressed in order for interprofessional practice to be successful (i.e., resource allocation, how staffing decisions are made, using HR historical patterns versus looking at population based needs).
- Participants used analogy of a "brick wall" wherein each piece of the wall is important.
- Operationalizing the concept will require input from project designers and evaluators so that it reflects the reality of the project and provides measureable/observable outcomes and indicators.

It was suggested using the following definition of workforce optimization, adapted from Carl Ardy Dubois as a starting point:[6]

Workforce optimization enables organizations to optimize patient outcomes while ensuring the most effective, flexible and cost effective use of human resources. It is the product of multiple, integrated and interacting organizational interventions focused on: (i) appropriate staff mix; (ii) continued education to ensure health service provider continued competency in a changing health system, (iii) optimal deployment of staff members' competencies; and (iv) optimal practice environments. (Dubois, CA. and Singh, D. (2009). From staff-mix to skill-mix and beyond: towards a systemic approach to health workforce management. Human Resources for Health. 7 (87): p. 1-19.)

It was recommended to:

1. Explore further by taking Dubois definition and define each of the subcategories (i.e., (i) appropriate staff mix; (ii) continued education to ensure health service provider continued competency in a changing health system, (iii) optimal deployment of staff members' competencies; and (iv) optimal practice environments) more precisely with indicators.
2. Use the CIHC competencies document and WHO framework as a starting place to identify indicators for each subarea.

Unfortunately, due to time constraints, no further work could be acted upon. However, the definition shown above and the subsequent recommendations do provide a strong starting point for other interested parties to forge a link between interprofessional practice and workforce optimization.

[6] This was the definition used in the Forum project - Increasing Awareness and Resources to Facilitate the Improvement of Effective Productivity in the Health Care Workforce in Western and Northern Canada, November 2010 to March 2011.

PART III: OVERVIEW OF THE PROJECT SITES

This section of the report includes a high level description of each of the nine service delivery team/sites that participated in the project.

CRITERIA FOR SITE SELECTION[7]

One or two health services sites (i.e., geographic service areas, clinical departments, medical units, etc.) were identified in each of the participating jurisdictions. Preference was given to areas that show a high level of readiness for collaborative practice and learning. Potential sites interested in participating in the project were required to meet a number of criteria such as being:

- Committed to interprofessional collaboration.
- Willing to work with the Core Project Team to create a new collaborative practice model modified to achieve workforce optimization.
- Prepared to participate in all evaluation activities and to openly share the results with all project participants through the electronic platform and other potential KT strategies.
- Prepared to provide opportunities for student and staff training and IP mentoring.
- Prepared to provide appropriate levels of financial and in kind resources to fully support the project objectives for the project site.
- Other criteria will be determined by the Project Steering Committee during the Establishment Phase of the project.

It was intended that the above criteria would be assessed at all levels of the potential site, including health authority management, health facility management, middle level management and specific site staff to be affected by the proposed changes. Final selection of sites was undertaken in conjunction with ministries of health in each jurisdiction.

MEMORANDUM OF AGREEMENT

The Memorandum of Agreement (MOA) outlines the respective roles and responsibilities of the participating health regions/authorities and the BC Academic Health Council, contracting organization managing the project. Each MOA includes the respective site budget and details allowable expenses. An example can be found in Appendix E.

BRITISH COLUMBIA

Readers are encouraged to review the comprehensive site report prepared by Mark Blanford of Vancouver Island Health Authority (Appendix F). A high level summary is provided here.

[7] Taken from Project Proposal dated September 4, 2009.

PARTICIPATING SITES/TEAMS

The project was undertaken at two separate sites within the Vancouver Island Health Authority (VIHA).

The Lodge at Broadmead (the Lodge), Broadmead Care Society (BCS)

The Lodge is a residential care facility operating within VIHA with 115 priority access beds for veterans and 110 community beds. The Lodge provides service to seniors with impairments that may be physical, cognitive, or very frequently both, when care and assistance must be readily available at all times. The average age of resident is 87 years. 75 percent have cognitive impairment with multiple co-morbid conditions. Between 50 – 60 percent of all residents have a change in family physician when they move into the care facility. Nearly 100 percent of all people who move into the Lodge die there.

The Lodge is funded by the Vancouver Island Health Authority. Residents pay a daily rate that is set by the Ministry of Health, as well as optional service fees. Veterans may receive funding support for some services, equipment and supplies through Veterans Affairs Canada. The staff is made up of an interdisciplinary team (nursing, social work, dietician, occupational therapy and physiotherapy) providing assessment and care. Staff have been working with a small group of 10 - 12 local physicians who have been willing to increase the number of patients they care for at The Lodge; collectively they now provide medical care to over 80 percent of the residents.

The primary focus of this project was to explore the relationships and interprofessional practice between all of these disciplines with particular emphasis on the integration of a newly introduced nurse practitioner role.

Seniors At Risk Integrated Health Networks - (SARIN)

SARIN is an innovative approach to keeping vulnerable seniors healthy and out of hospital. This integrated health network links seven VIHA programs, 28 Greater Victoria and Saanich Peninsula physicians, and their elderly patients. SARIN aims to empower people to become partners in their own healthcare by maximizing function and independence. The target population is frail, elderly patients over 55 years of age living with two or more chronic conditions.

SARIN creates partnerships between primary care physicians, home and community care programs, mental health and addictions services, seniors health specialized services, end of life services, community recreation centres and many other organizations that help delivery holistic primary and preventative care to seniors. A clinical team approach has case managers collaborating with nurse practitioners, specialized nurses, social workers, pharmacists, dieticians, physiotherapists and occupational therapists. SARIN provides enhanced access to services for frail seniors/families (falls prevention, medication management, congestive heart failure self management, dementia education programs). There are enhanced linkages with

specialist services (geriatrics, mental health, palliative care) and access to community services that promote seniors independence.

The SARIN clinical team is comprised of: family physicians, nurses, case managers, occupational and physiotherapists, nurse practitioner, recreation therapist, dietician, pharmacist, administrative assistants, manager.

IDENTIFYING OPPORTUNITIES TO IMPROVE COLLABORATIVE PRACTICE

Both sites/teams utilized Future Search as a methodology to explore where practice could be improved. At The Lodge at Broadmead the Future Search workshop allowed the team to focus on past highlights and milestones, present reality and trends, and imagine and plan for an ideal future. Four action projects identified related to: information technology; nurse practitioner; person centered end-of-life care; and community outreach for the frail elderly.

The Future Search technique that was utilized to support the SARIN team led to extensive conversations that enabled all team members to gain a greater understanding of each other's roles and the day to day difficulty each encountered in fulfilling those roles. The power of these conversations has led to small and large changes in how many team members function with each other. In particular, an exercise on day one of the Future Search session required the team to explore the "land" inhabited by others. This exercise was very powerful in exploring myths about other team members and bringing the team to a closer understanding of each other's roles.

At both sites surveys were administered pre-and post-intervention (before and after Future Search sessions) to assess collaborative competencies.

KEY OUTCOMES TARGETED FOR IMPROVEMENT

Patient/family

- SHORT TERM: Increased satisfaction with healthcare provision and healthcare experience. Improved self care capacity, and reduced healthcare service utilization.
- LONG TERM: Improved health outcomes.

Providers

- Positive change in attitude, knowledge and skills related to ICP & LE; positive attitude toward healthcare team; increased skill in patient centred care.
- Increased life/work satisfaction; improved work quality and safety; increased attitude, knowledge and skills toward healthcare team.

Broader organization and/or system

- Increased team cohesion, efficiency and collaboration. Increased staff recruitment and retention, and efficient utilization of healthcare workforce.
- Improved productivity leading to cost effectiveness, reduced sick leave taken and patient centred care.

- Increased capacity for ICP & LE and change management practices among site level participants (providers, patients, and workforce optimization).
- Increased access to technology to support cross jurisdictional/site role collaboration.
- Increased knowledge exchange related to ICP & LE between all project participants.
- Increased awareness of relationships involved in ICP & LE network and activities by all project participants.
- Increased capacity and evidence of cross jurisdictional/site role collaboration.
- Awareness of the importance of mechanisms identified by WHO Framework for Action on Interprofessional Education & Collaboration Practice as essential for support system change at the national, jurisdictional and site levels (institutional support, working culture and environmental mechanisms).
- Improved team effectiveness in ICP & LE at practice sites (providers, patients, workforce optimization).

INTERVENTIONS INTRODUCED

The Future Search workshops/meetings were the main interventions conducted in order to facilitate structured activities to assist the team at each site to assess their interprofessional status and to set future team goals.

Additional SARIN interventions included:

- Learning sessions on collaborative practice competencies – dialogue and identifying future opportunities.
- Mapping the patient experience – maps showing how the patient experiences the 'system'; follow up workshop with clinicians to identify improvement opportunities.
- Identifying system structures and processes that can impede or facilitate collaborative practice – documenting results for discussion within the broader organization.

ALBERTA

Readers are encouraged to review the comprehensive site report prepared by Esther Suter and Siegrid Deutschlander of Alberta Health Services (Appendix G). A high level summary is provided here.

PARTICIPATING SITES/TEAMS

Two community mental health outpatient clinics, operated by Alberta Health Services (AHS), participated in this project. Both clinics offer services to adults that experience psychiatric problems with pervasive impairments across different areas of functioning (Axis 1 diagnosis). Services are provided by interprofessional team members (i.e. social work, nursing and psychology therapists, independent living support workers, occupational therapist (one clinic only), outreach workers and transition coordinators). Both clinics operate on a primary therapist model where each therapist has a full client load and acts as a case manager for their clients. Psychiatrists act as consultants.

Services include intake assessments, psychiatric consultations, individual and group therapy, medication management, outreach and transition support. Both clinics have regular student placements mainly from nursing, social work, occupational therapy, psychology and psychiatry.

Clients require a referral to access services. Prospective clients can be self referred, referred by physicians or other agencies. All referrals are screened by Access Mental Health – Adult & Senior Services (Access MH) and forwarded to the clinics if appropriate. A triage team in each clinic confirms that a client is eligible for services and what the client's specific needs are. New clients are prioritized, assigned to a therapist and booked for a psychiatric assessment if needed. The total client base for each of the clinics is about 800, with some clients being long term, staying with a provider for 25 years. There is currently about a six month waitlist.

IDENTIFYING OPPORTUNITIES TO IMPROVE COLLABORATIVE PRACTICE

A comprehensive assessment of both clinics was conducted to understand the current levels of collaborative practice, structures and processes in place to support collaborative practice and opportunities for improvement. Data was gathered from a number of sources:

- Environmental checklist completed during team meetings; the checklist captures structures and processes that support IP education and collaborative practice.
- Individual interviews with staff.
- A social network survey to capture interactions between staff around clients.

Following the CIHC collaborative practice competency framework, the data are broken down into the different aspects of team functioning, role enactment and role clarity, communication, interprofessional conflict, client/family centered care, and collaborative leadership.

The facilitators also examined organizational level support for collaborative practice, interagency collaboration, and student placements and IP mentoring.

KEY OUTCOMES TARGETED FOR IMPROVEMENT

The primary outcomes targeted were at the provider and system levels. Specifically, the intention was to:

- increase IP competencies of providers,
- develop staff competencies to act as IP mentors for students,
- increase capacity for IP student placements and,
- develop structures and processes to facilitate collaborative practice.

INTERVENTIONS INTRODUCED

Staff Interventions (September 2010 – June 2011)

The project was guided by a philosophy of participant engagement to create ownership of the work to be conducted. Two project team members acted as external facilitators; program managers at both sites acted as internal champions. The facilitators met approximately every two weeks for about one hour with each project team to guide discussions about areas for change and to assist with the design of the strategies. Tools and approaches from Human Systems Dynamics were used to structure the conversations and arrive at meaningful strategies. The CIHC collaborative practice competency framework was core to all conversations. Care was taken to devise IP strategies at the education, practice and organization level. The importance of sustainability was discussed early on and a tool to create sustainable strategies was introduced. Both clinics introduced a number of strategies over ten months.

In Clinic 1:

- IP mentoring strategy: a clinical placement approach was implemented that creates IP learning opportunities for students from different professions. Each student still has a discipline specific supervisor; however, all staff members at the clinic act as IP mentors and support students' development of IP competencies.
- Addictions expertise: due to the recent inclusion of addictions into the mental health mandate, therapists identified a need to increase their knowledge and skills around concurrent disorders. A strategy was implemented that accessed the expertise of an addiction councillor to model treatment approaches for patients with concurrent disorders, educate on assessment tools for addictions and appropriate referrals.
- Team functioning: the team developed "simple rules" to guide team behaviour.
- Vision: the team created a shared vision for their program. Due to ongoing restructuring over the past years, this was seen as an important step to create alignment amongst all staff.
- Sustainability framework: a framework was introduced to guide discussions around maintenance of the strategies implemented.
- Education series: staff organized three continuing staff development sessions in areas of common interest with a focus on collaborative practice approaches.
- Access to family physicians: A facilitated conversation about unattached clients that resulted in a solution for increasing access of those clients to family physicians.
- Team retreats: one full day and two half day retreats for staff to conduct focused work around the strategies outlined above.

In Clinic 2:

- IP mentoring strategy as outlined above.
- Restructuring of weekly team meetings to allow for more structured conversations and case presentations.

- Comprehensive review of the patient journey through the program (i.e., from triage to discharge including roles of different therapists and psychiatrists at various stages of the process).
- Protocol for co-sharing of complex clients between two therapists.
- Sustainability framework: a framework was introduced to guide discussions around maintenance of the strategies implemented.
- Education series: staff organized three continuing staff development sessions in areas of common interest with a focus on collaborative practice approaches.
- Access to family physicians: A facilitated conversation about unattached clients that resulted in a solution for increasing access of those clients to family physicians.
- Team retreats: one full day and two half day retreats for staff to conduct focused work around the strategies outlined above.

Staff evaluation interviews were completed in June and data analysis is in progress. Preliminary findings indicate an overall positive impact of the project activities in a number of areas:

- Increased staff awareness of team dynamics.
- Increased awareness of team practices and opportunities for collaboration/referrals.
- Increased team cohesion and team functioning.
- Increased collaborative practice competencies.
- Increased collaboration (i.e., sharing of complex clients).
- More effective team meetings.
- Improved client care processes (i.e., triage, discharge, concurrent disorders).
- Improved access to family physicians for unattached clients.

Student Interventions (September 2010 – April 2011)

A second focus of the Alberta ICP & LE project was on providing collaborative practice education to students to enhance their training in IP competencies as part of their professional development. The primary research question for the student component was "How did the IP clinical placement influence students' IP competencies and their collaborative practice during their placement?" The students were not placed in teams; instead the project supported the placement of individual students at the sites. Six students were placed at the clinics during the fall 2010 and winter 2011 semesters. Three were from the faculty of social work and three from nursing.

Through interprofessional mentoring, students were taught about IP competencies and collaborative practice. At the beginning of their placement, the students received an orientation to the project and expectations for their participation were outlined. The students were expected to select IP competencies for one of their learning goals, write a reflection on their experiences, carry out IP practice activities and attend IP seminars.

Students participated in a range of IP activities. For example, students accompanied other practitioners on home visits (nurses, independent living support workers,

occupational therapist) and joined particular client sessions with other providers (i.e., medication reviews with psychiatrists, group therapy sessions for specific disorders). Two students attended an interprofessional conference in Edmonton. Some of the students also attended the bi-weekly staff discussions on collaborative practice, the regular team meetings or the triage meetings. Programs or organizations outside their own teams were also visited (i.e., forensic psychiatric centre, dialectical behaviour therapy team, chronic pain clinic). The nursing students facilitated a few of the social support group therapy sessions by discussing lifestyle choices with the clients (smoking cessation, healthy eating, stress management, etc.). One nursing student researched different types of injections as a potential option for future practice by nurses on the team.

Besides the IP practice activities with IP mentors at the sites, the students participated in bi-weekly IP seminars that were held by one of the project facilitators. In the two hour sessions, interactive activities and discussions among the students to promote knowledge exchange were facilitated. Altogether, twelve student sessions were held to discuss the IP competencies, the importance of IP collaborative practice, review client cases from the clinics, and to debrief on their practice experiences at the clinics.

To support staff in IP mentoring, the project team held an IP mentoring workshop and consultations with mentors throughout the project.

SASKATCHEWAN

Readers are encouraged to review the comprehensive site report prepared by Stacey Shand on behalf of the Sun Country and Sunrise Health Regions (Appendix H). A high level summary is provided here.

PARTICIPATING SITES/TEAMS

The project was undertaken at two sites each within a different health region in Saskatchewan.

Rural West Primary Health Care Team, Sun Country Health Region

The Rural West Primary Health Care Team covers an area covers of about 14, 400 square kilometres west of Weyburn, Saskatchewan. This is an agriculture based community with some oil development. There are 3 health facilities. The Team serves a population of 4,997.

The Rural West Primary Health Care Team is comprised of: client(s), physicians, nurse practitioners, registered nurses, pharmacists, dieticians, community partners, occupational & physical therapists, home care, social work, mental health, public health & all support services.

The Rural West Primary Health Care Team is one of three primary healthcare teams in the Sun Country Health Region. The Rural West Primary Health Care Team is unique, in comparison to the other primary healthcare teams, as Rural West covers a larger

geographical area, has a more interdisciplinary mix of health professionals and is the youngest (only one year old).

Women's Wellness Centre Team, Sunrise Health Region

Services are offered to women from 12 years old and up. The total population served is 56,800. The city of Yorkton, population +/- 17,600, is the largest community with 31 percent of the total population. First Nation communities of Key, Cote and Keesekoose account for 2.8 percent of the population.

Services offered include: pre-menopause & menopause support, sexually transmitted diseases clinic, birth control counselling, care before & after birth, pre-pregnancy planning, depression assessment, bone health support, and pap & breast exams.

The Women's Wellness Team includes: physician, nurse practitioners, community support worker, administrative assistants & visiting services (mental health nurse/counsellor, exercise therapist, and are actively recruiting a pharmacist).

The Women's Wellness Centre (WWC) Team is one of five inter-disciplinary teams within the Primary Health Care (PHC) portfolio, which also has a developing Chronic Disease Management (CDM) program that links very strongly to each of the PHC teams and other primary care physician clinics. Thus, various members will assist in delivering CDM programs in their communities as well as other educational events. WWC links with the local educational institutions or organizations such as Kid's First by offering services or educational events. These would include the teen nights and women's events.

IDENTIFYING OPPORTUNITIES TO IMPROVE COLLABORATIVE PRACTICE

Opportunities to improve collaborative practice were identified through the following Interprofessional Team Relationship Activities:

- Research meetings
- Regular team meetings
- Community/patient relationship: consultations meetings and lunch & learn sessions

Research Meetings

Research meetings were for the provincial/jurisdictional research consultant and the onsite facilitator(s) to plan and develop interprofessional interventions for each individual team. The planning meetings were an opportunity for each onsite facilitator to:

- Describe the roles and responsibilities of the team members.
- Provide regular updates on team meetings (minutes, discussions, etc.).
- Identify and describe the aims, goals and vision of the team as it pertains to IPCP learning.

The research meetings would then focus on the following activities based on the report of the onsite facilitator:

- Research consultant would propose best practice research on the areas of IPCP team development identified by the team.
- Development of interventions and intervention strategies to meet the needs of the team (with a plan to continuously report back to the large team as needed).
- Plan learning events, meetings, work sessions, planning sessions as needed.

Regular Team Meetings

Regular team meetings provided an opportunity for face to face interprofessional conversations on the current state of the team and to develop aims, measures and actions to move forward. This was an opportunity to understand roles and responsibilities of the team members as well as implement the interventions planned during the research meeting.

In order to continue the momentum of the team, the onsite facilitator attended all regular team meetings in order to become a key member of the team. The role of the onsite facilitator was to be the main team contact. All interventions in the ICP & LE initiative were in consultation with the team members, proposed by the onsite facilitator.

Community/Patient Relationship: Consultations Meetings and Lunch & Learn Sessions

The Rural West Primary Health Care Team held community consultations in 3 communities. These consultations involved education about Rural West, asking the community about their strengths and challenges, and identifying opportunities to work together with the team. This opportunity provided a way to listen and engage the community, building relationships, trust and support.

The Women's Wellness Centre hosted bi-monthly lunch & learn sessions for community members, patients and service providers. This provided a way for these key stakeholders to engage in the newly established Women's Wellness Centre and in the team approach to healthy living within their community.

In addition, at both sites self assessment evaluations and attitude assessments were administered to assess current practice as to the quality of collaboration and identify opportunities for enhancement.

KEY OUTCOMES TARGETED FOR IMPROVEMENT AND INTERVENTIONS INTRODUCED

Focus: Provider

Key Outcome	Intervention
▪ Assess current practice as to the quality of collaboration	• Strategic Planning Meeting *(both sites)* • Staff Interviews *(both sites)*

(communication, shared decision making, assessment etc. on site and externally) and identify opportunities for enhancement	• Administer self assessment evaluations & Attitude Assessments (Pre-Survey) *(both sites)* • Collect assessments *(both sites)* • Distribute assessments for Analysis *(both sites)* • Analysis *(both sites)* • Use data to direct interventions *(both sites)* • Administer self assessment evaluations & Attitude Assessments (Post-Survey) *(both sites)* • Compare self assessment evaluations & Attitude Assessments (Pre-&Post- Survey Results) *(both sites)*
▪ Hold learning sessions for providers about key concepts (collaboration, IPE, Competencies)	• Plan & organize Learning Event on IPE Competencies - administered by Site Facilitator – *see Appendix V (both sites)* • Email circulation of key learning/knowledge documents to team members *(both sites)* • Design feedback page on attending a Learning Event/PD Reporting Outline *(both sites)* • Have team provide feedback on Learning Event Reporting/PD Reporting Outline *(Rural West Primary Health Care Team)* • Interprofessional Experience in Pain Management Conference, January 2011 *(both sites)* • Learning Event: Interprofessional Health Collaborative of Saskatchewan (IHCS) IP Workshop, March 2011 *(both sites)* • InterD4 Interdisciplinary Workshop, by Communimed, on effective IP Communication, March 2011 *(both sites)* • Emotional Intelligence Quotient Testing & Consulting for Team Members, May-June, 2011 *(Women's Wellness Centre Team)* • Collect feedback on event participation via Learning Event Reporting/PD Reporting Outline Tool *(both sites)* • Purchase of Online Team Development IP Modules (Created by McMaster University with Interprofessional Education Online) for the education & development of team members *(Rural West Primary Health Care Team)* • Analyze feedback from event participation via Learning Event Reporting/PD Reporting Outline Tool *(both sites)*
• Develop common guidelines for development of ICP & LE • Develop structures and processes to enhance collaboration	• Conduct Best Practice Research on Guides for Effective IP Teams *(both sites)* • Conduct Best Practice Research on Guides & Tools for IP Student Placements *(Rural West Primary Health Care Team)* • Creation & design of Guides/Tools for Effective IP Teams (both sites) and Guides/Tools for IP Student Placements using feedback from site *(Rural West Primary Health Care Team)* • Implementation & Testing of Guides/Tools (Sharing resource updates with team(s) on a regular basis, briefings at staff meetings, and through regular team meetings) *(both sites)* • Circulation: This may be in the form or a handout,

	orientation package, and placement in a resource library on site *(both sites)*
• Support team/unit/site managers in implementing collaborative structures and processes	• Site Facilitators /Research Facilitator provide ongoing support of team/unit/site staff in implementing collaborative structures and processes *(both sites)* • Development of Code of Conduct Process (adapted from Communimed Learning Event, March 2011) to enhance team communication and collaboration *(both sites)* •
• Train staff on inter-professional mentoring (especially in concern to practicum students)	• Identify a University of Saskatchewan Faculty member who is linked with ICP curriculum-Networking occurred at IHCS IP Workshop on March 4th *(Rural West Primary Health Care Team)* • Meeting occurred at the Health Region, with Faculty, member to discuss the possibilities & process of incorporating the IP Student Placement Guide into the student practicum and enhance collaboration between practicum site & University *(Rural West Primary Health Care Team)* • Faculty member provided feedback on IP Student Placement Guide *(Rural West Primary Health Care Team)* • *Work with Faculty will be on-going to strengthen Student IP Placements (Rural West Primary Health Care Team)*
• Create an orientation package on Collaborative Practice	• Notes, reflections, paperwork connected to all interventions related to this process in order to document the sites activities *(both sites)* • Guide & Tools for Effective IP Teams created *(both sites)* • Guide & Tools for IP Student Placements created *(Rural West Primary Health Care Team)*

Focus: Site (Environment)

Key Outcome	Intervention
• Enhance capacity of site team for ongoing monitoring of practice to conduct future practice changes as needed (sustainability)	• Guide & Tools for Effective IP Teams created *(both sites)* • Development & Implementation of Patient Satisfaction Survey Process *(Women's Wellness Centre Team)*
• Enhance level of collaboration of the Team within the Health Region	• Creation of a communication document & event for Women's Wellness Centre (WWC) to update other departments/offices/staff about WWC, their roles/responsibilities and upcoming events/news, etc. *(Women's Wellness Centre Team)* • Organization of an 'in-house' Lunch & Learn Session for all employees/offices/departments in the building (Tasks: budget, date, advertising, staff participation) *(Women's Wellness Centre Team)*

Focus: Patient

Key Outcome	Intervention
• Assist patients and families in becoming aware of IPCP	• Community Consultation Meetings held to introduce the Rural West Primary Health Care Team *(Rural West Primary Health Care Team)* • Collect baseline data from Community Consultation Meetings to assess their attitudes & responses to IPCP *(Rural West Primary Health Care Team)* • Creation of materials to introduce the health care team and the concept of IPCP to patients *(Women's Wellness Centre Team)* • Circulation of materials *(Women's Wellness Centre Team)*
• Enhance patient care experience (continuity of care)	• Conduct best practice research on effective Patient Satisfaction Surveys (*Women's Wellness Centre Team)* • Work with team to create the tool to have an IPCP focus *(Women's Wellness Centre Team)* • Identify an assessment period 2 months to understand their care experience (Identify strengths and weaknesses in the care experience as they relate to collaborative processes [point of fragmentation, missing providers etc.] and ask patients and families about their journey in the system with a focus on what facilitated smooth journ(eys) *(Women's Wellness Centre Team)* • Analysis of the Patient Satisfaction Survey data & the tool itself *(Women's Wellness Centre Team)*
• Identify and implement collaborative structures and process to enhance patient education and patient care experience	• Organization of 'in-house' Lunch & Learn Sessions for all community members to learn about the visiting services & community partners of the Women's Wellness Centre (Tasks: budget, dates, advertising, staff participation, organization, creation of feedback tool & assessment of participant feedback) *(Women's Wellness Centre Team)*

Focus: Student

Key Outcome	Intervention
• Enhance inter-professional collaboration amongst students	• Collect baseline data on students and their placements *(Rural West Primary Health Care Team)* • The Rural West Team identified collaborative assignments/projects that would fit into the students timelines & schedules *(Rural West Primary Health Care Team)* • Conduct best practice research on assessment & education tools for student IP placement experiences *(Rural West Primary Health Care Team)* • Create Guide & Tools for IP Student Placements *(Rural West Primary Health Care Team)* • Site facilitator engages the team in the editing & implementing of Guide & Tools *(Rural West Primary Health Care Team)* • Tools tested on students *(Rural West Primary Health Care Team)*

	• Student data collected from the tools *(Rural West Primary Health Care Team)* • Data analyzed *(Rural West Primary Health Care Team)*
• Enhance integration of students into inter-professional practice teams within Rural West	• Site facilitator & team currently incorporates students into staff collaborative practice teams where appropriate *(Rural West Primary Health Care Team)* • Student participation in ICP & LE professional development activity *(Rural West Primary Health Care Team)* • Site facilitator is creating mechanisms for students to interact with staff from other disciplines and to observe/practice collaboration *(Rural West Primary Health Care Team)*

Focus: Partnership/Jurisdiction – Focus: Site (Environment)

Key Outcome	Intervention
• Develop a network of Community and/or Organization stakeholders engaged in IPCP	• Community Consultation Process *(Rural West Primary Health Care Team)* • Development of materials to introduce the health care team and the concept of IPCP to patients *(Women's Wellness Centre Team)* •
• Set foundations for regular Lunch & Learn Sessions to enhance collaboration within the jurisdiction	• Work with Staff to organize bi-weekly Lunch & Learn events *(Women's Wellness Centre Team)* • Logistics for Lunch & Learn Events: Budget, Dates, Location *(Women's Wellness Centre Team)* • Invite key stakeholders from various networks to participate in regular (bi-monthly) Lunch & Learn Sessions *(Women's Wellness Centre Team)* • Develop an advertising strategy for Lunch & Learn Sessions *(Women's Wellness Centre Team)* • Design feedback survey for Lunch & Learn Events *(Women's Wellness Centre Team)* • Hold regular Lunch & Learn Sessions *(Women's Wellness Centre Team)* • Collect Feedback from Lunch & Learn Events *(Women's Wellness Centre Team)* • Analyze feedback from Lunch & Learn Events *(Women's Wellness Centre Team)*
• Engage in Networking/Partnership Opportunities, Knowledge Transfer	• Development of proposal for the Saskatchewan Association of Health Organizations (SAHO) Annual

& Sharing at IPCP Learning Events	Conference, January 2011 *(Rural West Primary Health Care Team)* • Presentation at the Interprofessional Health Collaborative of Saskatchewan (IHCS) IP Workshop on the Saskatchewan ICP & LE Project, March 2011 *(both sites) (see Appendix VI)* • Poster Presentation on the Team & Services at an Education Wellness Event in the Community, March 2011 *(Women's Wellness Centre Team)* • Proposal accepted & Poster on Rural West Primary Health Care Team displayed at the SAHO Conference, April 2011 *(Rural West Primary Health Care Team)* • Development of proposals for Collaborating Across Borders IPCP Conference (Topics: Guide for Effective IP Teams; Guide for Student IP Placements), April 2011 *(Rural West Primary Health Care Team)* • Presentation to the Primary Health Care Directors in Sunrise Health Region on the Women's Wellness Centre & the ICP & LE initiative, April 2011 *(Women's Wellness Centre Team)* • Jurisdictional Update on the Saskatchewan ICP & LE Project at the Interprofessional Health Collaborative of Saskatchewan (IHCS) Annual Meeting, June 2011 *(both sites)* • Proposals accepted for Collaborating Across Borders IPCP Conference (Topics: Guide for Effective IP Teams; Guide for Student IP Placements). Conference Presentations will take place in November 2011 *(Rural West Primary Health Care Team)*

MANITOBA

Readers are encouraged to review the comprehensive site report prepared by Sunita B. Bapuji of the Winnipeg Regional Health Authority, on behalf of the Manitoba Jurisdictional Steering Committee (Appendix I). A high level summary is provided here.

PARTICIPATING SITES/TEAMS

This Health Canada funded project actively worked with three project sites within the WRHA from August 2010 through to March 2011 to assess, assist and optimize each team's collaborative practice.

Home Care Community Stroke Care Service

The Home Care Program's Community Stroke Care Service (CSCS) is a community based centralized, interprofessional service that provides case coordination from hospital to home, home care support and home based rehabilitation to adults who have recently suffered a stroke. When a person experiences a stroke, the need for support and rehabilitation does not end after their hospital stay. The CSCS responds to these challenges and evolving needs of clients and caregivers as they recover and adjust to

life after stroke at home. By promoting recovery and independence the CSCS helps people with stroke to remain at home as long as possible. Clients are supported and empowered to develop and achieve their goals. CSCS staff includes a team manager, case coordinator, occupational therapist, resource coordinator, physiotherapist, speech language therapist, and rehabilitation assistants (~12 staff in total).

Mature Women's Centre

The Mature Women's Centre (MWC) at the Victoria General Hospital is a referral based, nurse managed centre that provides comprehensive management of health issues related to menopause and aging with an emphasis on health promotion, and disease and disability prevention from a physical, cultural, emotional and spiritual perspective. Clients come from all across Manitoba, north western Ontario and Saskatchewan. The age range of clients spans from 17- 99. Men age 40 and over are also seen in the osteoporosis clinics conducted at MWC. MWC staff includes a manager of patient care (registered nurse), clerical staff, registered nurses, pharmacist, dietician, clinical kinesiologist (~11 staff in total whose primary work place is MWC) and a medical director. There are some physicians/medical residents (~6) who rotate and run various clinics at the MWC site but their primary site/workplace is elsewhere.

River Park Gardens

The River Park Gardens Personal Care Home (RPG-PCH) is an 80 bed facility located on the banks of the Seine River in south east Winnipeg (South St. Vital), and is owned and operated by the WRHA Personal Care Home Program. This facility provides 24 hour professional nursing services to elderly individuals who can no longer manage independently at home with family support and/or community services. The RPG-PCH's philosophy of care is based on a resident and family centered approach that is grounded in mutually beneficial partnerships among healthcare providers, residents and families. RPG-PCH has approximately 80 staff including registered nurses, licensed practical nurses, healthcare aides, a physician, administrative staff, housekeeping, and dietary staff.

Degree of student involvement

Although the primary focus of this project was on supporting teams as they transition to collaborative practice and learning environments, all three sites have historically had students placed with their teams and were open to mentoring interprofessional teams of students during their clinical placements/practicum/fieldwork. In partnership with the University of Manitoba Interprofessional Clinical Placement Working Group, efforts were made to coordinate the simultaneous placement of students. Due to a variety of factors (differing placement schedules, preceptor availability, and communication issues) none of the sites had a sufficient number or mix of healthcare students placed simultaneously. On a positive side, sites became very innovative in finding ways for IP practice education to occur when an IP core group of students was not present (i.e., team observation, cross profession shadowing). During the project period, one student each from pharmacy, kinesiology, dietetics, and administration was placed at MWC; one student each from rehabilitation and pharmacy discipline was placed at CSCS (albeit not simultaneously).

IDENTIFYING OPPORTUNITIES TO IMPROVE COLLABORATIVE PRACTICE AND THE KEY OUTCOMES TARGETED FOR IMPROVEMENT

The project interventions such as Appreciative Inquiry (AI) workshops and IP-COMPASS1 meetings focused on identifying patient/family, provider and system outcomes at each site level. AI focused on identifying teams' strengths and wishes (see attachments - pre-intervention evaluation reports (3) of CSCS, MWC, & RPG) related to the interprofessional collaboration that they would like to work on and to fulfill in the near future. Similarly, IP-COMPASS aimed at developing and implementing an action plan to create an environment that is conducive to interprofessionalism. Each site identified outcomes/action items that they targeted to work on to strengthen and improve their respective collaborative team environment.

CSCS Action Plan:

- Develop CSCS brochure and conduct related activities to inform public and community partners about CSCS.
- Include CSCS information on WRHA Insite: programs → home care→ specialty programs.
- Ensure new staff engage in interprofessional practice concepts.
- Enhance continuity of care/reduce wait times/workforce optimization.
- Enhance team's clinical learning.
- Maintain/improve team relations/expectations.
- Enhance clinical learning for interprofessional students.

MWC Action Plan:

- Increase our satisfaction survey to patients.
- Revisit our Advisory Committee to include a patient representative on our committee.
- Include in new orientation manual physician section and role of clinician
- Conduct daily morning meetings.
- Expand our MWC team to include psychiatric health service.
- Present case rounds more regularly, weekly nursing meeting and consistent wed rounds.
- Document student's involvement in inter-collaborative practice in orientation manual.
- Clearly define team goals/strategic plan.
- More formalized process so improved consistency within disciplines.

RPG Action Plan:

- Workforce optimization maximizing the role of the nurse.
- Enhance effective communication with VGH emergency department and River Park Gardens.

- Remain open to new ideas – use of PIECES (physical, intellectual, emotional, capabilities, environment, and social assessment tool).
- Continue to hire staff with empathy and high work ethics.

INTERVENTIONS INTRODUCED

Several activities were undertaken with each team. However, the AI and the IP-COMPASS workshops/meetings were the two main interventions conducted in order to facilitate structured activities to assist the team at each site to assess their interprofessional status and to set future team goals. A collaborative care education session was also conducted in order to facilitate knowledge translation and dissemination. A description of AI, IP COMPASS, and collaborative care education follows.

Appreciative Inquiry

Appreciative inquiry is commonly used for organizational and program development. It is now also being used widely in project evaluations. AI is a highly participatory approach to visioning and collective action. It focuses on identifying strengths and 'what gives life' to organizations by asking questions that identify strengths and wishes for the future (Reed, 2007). A WRHA Research & Evaluation Unit team member who was not involved in the evaluation planning but had experience conducting AI workshops, was brought in to facilitate the AI workshop.

IP-COMPASS

The Interprofessional Collaborative Organizational Map & Preparedness Assessment (IP-COMPASS) is a quality improvement framework intended to help clinical settings improve interprofessional collaboration and become better prepared to provide intentional interprofessional education, i.e., learning experiences that help students develop skills for interprofessional collaboration (Oandasan & Parker, 2010). It provides a structured process to help healthcare organizations understand the types of organizational values, structures, processes, practices and behaviours that, when aligned, can create an environment that is conducive to interprofessionalism.

Prior to implementation, site leads and project facilitators participated in an orientation session that provided information about the IP-COMPASS' purpose and process. In addition, all sites participated in an appreciative inquiry summit (focusing on interprofessional practice) prior to the IP-COMPASS. Each team implemented the IP-COMPASS in a slightly different way, based on their team composition and practical constraints. As a result of using the IP COMPASS, each team developed a detailed action plan.

Collaborative Care Education

An interactive educational session on the CIHC National Competency Framework was conducted at each site.

PART IV: PROCESS OF DEVELOPING A COLLABORATIVE NETWORK

One of the key deliverables of this project was the development of a collaborative network among the participants spread out at locations across the four western provinces. Not that many years ago, few people thought about or discussed social networks, let alone used "network" as a verb to describe making strategic connections with other individuals. Now, almost everyone is seemingly connected to colleagues and friends using tools such as LinkedIn, Facebook and Twitter to share information, make referrals and keep in touch.

Historically, organizations have worked together in formal and informal partnerships, collaborations and coalitions. As awareness of social networks has increased, organizations have increasingly recognized the benefits of studying their relationships with other organizations and leveraging them to maximize their own, or mutually beneficial goals. The relationships among network members are primarily non-hierarchical and have partial and often substantial operating autonomy. The organizations within the network can be linked by many types of connections and flows, such as information, materials, economic resources, services and social support. In the case of interorganizational networks, such as the one engaged in the ICP & LE project, interaction among organizations occurs primarily between individuals acting on behalf of organizations.

By working together as a network, organizations can improve both their efficiency and the effectiveness of the services and programs they offer (O'Toole, 1997; Agranoff, 2003). Potential benefits of network involvement are substantial, and include improved services, better access to these services for clients, less duplication of effort, better communication and access to needed information, improved innovation, and ultimately, improved health status indicators. Networks have been shown to be especially valuable for non-profit and public organizations working to address a broad range of problems in community and regional health and human services (c.f. Alter and Hage, 1993; Provan and Milward, 2001). In addition to facilitating service related outcomes, networks have been found to be essential for the dissemination of knowledge leading to adoption of innovative practice (cf. Westphal, Gulati, and Shortell, 1997; Rogers, 2003).

In this part of the report, the work undertaken to understand and document the emerging ICP & LE network is briefly described. In addition, the important contributions of the knowledge broker and the electronic community of practice to network development are highlighted. The SNA and knowledge broker also played a role as interventions.

UNDERSTANDING THE EMERGING ICP & LE NETWORK

InSource Research Group was contracted to undertake a multi-level evaluation of the emerging ICP & LE network using social network analysis (SNA). SNA examines relationships between organizations within a network, or network of networks, to identify patterns of interactions, diagnose areas of strengths and weaknesses, and generate

ideas for improving system performance. Doing SNA at the outset of a project (as done here), provides a snapshot of the current network, and collecting SNA data from this network in the future would be expected to show changes that may be attributed, at least in part, to the developmental work of network members and the project itself.

The purpose of the social network analysis was to identify which organizations are in the network, what relationships exist, and how the organizations within the network are supporting each other. Fundamental to this process was educating participants about key SNA concepts and how to read and interpret maps produced from the data collected, in order to increase network members' network competencies, particularly the ability to recognize opportunities to strategically reduce, build, and leverage ties with other organizations in the network, to maximize the benefits to one's organization and the network overall.

It was recognized that the ICP & LE planning and research network is a multi-layer network comprised of:

1. The Project Steering Committee (PSC) and the Western & Northern Health Human Resources Planning Forum (the Forum).
2. The four Jurisdictional Steering Committees (JSCs).
3. Local project sites within each jurisdiction.

Given that every jurisdiction did not have their project sites functioning and available for participation at the same time, it was decided that SNA would be conducted with only the Forum, the PSC and the four JSCs. The SNA methodology and findings are briefly described below. The full report is available as Appendix J.

METHODOLOGY

Working with the evaluation team, InSource developed a survey tool incorporating evaluation and SNA questions. The SNA relationship characteristics were developed in a workshop session at the September PSC meeting, and were further manipulated with the eCoP/SNA Working Committee. Organizations chosen for inclusion were those represented by membership in the Forum, the PSC and the four JSCs. A representative for each organization was selected by those participating in the PSC meeting workshop and this list was further refined by email dialogue with members of the eCoP/SNA Working Committee.

The resulting survey instrument was reviewed with the eCoP/SNA Working Committee to ensure it was appropriate and adequate for capturing the required data. The survey was administered online, and links to participants' individual surveys were sent to each of the organizations' representatives who were asked to respond on behalf of their organizations and, where possible, to include their colleagues in formulating their responses. Participants in the 30 minute survey were presented with a list of 31 participating organizations and programs. Participants selected the organizations/programs with which their organizations have relationships and indicated the intensity of each relationship along four defined categories of interaction:

- Sharing information;
- Planning strategies;
- Non-funded collaborative projects;
- Funded collaborative projects.

The survey was open for respondents from October 20 to November 15, 2010. During that time, 28 out of 31 possible participants completed the survey, yielding a response rate of 90 percent. This exceeds the minimum response rate of 85 percent.

The resulting network maps provide a comprehensive visual picture of the linkages and gaps that currently exist among participating ICP &LE organizations and partners with the Forum, PSC and JSCs. The SNA data were analyzed and presented to stakeholders for discussion and interpretation.

FINDINGS

Preliminary SNA results included the following high level findings:

- The Forum and Alberta Health and Wellness consistently showed up as hubs[8] and/or brokers regardless of the type of relationship examined.
- Other organizations currently well positioned to bridge cliques or serve as hubs included BC Academic Health Council, CIHC and WCIHC and Victoria General Hospital in Manitoba.
- Cliques of organizations tend to exist within provincial boundaries.
- Overall, there is a high degree of fragmentation across the network.

InSource presented its findings to stakeholders from the ICP & LE network at two sessions. The following is a compilation of stakeholder responses to the SNA data:

- The ICP & LE network is intended to be democratic and not autocratic, therefore lower centrality is preferred. However, a higher level of centrality to start may be useful for getting all network participants moving along a complementary path.
- If a decentralized network is the goal, it would be good to see a reduced number of cliques.
- The SNA revealed no hubs or brokers in either BC or SK thus far. These provinces were at earlier stages of project involvement, so this result was not unexpected.
- There was a strong interest in being able to monitor the network over time and to measure changes however any follow up SNA was beyond the scope of this phase one project.

There were a number of surprises in the findings. The links between Vancouver Island Health Authority and Victoria General Hospital in Manitoba were unexpected. Follow up discussions in the validation process discovered that these links most likely do not exist

[8] A glossary of SNA terms is provided in the full report.

but appeared due to confusion over the existence of a Victoria General Hospital (VGH) in both Winnipeg and Victoria, BC.

Stakeholders would have expected links between University of Manitoba, CIHC and WCIHC where there were none. Further, they would have expected ties between the SK Ministry of Health and the Forum. InSource noted that the two preceding anomalies could stem from participants under reporting existing relationships, and because reciprocal ties were used for the analysis to increase the validity of the results. The validation process discussions confirmed that the actual tie between the SK Ministry of Health and the Forum is definitely reciprocal.

RECOMMENDED ACTIONS

- Encourage "positive deviance", especially within and between project sites. Positive deviance is deliberately acting and manoeuvring in ways that are not normal within traditional bureaucratic structures. This describes how networks work around standard organizational processes to influence change in systems that are bound up in traditional organizational hierarchy.
- Focus initially on building awareness and coordination so that network members can see the potential value of collaboration.
- Move beyond awareness when readiness has developed, to foster "doing together" i.e., developing a common resource kit or staff training. Networks thrive on activity.
- Ensure all participants are supported in making time for network participation.
- Ensure enough central coordination to focus and guide activities strategically.
- Avoid introducing structural changes in an organization that might interfere with its network participation.
- To minimize the risk of stakeholders not participating and to provide a safe place for open collaboration, do not focus on performance measures for network participation.

ROLE AND SCOPE OF THE KNOWLEDGE BROKER IN THE EMERGING ICP & LE NETWORK

Knowledge brokering is an important activity for partners within professional networks to share information, best practices, insights and experiences with the aim to promote and support evidenced based decision making and practice. Given the cross-sectoral, multi-professional and cross-jurisdictional complexities inherent in this initiative, the role of a knowledge broker to facilitate knowledge exchange between project partners was deemed to be essential to the project.

A knowledge broker was hired for the period of November 1, 2010 to March 31, 2011, with a negotiated extension to September 30, 2011 to provide continued support to the completion date of the project. The knowledge broker averaged 15-18 hours per week during this period of time.

The knowledge broker was introduced into the project at a point in time when two jurisdictions (Manitoba and Alberta) were in the process of implementing their practice interventions while two other jurisdictions (BC and Saskatchewan) had recently joined the initiative and were in the very early stages of planning. The differences in the nature of the need for knowledge and support were evident and while these differences posed some degree of challenge, they also created a timely opportunity for sharing learning and linking partners to begin the journey of collectively working toward achieving the overall goals of the project.

To achieve the project outcomes the role and responsibilities for the knowledge broker were clearly articulated in a posted job description (Appendix K). As a member of the core project staff team, this role was responsible to meet knowledge/ knowledge exchange needs at all levels in the project and across all jurisdictions. The key roles and responsibilities for the knowledge broker included:

- Assessing the information needs of defined stakeholders.
- Determining the most effective/efficient methods for providing information to and engaging stakeholders.
- Facilitating the mobility of information and linking those in the network.
- Improving access to knowledge, facilitating learning, and facilitating implementation of knowledge in new settings.
- Facilitating the implementation and education of the electronic community of practice.

The roles and responsibilities of the knowledge broker promoted a significant level of interaction, sharing and exchange of knowledge and experience over the course of the project. Highlights of activity in relation to each of the roles are described below.

ASSESSING THE INFORMATION NEEDS OF DEFINED STAKEHOLDERS

As mentioned, the first priority was to connect with the jurisdictional and site leaders. The knowledge broker conducted a series of interviews with project leads within each jurisdiction for the purpose of reviewing their project goals and current status, building relationships, understanding one another's roles, identifying the sites' immediate and anticipated knowledge/resource needs and determining their knowledge, experience and interest in electronic communities of practice. A series of phone conversations with the various project partners were conducted during November, reflecting on the following questions:

- What have they found to be their most significant knowledge needs to date in relation to the project, knowledge of interprofessional collaborative practice and learning environments, and/or project management?
- Where have they found their information to date? What was easy/challenging about the process? What are their gaps?
- What has been their experience in sharing information with other site members? How do they exchange and share knowledge currently? What is their sense of team members' access to and uptake of information?

- What value do they see in sharing/exchanging knowledge with site partners from other provinces, both for their own benefit and for the benefit of others?
- What has been their experience with electronic communities of practice? What is their experience with electronic discussion forums? How do they think these might benefit or impede their progress toward achieving both site specific and overall project goals? What is their understanding of the moderator's role?

The knowledge gained through these interviews provided a solid foundation for the next steps required by the knowledge broker. All members from each jurisdiction spoke enthusiastically about their projects, openly sharing their successes and challenges to date. At that time, they identified that their communication was primarily focused within their own jurisdictions/sites as their top priority was to launch and/or implement their practice interventions locally. There had been limited or no opportunities for knowledge sharing with partners from other provinces; however, all partners recognized the potential benefit of this and expressed willingness to participate. This was a particular need from BC and Saskatchewan as they were acutely aware of their short project timelines to achieve a significant amount of work. BC and Saskatchewan were interested in lessons learned from their partners in Manitoba and Alberta.

Knowledge, experience and interest in electronic communities of practice were very diverse. Some had little knowledge of e-communities while others participated in other eCoPs frequently. In general, there was interest and a willingness to participate from each jurisdiction, given further education and support.

DETERMINING THE MOST EFFECTIVE METHODS FOR PROVIDING INFORMATION TO AND ENGAGING STAKEHOLDERS

The project charter clearly stipulated the need for active sharing and engagement between all partners. The first guiding principle states: "all knowledge gained and tools and educational resources developed during the project will be openly shared with all participants, stakeholders and partners."

Project leaders recognized the vast geographic distance between jurisdictions and the challenges that posed to communication. However, they also acknowledged the importance of knowledge exchange to the success of the project and designated resources to the knowledge broker role and to development of a web based electronic platform to support an eCoP. Determining the right method that ensured quality, value and innovation needed to be considered in light of efficiency in cost and resource utilization. Many factors contributed to the decisions, including:

- The purpose and desired outcomes for each KE event.
- Resource capacity, including financial, human, technology.
- Benefit vs. cost implications of all KE events, particularly in person events.
- Partners' experience and confidence in utilizing web based technology for KE.
- Partners' preference and ease of use with traditional methods of communication and information access (i.e., email, phone conversations, video conferencing).
- The value of the project partners' time.

Three examples of KE events where the factors above played a key role in determining the method for engagement are described below:

The hosting of two large in person KE events (Project Steering Committee Meeting in Manitoba in October 2010 and Core Team Workshop in Alberta in December 2010) over the course of the project. These events focused on relationship and network building, establishment of the community of practice and active exchange, debate and decision making for project planning. The benefits of these personal interactions were pivotal in developing and strengthening the network. People 'put a face to a name', expressed value of meeting in person and had increased comfort in connecting virtually in the future.

The electronic Community of Practice was a key deliverable for the ICP & LE initiative. This site became a central repository for accessing and sharing of project documents, a link to other IP initiatives and resources in the broader national and international IP community, and a place where questions could be posed and debated through an interactive discussion forum. All project partners were educated and supported on the site. Consideration of project partners' perceptions, preferences and comfort level using web enabled platforms needed to be considered when designing and utilizing this site for KE.

Bi-weekly Core Team Meetings: this knowledge exchange forum was requested by the core team project members. There was a desire to connect regularly to share updates, discuss issues and share successes. Based on the desired frequency for these meetings, in person events were not feasible so members agreed to meet via teleconference. The eCoP was used in conjunction with these meetings for posting/accessing documents for discussion and follow up.

FACILITATING THE MOBILITY OF INFORMATION AND LINKING THOSE IN THE NETWORK

The value of a knowledge broker central to the overall project was evident for identifying commonalities, needs and opportunities for sharing across jurisdictions. Although unclear at first, most partners became familiar with the knowledge broker role and frequently made contact for ideas, knowledge of resources, and partners to link with. While each jurisdiction had specific interventions unique to their sites, each was focused on the same overall project goals for creating collaborative practice environments. Collectively, both tangible (resources, tools) and intangible (insights, experiences, learnings) products contributed to a comprehensive toolkit that was valuable to all clinical sites. The key was to raise awareness and create learning opportunities, facilitate obvious linkages and ensure access to information and resources. Examples of knowledge exchange events for mobilizing information and creating linkages included:

Awareness and Learning: project updates and topic specific discussions (i.e., Alberta's Reflective Questions to the IP Competencies) occurred at each bi-weekly

team meeting. Special knowledge exchange teleconferences with presentation of specific topic by expert were held, followed by a facilitated discussion (i.e., workforce optimization, sustainability). Final project presentations were made by each jurisdiction at last Core Team meeting through a defined set of reflective questions.

Facilitate obvious linkages: the knowledge broker was in a unique position to learn of the specific needs of one jurisdiction and potential solutions/resources to address the needs in another; facilitating the linkages between partners was an important role. This was prevalent when BC and Saskatchewan began their projects and were looking to the partners in Manitoba and Alberta who were more established. For example, Saskatchewan's researcher was linked to Manitoba's researcher for support with ethics review process and applications.

Ensure access to information and resources: a myriad of opportunities for accessing information and resources was made available to partners at all levels in the project. Regular meetings of the Project Steering Committee, Core Team Meetings, Network/eCoP and Evaluation Committees were held with standing reporting items. Extensive email and phone discussions and special focus teleconferences supported the mobility of information. All meeting agendas, minutes, project documents and resources/tools were accessible through the eCoP. Relevant links to national and international sites and resources were also available through the eCoP. Additionally, a full search of teaching resources was completed and a full inventory with weblinks was created and posted.

IMPROVING ACCESS TO KNOWLEDGE, FACILITATING LEARNING AND FACILITATING IMPLEMENTATION OF KNOWLEDGE IN NEW SETTINGS

Effective and innovative change is synonymous with learning. The expressed needs and opportunities for learning inherent in this initiative were significant. A key role for the knowledge broker was to not only be responsive to the expressed/identified needs, but anticipate additional and future needs and provide opportunities for participants to engage and learn in different ways.

Improving Access: the expressed preferences and abilities to access knowledge were diverse across the project participants. No one method suited all participants and therefore, the knowledge broker had to consider a menu of opportunities and venues. The most significant issue identified by participants was the use of the eCoP and accessing resources. The site was therefore designed to be as user friendly as possible and generally self explanatory. Individualized and/or group orientation/learning sessions were offered to promote comfort and competence with the site. User friendly tools were created including FAQs (frequently asked questions), "how to use the site" instructions, and functionality through direct links to databases and RSS feeds created. A librarian consultant created these database links and in addition participated in the design, structure and population of the site.

Facilitating learning: creating a safe learning environment where all partners felt comfortable and confident to exchange ideas, stretch their thinking and ask questions

was critical. It was important for the KB to establish a trusting relationship with participants at the outset of the project and seek opportunities to facilitate similar relationships with others in order to broaden and strengthen this environment throughout the project. Some strategies employed to create this safe environment for learning included: personal introductions and meetings at the Core Team workshop in December 2010, presentation of important principles for effective communities of practice at the workshop, welcome emails to eCoP members and encouragement to contact for support as needed, introductions at the beginning of each meeting and positive feedback to participant contributions and questions.

Facilitating implementation of new knowledge: many learning events and activities occurred throughout the project. The knowledge broker had to be cognizant of meeting the needs of participants, while cautious to not overload and saturate. The knowledge broker facilitated sharing of learning between partners and then supplemented the learning with sourcing and/or developing additional resources. The eCoP was used as the central location to house these resources and was designed to ensure simple access to what was needed. Specific learning activities that occurred included:

- Focused literature reviews and highlighting of feature articles. Direct links from eCoP home page to two IP journals was created together with direct links to full text EBSCO database searches based on pre-selected search terms.
- Regular “In the Spotlight Features” where specific topics identified as needs for learning were highlighted through an overview of the topic, links to current literature, relevant weblinks, partner resources etc. These highlights were posted to the front page of the site. Topics included: Communities of Practice; Engaging Frontline in Change Initiatives; IPE: Activities for Engaging Learners; Realizing and Optimizing the Value of Networks for Sustainability; Building the Infrastructure for Effective IP Collaborative Practice. New postings were communicated by email with a short synopsis to the project partners, directing them to the site.
- Questions for discussion and critical reflection were posted to the eCoP discussion forum (although not a preference for the majority of project partners).

The opportunities for learning within this community were endless. The experience and expertise of all project partners and their willingness to share with others was exceptional and contributed to a rich learning environment for the benefit of one another, their teams, and ultimately the patients receiving care at their sites.

FACILITATING THE IMPLEMENTATION AND EDUCATION OF THE eCoP

The knowledge broker played a key role in all aspects of the development of the eCoP, including:

- Moderation: daily moderation and review of the site, discussion forum and new member registration to identify needs, respond to user questions etc.
- Orientation and education of new members: group orientation sessions were planned via teleconference but participants mainly chose to self orient using self

directed tools on the site and support from the knowledge broker as required. One team on Vancouver Island requested an in person orientation session for partners from both clinical sites. This session occurred March 2011.
- Design and Development: the site underwent a format redesign in January/February 2011 in response to member requests and suggestions. The knowledge broker, together with many project partners, populated the site with project documents and resources, current literature, national/international IP initiatives and links.
- Data Management: policies and guidelines were created to maintain site quality, integrity, and transparency. These policies included criteria for active vs. archived resources, screening of posted comments to the discussion forum, screening of suggested weblinks prior to posting and copyright guidelines.

A full review of the eCoP development, activity and future possibilities is described in the section that follows.

ADDITIONAL ROLE OF THE KNOWLEDGE BROKER

As the project progressed, the role of the knowledge broker evolved in response to the needs of the project but also through the emergence of opportunities and possibilities for sustainability and future growth of the community. The knowledge broker consulted with many project partners and engaged in activities specifically to address sustainability. These activities included:

- Informing decision makers of the progress and contribution of knowledge exchange activities, particularly related to the eCoP, through the preparation and presentation of an eCoP briefing paper with recommendations for future consideration.
- Developing a survey for the purposes of a health region/organization environmental scan of IP intranet/internet resources.
- Conducting an environmental scan of IP intranet/internet resources of 4 health authority sites.
- Preparation of a proposal for the Western and Northern HHR Planning Forum, outlining options for the future of the eCoP.
- Reviewing the overall project initiative in relation to the Legacy Sustainability Model.

ROLE OF THE ELECTRONIC COMMUNITY OF PRACTICE IN THE EMERGING ICP & LE NETWORK

A community of practice is a network of people who have a common interest or goal, and who interact on an ongoing basis for the purpose of sharing and creating knowledge, socializing, and learning. An electronic community of practice (eCoP) is the web based platform within which these communities can engage.

Members of the ICP & LE initiative formed a community of practice by virtue of their participation in the initiative. The ICP&LE eCoP provided a venue for interaction which given the vast geographic distances between jurisdictions, was an ideal format to

support their collaboration. Members engaged in both synchronous and asynchronous modes of participation. Members accessed and shared project information, current literature, relevant project weblinks and national/international partner initiatives. Additionally, an interactive discussion forum hosted discussions and questions within and between members.

OVERVIEW OF THE PROCESS USED TO CREATE THE eCoP

In October/November 2010, Project Steering Committee members and jurisdictional project partners were consulted regarding their needs for an electronic community in preparation for its development. Additionally, understanding the interest, experience and needs of the members that would form the electronic community helped to inform the planning process. A top priority identified was a platform that could serve as a central access point for resources and a repository for all project documents, resources and tools. Key learnings from this assessment included:

- There was willingness and good intent to participate by project partners.
- There was a range of diversity in the following areas: technological familiarity; experience and expertise; preferences and comfort for different modes of communication; interest and excitement.
- In relation to electronic communities there was: differing abilities (perceived/real) to access; varied experiences and success with eCoPs; varied perceived need and reluctance about time/duplication; agreement for a document repository/place to communicate; a desire for something to be developed immediately; queries about sustainability.

Using the information gleaned through this initial assessment, development of the ICP & LE electronic community of practice began in November 2010 and was launched to project partners at the Core Team workshop in Calgary on December 9/10, 2010. At that time, a general overview of electronic communities of practice was presented including key elements required for success, followed by an orientation to its functionality.

Feedback was invited from all registered members from the time of the launch. As members began to use the site and provide feedback, the site was redesigned in February 2011 to improve ease of access and organization of resources. Members expressed satisfaction with the layout and functionality of the site since that time.

DESCRIPTION OF THE SITE

www.icple.com

For the term of the project, the site was accessible only to project partners, secured through a registration process. While the site face page was public, a username and password was required to enter the site. The site hosted the following pages:

- Home Page: welcome statement, changing features (article spotlights), links to library databases, how to use the site features.
- About Us: describes the ICP & LE project initiative.
- Discussion Board: forum for posting and responding to member questions, experiences, successes and challenges.
- View Events: calendar for posting project event details (meetings, teleconferences, and workshops), interprofessional conferences (national and international) and other related conferences. Members could upload event/conference information independently.
- Resources: a library of universal project documents/resources, jurisdiction specific documents/resources and general resources. Members could upload resources independently.
- Weblinks: a library of relevant weblinks. Members could submit a weblink for uploading but moderator screening was required prior to publishing. This page linked users to other related organizations and sites.
- Community Contacts: a registry of members and their profiles.
- Contact Us: eCoP moderator contact information for questions/feedback.

Fifty nine members registered to the eCoP, including all jurisdictional researchers, facilitators and site leaders. Additionally, many members of the Project Steering Committee and all members of the project staff, including the network and evaluation consultants registered.

Access to and use of the site evolved over the eight months from the launch in December 2010. The knowledge broker also assumed the role of eCoP moderator and was responsible for utilizing the site to support the range of knowledge exchange activities. The primary users of the site were those closest to the clinical sites where interventions occurred - facilitators, researchers and site managers. The

Population of the site (at the time of writing this report) with current, relevant resources was a focus of activity. A snapshot view of the site indicates that between December 10, 2010 and July 10, 2011 the site evolved to host:

- 59 registered project partners
- 184 resources including: 115 - Project Documents; 4- IP Models/Practice Initiatives; 57 - General Resources; 8 – “In the Spotlight” Documents
- 29 web-links
- 19 National/International conferences (10 active)
- 25 ICPLE events (1 active)
- 5 “In the Spotlight” features
- 13 subjects posted to the discussion forum
- Direct links to EBSCO full text databases through provincial library consortiums
- One “in-person” training session was provided to a jurisdictional team; otherwise, all other members self-oriented using the “how to use this site” feature, the site FAQ (frequently asked questions) and/or received phone support from moderator.

community was strengthened by select champions who became advocates for the site with others both internal and external to the project.

Security, quality and integrity of the site were priorities. The following actions and strategies were implemented to be accountable to these principles:

- Site was established as a secure site (i.e.; not public).
- All new members were confirmed as project partners/direct or indirect.
- General resources (literature, external organization documents and resources) were reviewed for relevancy, credibility.
- Posted comments to discussion board reviewed daily; guidelines for data management (Appendix L) were developed and posted to the site to address: accuracy/currency of literature and documents; relevancy and credibility of posted web links; copyright guidelines; document archival guideline.

There were no instances of questionable content/comments posted to the site over the course of the project or any evidence of breach of copyright guidelines.

User and site activity between March 13, 2011 – July 10, 2011:

- 536 visits to the site
  - 77.05% returning visitors
  - 22.95% new visitors
- 4,223 page views
- 7.88 pages viewed per visit
- 6:44 minutes average time on site
- Top 10 pages viewed:
  - Home page: 1025 views
  - ICPLE: Manitoba: 318 views
  - ICPLE: BC: 274 views
  - Upload a Resource: 249 views
  - Community Contacts: 174 views
  - General Resources: 158 views
  - ICPLE: Universal: 144 views
  - ICPLE: Alberta: 138 views
  - ICPLE: Saskatchewan: 119 views
  - View Events: 103 views
- 42.6% of visitors, visited between 9-100 times
- 88.25% was direct traffic
- 11.57% was from referring sites
- 0.19% was through search engine

KEY SUCCESS FACTORS

As the project unfolded, partners acknowledged the value of connecting with others and the benefits from the sharing of experiences, information and very importantly, the resources and tools developed within each jurisdiction and site. Despite the eCoP being launched at the midpoint in the project timeline (initially this was a 3-phased, multi-year project), it supported this collaboration and demonstrated optimistic growth with the partners over time. Keeping in mind that the eCoP was a new format for most partners, this initiative provided a first experience for many to change traditional (and comfortable) practices and shift to new ways of communication and collaboration.

Many areas of success were evident including:

- Supported site moderation: this ensured continual development of the site, integration of members and gradually built momentum. Moderation also ensured that the security, quality and integrity of the site were maintained.
- The majority of project partners registered to the site. All jurisdictional researchers, facilitators and site leaders registered and most were active participants. Not only did the facilitators use the site themselves, but they also acted as knowledge brokers within their clinical sites, passing along information and resources to others.
- Site leaders encouraged clinical staff to register in order to contribute to and benefit from the site as a resource; in particular, Vancouver Island actively encouraged this participation and ten clinical staff registered.
- Over time, references to the use of the eCoP increased – partners were becoming accustomed to the eCoP being their central point for access and sharing.
- Site population and functionality design was extensive, providing valuable access to current resources and information.
- Links to similar organizations and websites were made so that project partners could easily connect from one place.
- The site promoted consistency and access to project meeting documents and information; partners were aware that all meeting details were posted on the events page and that meeting agendas, past minutes and related documents were available on the site.
- The site was updated regularly; new features/resources and discussion questions were posted. Email updates/reminders were sent to registered members highlighting "What's New on the eCoP". Members identified this as a helpful reminder to access the site.
- The site information/resources informed project decision makers; many Project Steering Committee members were registered and accessed the site for information. The evaluation consultants accessed information on the site as data to the evaluation report.
- Some partners who were external to the project registered (with approval from the Core Team) to view the site and its resources for the benefit of collaborative practice in their health regions.
- The site became well established and poised for expansion opportunities.

CHALLENGES IMPACTING DEVELOPMENT

As with any new change, challenges are not uncommon and are to be expected. As mentioned, the electronic community of practice introduced a new way of collaboration for many partners. Unfamiliar processes take time to become accustomed to which can be particularly challenging with high levels of project activity and tight timelines. It was imperative to be cognizant of the challenges in order to provide necessary support and seek solutions to promote forward growth.

Key challenges evident included:

- Some members experienced a rapid learning curve for orientation to the site given the short timelines.
- Some members preferred traditional methods for communication and collaboration, particularly during times of high project activity. Email, phone conversations and teleconferences remained dominant methods. This was evident in the minimal participation in the discussion board. Members did not find this a valuable forum for exchange, especially with the regular opportunities for discussion at bi-weekly Core Team and monthly Project Steering Committee meetings.
- There were expressed concerns of potential duplication on the site to other national IP sites. In follow up to this potential issue, it was identified that websites that exist across the country primarily address a policy and academic level, and to a lesser extent a research level. This site focused on needs at the clinical level and addressed an identified gap in the system; it was felt that this site could aid health authorities and learning centres who may not have well developed or easy to find resources and tools for application at the clinical level.
- There were instances of competing needs and priorities; some members expressed the time challenge of learning and populating the site with resources when other project needs and priorities were felt to be more pressing.
- There were varying levels of interest and perceived value/benefit for some members and one situation of intentional choice for non-participation. The majority of project partners acted as champions/facilitators, rather than barriers to collaboration and knowledge mobility.
- There were expressed challenges with technological competence.

LESSONS LEARNED

Reflecting on the process that was undertaken to establish and implement the electronic community of practice, members of the Network/eCoP Committee identified specific lessons learned from this experience, including:

- Develop and use the eCoP at the beginning of the project prior to, or parallel to the formation of committees, working groups and jurisdictional teams. Note that initially the project was proposed as a multi-year/multi-phase project and the development of the eCoP was to occur in this phase one.
- Clearly articulate the purpose and role of the eCoP in the project.
- Clearly define expectations and requirements for member participation in the eCoP at the beginning of the project. As a community, each member has a responsibility to share and engage. At the same time, it is important that these expectations are realistic and complement the site work rather than add an additional layer of work.
- Maintain moderation of the site and support for members to orient to and participate in the site. The success of the community is driven by relationships and trust established between partners. The moderator has a key role in facilitating these relationships and building that trust.

- Establish the eCoP as the primary, central source of information for all meetings, exchanges, etc. Avoid distribution of documents through other sources (i.e.; email).
- Where the eCoP linked to similar organizations so that users could easily connect to others, request reciprocal links to the eCoP.
- Continue to be flexible, supportive and open to possibilities.

LOOKING AHEAD

The eCoP has contributed to creating a legacy for capturing and sharing the outcomes of the ICP & LE initiative. Moving forward beyond the formal end date of the project, the community can continue to exist in a variety of forms, depending upon needs and resources available. It has become evident that that there is a need for knowledge and support for promoting and embedding IP collaborative practice at the clinical level. Initial environmental scans of health region and organizational websites (intranet and internet) indicate a gap in the availability of a comprehensive resource for guiding implementation and sustainability of IP collaborative practice at the clinical frontline. This may be an area that the ICP & LE deliverables can address, without creating duplication of other valuable website resources across the country.

The resources developed by each of the jurisdictional teams will contribute significantly to IP collaborative practice within their own and other clinical units. The goal is to determine how best to share this knowledge with the broader community and establish opportunities to foster collaborative practice and education. The site's files/resources are being prepared for continued access and sharing with others as the site transitions from members only to a public site. With its established foundation, the public site has the potential to provide a rich, interactive venue for an extended audience engaged in IP collaborative practice, nationally and internationally.

PART V: FINDINGS FROM THE PHASE ONE IMPLEMENTATION EVALUATION

The ICP & LE Multi-Site Evaluation Framework, guided by the program theory and logic model, was used as the basis for the Phase One ICP & LE Multi-Site Evaluation. In addition to providing evaluation questions and indicators for the phase one implementation evaluation, the framework also outlines an evaluation strategy for the long term project described in the original proposal. A copy of the evaluation framework, program theory and logic model can be found in Appendix C.

The phase one evaluation focuses on the three primary areas of activity defined in the program theory: 1) jurisdictional programs focusing on collaborative practice, 2) the overall project activities created to support sites and jurisdictions, and advancement of collaborative practice, and 3) support for systems change at all levels. For each of these areas, common themes regarding implementation of the activities are discussed.

This part of the report documents the findings from the phase one evaluation. It begins with a discussion of the evaluation methodology. In subsequent sections, the evaluation findings are presented followed by conclusions and recommendations. Had this project moved into phase two, the learnings from the process evaluation in phase one would have been implemented and adjustments made, moving forward.

EVALUATION METHODOLOGY

The Phase One ICP & LE Multi-Site Evaluation was developed and implemented by external evaluators with input from the ICP & LE Evaluation Working Committee (EWC) and the Project Steering Committee (PSC). The role of the EWC was to review and provide advice regarding evaluation activities. The committee was comprised of evaluation experts from each of the jurisdictions and the project manager. The committee provided advice regarding the evaluation framework and associated indicators, the evaluation methodology, gave feedback on interview questions, and suggested potential documents for the document review. In addition, committee members reviewed the preliminary evaluation and provided their insights into local contexts which contributed to the validity of findings. The PSC also approved the evaluation framework and phase one evaluation methodology.

The four jurisdictions operated independently to design, implement, and evaluate their programs which were designed to establish effective ICP & LE approaches to healthcare delivery. Projects were in a variety of practice settings within each province, operated across a range of clinical settings, and were meant to reflect the continuum of healthcare delivery. While it would have been ideal to conceptually compare data across jurisdictions and sites it was not feasible to do so, given the project timeframe.

The following section describes the evaluation methodology in more detail. It begins with a description of the tools used to collect data. This is followed by a description of the evaluation participants and the approach to analysis. This research received ethical

clearance by the University of British Columbia Office of Research Services, Behavioural Research Ethics Board.

EVALUATION TOOLS

Evaluation data were collected through: 1) semi-structured telephone interviews and 2) project document review.

1. Semi-structured telephone interviews

Semi-structured telephone interviews were conducted with twenty nine participants from both the jurisdictional and the overall project teams[9] (24 jurisdictional interviews and 5 overall project team interviews). The interview questions were qualitative in nature and were guided by the overarching evaluation questions. Table 1 identifies the primary areas addressed in the telephone interview. The areas included are based on the indicators listed in the evaluation framework. The EWC reviewed and provided feedback regarding the final set of interview questions. For a copy of the interview questions please see Appendix M.

Table 1: Primary domains included in the telephone interview grid

Domain	Focus
Context	Role in project Description of ICP & LE model
Inputs	Resources dedicated to the project-human, material/training, political, financial as well as in-kind contributions Relationships/partnerships that played a role
Activities	Activities undertaken Factors that challenged implementation of activities Factors that facilitated implementation of activities
Outputs	Products produced Services produced Deliverables attained
Outcomes	Outcomes realized to date
Learnings	Lessons learned
Looking ahead	Requirements to sustain level of build on or sustain level of change.

2. Project document review

Project documents such as meeting minutes, evaluation reports, and general documentation were reviewed to provide additional information and context to the evaluation findings. Researchers, facilitators and the project manager were asked to identify potential documents for review, many of which were housed on the eCoP. The documents were reviewed to provide additional contextual detail and where applicable

[9] Jurisdictional team refers to individuals in the four jurisdictions that were involved in developing and implementing project activities. Overall project team refers to individuals responsible for developing and implementing overall project activities (i.e., Project Manager, eCoP moderator and knowledge broker, contract mangers and SNA manager).

validate the findings. In addition, final site reports prepared by each jurisdiction were reviewed to confirm findings. Each site report was systematically reviewed to identify key outcomes and pertinent information regarding the teams that participated in the project activities, the roles and responsibilities within the service delivery teams and the degree to which the roles and relationships were optimized throughout the project.

INTERVIEW PARTICIPANTS

The evaluation team worked with the researchers and facilitators from each of the jurisdictions and the project manager, to develop a list of potential interview participants (n=32). The aim was to identify potential participants who were significantly involved with project implementation and represented a variety of positions/organizations such as facilitators, researchers, project team etc. Once identified, potential participants were contacted via email and telephone and asked if they would like to participate in a 45-60 minute telephone interview. If interested the participant was asked to sign a consent form describing the interview process in greater detail and ensuring confidentiality and anonymity. All interviews were conducted over the telephone. Of the 32 individuals contacted 29 agreed to participate in the evaluation. Those not able to participate either had too many other commitments and were too busy (2) or were out of town (1).

Of the 29 interview participants, 14 participated on the PSC in addition to their various roles within the jurisdictions or on the project team. When interviewed, these individuals were asked to speak to activities both within the jurisdictions as well as overall project activities. Table 2 provides information regarding the number of interviewees from each province and their key roles on the project.

Table 2: Interview Participants

Jurisdiction	Total number of interviews	Representation
British Columbia	7	1 researcher, 3 site leads, 2 health authorities, 1 Ministry of Health. 3 of the 7 were PSC members
Alberta	5	2 researchers/facilitators, 2 site leads, 1 Ministry of Health. 2 of the 5 were PSC members
Saskatchewan	6	1 facilitator, 1 researcher, 2 health region, 1 Ministry of Health, 1 University of Saskatchewan. 2 of 6 were PSC members
Manitoba	6	2 facilitators, 1 researcher (University), 2 Health regions, 1 Ministry of Health. 4 of the 6 were PSC members.
Project Team Member	5	project manager, contract manager for BC Academic Health Council, Chair of the PSC and contract manager for BC Provincial Government and Western and Northern Health Human Resources Planning Forum, eCoP moderator and knowledge broker, SNA Manager 3 of 5 were PSC members
Total number of interview participants	**29**	

ANALYSIS AND REPORTING

The interviews were audio-taped and transcribed for purposes of analysis. The key evaluation questions provided the framework for the analysis. The data were analyzed according to qualitative research methods including clustering and coding to determine respondent views and perceptions and uncover emerging themes. The data were analyzed according to jurisdiction and project team and then examined for common themes. Two members of the evaluation team analyzed the data separately and then compared findings to ensure consistency. In addition the results were reviewed by members of the EWC to help validate findings and provide insight into the jurisdictional and overall project context.

The data from the project document review was used to further develop themes and set the context for findings. This included the individual jurisdictional site reports that were reviewed to help ensure accuracy of findings.

EVALUATION FINDINGS WITH RESPECT TO JURISDICTIONAL ACTIVITIES

The findings reported in this section focus on the implementation of jurisdictional activities and represent common themes across the four jurisdictions which are further illustrated by quotes (see Tables 3 & 4). Jurisdictional activities refer to the project activities undertaken in each of the four jurisdictions which are the formation of a jurisdictional steering committee and ICP & LE interventions undertaken at each of the sites within the jurisdictions.

Results are reported according to the evaluation questions described in the evaluation framework:

- Were **jurisdictional** activities implemented as intended?
- What were the factors that facilitated implementation of activities at the **jurisdictional l**evel?
- What were the factors that challenged implementation of activities at the **jurisdictional** level?

Some early short term outcomes were identified in the data and are presented. Although they should be considered tentative, they shed some insight into short term outcomes and address the evaluation question:

- Was there an increased capacity for ICP & LE and change management practices among site level participants?

It is important to note that results represent common themes across jurisdictions rather than commentary specific to individual jurisdictions. As mentioned previously, the evaluators did not use Jurisdictional Evaluation Reports for purposes of comparison in this part of the evaluation; however, they did review jurisdictional site reports to ensure

there was continuity with implementation findings. For individual jurisdictional site reports please see Appendices F, G, H and I.

WERE JURISDICTIONAL ACTIVITES IMPLEMENTED AS INTENDED?

Multiple intervention activities were implemented within each of nine healthcare settings across Western Canada. The sites represented a variety of settings across the continuum of care ranging from long terms care clinics to wellness centres. All four jurisdictions created a jurisdictional steering committee to guide site activities within their province. For a detailed description of the sites and associated activities please refer to Part II of this report.

All interview participants believed that site activities were implemented as intended though many participants were quick to comment that implementation was an "*iterative process*" with project activities building on one another. Thus, plans were initiated as intended but changed in response to local context. A comment from a facilitator illustrates this point: "*As knowledge and experience was gained and issues came up with staff turnover and new team members coming on site, our activities and the way they were implemented changed continuously."* As a result, though activities were implemented as intended team members recognized the need to be flexible and responsive to unique circumstances at the site level. For example, in one of the jurisdictions, the researcher met with the teams to identify their goals and vision for the project. From there, she drafted a work plan that addressed the goals identified. However, as the team began engaging in learning events they "*started to realize that they wanted to focus in a different area or that they really knew less about working in a team than they originally thought."*

Learning Education Opportunities for Students

With regard to the student learning education component of the ICP & LE project, one of the jurisdictions implemented ICP clinical student placements. Of the remaining three jurisdictions, one did not have learning education opportunities for students; another offered a range of ICP practice learning opportunities embedded within the profession specific clinical/fieldwork/practicum placement such as opportunities for healthcare students to shadow other healthcare professionals and observe team functioning; and the third jurisdiction developed a relationship with an academic institution to facilitate learning education opportunities in the future. Thus, this component was not implemented with equal intensity across the four jurisdictions. As one respondent stated the "*student piece was hit and miss*" and another commented that *"the student piece wasn't the main focus of any particular project (site). It was more about working with the teams to help promote ICP."*

In the jurisdiction where ICP clinical student placements were implemented, six students participated in the process through an ICP mentoring model. The facilitator spent time with the staff and students at bi-weekly meetings, created resources and materials to support learning and students participated in a wide range of ICP related activities. The student preceptors were encouraged to explicitly discuss the ICP competencies with the students informally and during student assessment. In general, the ICP clinical student

placements were implemented as intended however, were viewed as "*moderately successful*". It was challenging for the facilitator to engage preceptors to work with students from an ICP perspective. In one instance, two of the students were not aware that they would be participating in an ICP clinical student placement as they did not receive any project information from the preceptor.

The variety in approaches to implementing learning education opportunities at the sites may have been a result of differing philosophies about the integration of student learning education in the ICP & LE project. Some members of the team believed that it would be more advantageous to work with the sites to become reflective of ICP prior to integrating student learning education opportunities while others believed that student learning education opportunities should be implemented at the beginning of the project so that students would act as learning change agents within the team.

WHAT WERE THE FACTORS THAT FACILITATED IMPLEMENTATION OF ACTIVITES AT THE JURISDICTIONAL LEVEL?

There were a number of factors which supported implementation of site activities, many of which speak to the strength of the existing infrastructure in the jurisdictions. The strongest themes to emerge from data were provision of funding, collaboration and partnerships within jurisdictions, and engagement of senior management. Other themes, of moderate strength, include linkage to provincial strategies and communication and collaboration between jurisdictions. Table 3 provides quotes to support themes related to factors that facilitated implementation of activities at the jurisdictional level.

Provision of Funding

A significant facilitator to project implementation which was noted almost unanimously was having additional funding to support ICP&LE activities. The funding provided the opportunity for these individuals to fully focus on project activities rather than "*conducting the work off the side of their desks*" which they noted has been the case in the past.

Funding was also utilized "*to help with the engagement piece*" for staff development and persuasion of team members to participate in project activities (i.e., stipends, refreshments etc). Funds were also used to pay for speakers and other consultants such as writers and facilitators. Funding was particularly useful in recruiting fee for service healthcare providers such as physicians and psychiatrists, sites noted that these professionals are often limited in terms of time availability because they are generally fee for service providers, and are not paid when participating in volunteer activities. The resources from this project provided remuneration for their participation. The following comment by one of the participants supports this premise: "*There is no way we could have gotten the physicians involved if we didn't pay them."*

Collaboration and Partnerships within Jurisdictions

Each of the jurisdictions reported tapping into significant partnerships to implement project activities and in many cases strengthening or developing new partnerships. The

partnerships were broad and included representatives from: education, government - Ministry of Health, health regions, Western Canadian Interprofessional Health Collaborative (WCIHC), site staff and managers, other provincial health related organizations and networks and the BC Academic Health Council.

The role of these partners varied, some were directly involved with implementation, others sat on the jurisdictional steering committee while others provided support in a manner that was relevant to the mandate and functioning of the particular organizations. In one of the jurisdictions, a key partner contributed additional project funding enabling the timeline of the project to be extended. Partners contributed significantly to the project primarily in terms of human resources, the majority of which was in-kind.

There were "*previous relationships and a history of collaboration"* among many of the project partners within each of the jurisdictions. Interview participants spoke of this history and how it provided for an environment in which there was the "*willingness of team members to work together in a respectful manner* "that was engaging, cooperative, and welcoming. Some project partners had worked together on previous projects related to ICP and as a result could share their previous experiences and expertise. For example, one of the project researchers for the ICP & LE project was involved in a previous ICP related initiative and was able to bring her knowledge about ICP to the project.

Participants also commented on how previous experience working together on other provincial working groups or committees such as other health related collaboratives, networks and education councils or groups was beneficial as a working relationship was already established. In one of the jurisdictions, a provincial interprofessional health collaborative compiled a number of relevant ICP resources for project facilitators and researchers to use and share with other jurisdictions.

Members of the WCIHC were part of project teams in each of the jurisdictions. Participants noted that WCIHC members and colleagues brought a wealth of knowledge regarding ICP & LE to the project and also had a history of collaborating with one another across jurisdictions. While this certainly was an asset at the jurisdictional level, some interview participants did not believe the potential of this group was "*fully realized in terms of contributing to the intellectual development"* at the overall project level.

Engagement of Senior Management

Nearly every jurisdiction indicated that engagement of senior management was instrumental to the implementation of project activities and their continued success. Senior management was represented on all jurisdictional steering committees and these individuals provided insight and linkages between project activities and other strategic primary healthcare initiatives in the jurisdictions. For example, "*The Director of Primary Healthcare was on the jurisdictional steering committee and could share the strategies in this area and how the ICP & LE project could complement that."*

The participation in project activities by senior management also helped to break down communication challenges between other senior managers and project stakeholders. For example, in one of the jurisdictions, senior management and physicians had an opportunity to talk about each other's roles and responsibilities and lay the foundation for further communication.

Link to Provincial Strategies

Some interview participants commented on the importance of jurisdictional activities being linked to provincial frameworks or strategies that address health and healthcare service delivery redesign. The following quote from a project member supports this finding*: "Consistency with the overall strategy of the province in terms of primary healthcare services was also very helpful to this project."*

Many of the jurisdictional ICP & LE activities at the sites aligned nicely with the healthcare service delivery redesign strategies occurring in the provinces. For example, in one of the jurisdictions, one of the key result areas for the Ministry is focused on community integration of healthcare and community services. The project activities at the site led to discussion around this area and some identified steps for action.

Collaboration and Communication between Jurisdictions

There was recognition among participants about the importance of communication and collaboration between project partners across jurisdictions. The overall project team provided opportunities for project partners to communicate and collaborate through a number of platforms, including regular conference calls for the Core Team and PSC; face-to face meetings; and an electronic community of practice. A face-to-face meeting in Calgary was frequently mentioned by interview participants as a tremendous opportunity to share experiences and discuss implementation plans; as one respondent stated: "*I really enjoyed the face-to-face meeting in December - that was probably one of the highlights.*" The regular conference calls with Core Team partners were also mentioned as a useful communication mechanism, though a few interview participants commented that the conference calls should have started at project onset.

The eCoP was increasingly being used as a repository for information that could be accessed by project partners. Project partners posted meeting minutes, tools, evaluation reports and other types of information for other team members to access. However, there was limited communication on the discussion board component of the eCoP; over the course of the project there were 13 subjects posted to the discussion board. There were also a few project partners who did not use the eCoP at all and made it clear that they had no plans to utilize the website in the future. The reason for this is not clear though there was some discussion among project partners about the perceived duplication with the eCoP with other ICP related websites.

While all the communication mechanisms utilized facilitated some level of communication, participants did not perceive that collaboration between the jurisdictions was realized to its greatest potential with the exception of some sharing of project ideas and materials. In general, the jurisdictions operated relatively independently. Project

partners indicated that if the project timeframe had been extended, closer working relationships would have developed across jurisdictions. We noted in project documents and through our own observations that toward the end of the project, team members were beginning to share similarities related to implementation and outcomes across their jurisdictions.

Table 3: Quotes to support themes related to factors that facilitated implementation of activities at the jurisdictional level

Provision of Funding
"It was helpful to have funding for staff development because I think that was a big perk for them. You can't underestimate the impact of those pieces."
"I think the hook (for the site team) was that they had some dollars they could put to the team to provide some education and learning opportunities. That was something that provided the buy-in for the team to continue."
"We brought in outside facilitators and luckily we had the budget to do that."
"We would not have had any where near the people (at our event) if they weren't paid to be there."
Collaboration and Partnerships within Jurisdictions
"We (the jurisdictional steering committee) have a mutual respect and we are collaborative and work very well together. I can't minimize the importance of that because it just makes things so much easier."
"The collaborative tradition in our province helped move the project forward."
"Everybody sitting at the table was willing to listen and learn from each other and take advice from past experiences."
"It is really critical to tap into them (those with previous experience in the area) for their expertise and knowledge."
"When we look at it from a provincial perspective, important partnerships are being developed (as a result of the ICP & LE project)."
"One of the really positive things that came out of this is that we have a stronger relationship with one of our key partners."
"We had on our jurisdictional steering committee the director of primary care services so we were aware of what their strategies in this area are and how this project could complement that."
Engagement of Senior Management
"The whole area around collaborative practice and care has been accepted by the senior administration as a major strategic piece and this is very helpful."
"Senior management actually spent time in some of the workshops."
"It was important to have management support at the sites."
"Having commitment and support from high level people was really critical."
There is now a relationship at a systems level (through relationship with senior management)."
"Senior management said to the doctors, "hey you can phone us anytime" and the doctors were saying, "we didn't know you had a phone."
Link to Provincial Strategies
"There is a provincial framework with an action plan for interprofessional education and collaborative practice which we linked to. This (project) has helped establish our relationship provincially and I think that is one of the big wins."
"I think one of the things that made it easier is that it (the project) was such a good fit with the work we are doing in the province currently around primary healthcare. Our foundational piece is interprofessional work and it was a great fit."
Collaboration and Communication Between Jurisdictions
"The meeting we had in Calgary was probably one of the most helpful things from a overall project perspective in my eyes. We were actually able to see people face-to-face. I came away from the meeting feeling a lot more confident about things."
"The core team meetings were a really great opportunity to link with others."

"I found the bi-weekly meetings that I was able to attend were quite valuable, hearing what other sites were doing and how they were dealing with their challenges."
"The face-to-face meeting in Calgary was good, we really got a good sense of what the project was meant to be and the juices started to flow when we were interacting with the other provinces."

WHAT WERE THE FACTORS THAT CHALLENGED IMPLEMENTATION OF ACTIVITES AT THE JURISDICTIONAL LEVEL?

Interview participants identified a number of challenges to project implementation, though they also commented that in most cases, they were able to implement strategies to overcome the challenges. The most frequently expressed challenges were the compressed timeframe and lack of common project elements. These were followed by differences in readiness for site selection, team dynamics and lack of clarity around extended project options.

Compressed Timeframe

All the interview participants believed that time constraints posed a significant challenge to the amount of work that could be completed during the 12-month project period. Several participants commented that although a great deal of work was accomplished, in all actuality, the work was only just beginning.

The timeframe for the ICP & LE Project was compressed. The project proposal was based on eighteen months, however, by the time the contribution agreement was signed and the money from the funder arrived, it left 12-months for project implementation. A 6-month, no-cost extension was received; however, there was a substantial reduction of committed funding ($152,000) which seriously compromised the project.

The shortened project timeframe allowed for the planned activities related to inputs. That is, engaging with communities to build relationships, engaging healthcare professionals in a meaningful way and beginning to implement intervention activities. This timeframe did not allow for further work with teams to embed changes and achieve (or reliably measure) even short term outcomes related to improved workforce optimization.

Lack of Common Project Elements

Many interview participants commented that there was a lack of direction and communication about key project elements to support a common approach among jurisdictions. Project partners "*struggled along the way about what were the common elements across the projects and the things that actually linked the jurisdictions together*."

An example of this, raised by an interviewee, was the common evaluation framework that was developed by the external evaluators several months into project implementation. Participants felt that rather than develop an evaluation framework that was a synthesis of their projects, they would have preferred to work together on a common evaluation framework prior to project implementation. The common evaluation framework could have been used as a resource for their jurisdictional evaluations and

ensured consistency in data collection at the jurisdictional levels. Other examples of key common project elements provided are the provision of a common approach for implementation, definitions and an overall timeline. The perceived lack of sufficiently common elements, identified at an early phase, may have deterred jurisdictions' motivation to collaborate on a more extensive basis.

Differences in "Readiness" for Site Selection

The four provinces were at varying levels of "readiness" for site selection and this posed significant challenges in terms of how quickly they were able to move forward with project activities. This in combination with the compressed timeline, made it challenging to build cohesion across jurisdictions as "*each of the jurisdictions seemed to be in a different place of readiness in terms of site selection…and the work became more focused on what was happening at the sites*."

Two of the jurisdictions had a delayed project start as a result of change in project leadership and internal bureaucracies (i.e., procedures for hiring staff). The other two jurisdictions had the opposite experience as they were ready to implement project activities well before official ICP & LE project start-up. This meant that two of the jurisdictions had close to a year to plan and implement activities and the other two jurisdictions had less than 5 months to plan and implement activities.

Recognizing Team Dynamics

While overall site teams participated enthusiastically in project activities there were a few challenges associated with the team dynamics that influenced implementation of activities. In two of the site teams, the team perceived that they were already functioning well as an ICP team and as a result it was more difficult to engage them in significant ICP intervention activities related to team building. The following quote illustrates this point: "*They all came into the project thinking they were pretty darn good teams*" and "*they were already doing a good job*." Interestingly, at the end of the project, these teams commented that by participating in the ICP process they developed a greater understanding into ICP and areas for potential improvement.

Additionally, a few of the site teams had challenges in terms of overall team dynamic/functioning and this hampered engagement. This is illustrated by the following comment from a facilitator: "*On the surface one of the teams looked like it was a highly functional team but the better we got to know them we realized they had quite a challenging team dynamic. I think that hampered the engagement*." Facilitators at these sites commented that in hindsight, they could have spent more time on team building up front before trying to get the site to change without making sure they were ready to make changes as a team.

Finally, a few of the sites experienced staff turnover during the course of the project which required additional work and time in developing a cohesive team. The staff changes ranged from site personnel to facilitators to the co-leader of the jurisdictional steering committee.

Lack of Clarity Around Funding

The proposal that was funded was written on the assumption of a three phased, multi-year plan. The project teams were told that additional phases would not be funded during their first official meeting of the PSC.

Further, the project was cut back from 18 months to 12 months. A no-cost time extension of 6 months was negotiated. However, at the same time a $152,000 reduction in funding was announced. The 6-month extension was announced well into project implementation when two of the communities were preparing for wrap-up of project activities.

Project partners expressed considerable disappointment and discouragement at the way in which these events unfolded. This was evident by the conversations and meeting minutes from the Core Team and PSC conference calls. These events were distracting and the team spent considerable time discussing whether or not there would be an extended timeframe and if additional funding became available for subsequent phases, what activities would be undertaken.

Table 4 below provides additional quotes to support the themes noted above.

Table 4: Quotes to support themes related to factors that challenged implementation at the jurisdictional level

Compressed Timeframe
"The shortened timeframe has certainly been a challenge. We have really just begun to be honest."
"We worked under very tight timeframes and challenges."
"The jurisdictional steering committee felt strongly that we were just really getting our sleeves rolled up and getting some good outcomes and having to close it all down."
Lack of Common Project Elements
"If the overarching piece had been stronger, we would have been able to deliver more because we would all be on the same page."
"I think the coordination between the jurisdictions and the overall project from an evaluation perspective was the biggest difficulty."
"We felt there was a lack of clarity overall. We were supposed to be doing things in a similar way across the jurisdictions."
"The communication was problematic; the jurisdictions just didn't have information about key elements like evaluation and that sort of thing. That was very, very problematic."
Differences in "Readiness" for Site Selection
"Where we ran into some difficulty was because every project was at a different part of its evolution."
"Each of the jurisdictions seemed to be in a different place of readiness in terms of site selections."
"If all the sites had come on board at the same time it would have been a little bit easier because they would have been able to support one another."
Recognizing Team Dynamics
"One of the teams believed that when they were selected to participate they thought they had won an award because their team was such a good team (ICP team)."
"The fact that there was a lot of staff turnover on the teams made it difficult. It is hard when you have people leaving and coming in and some people not being replaced."
"There were a lot of staff changes which were quite disruptive to the process."
Lack of Clarity Around Funding
"Through the entire time of the project there was uncertainty as to how much money there was and how long it was going to last."
"Throughout the project until right up to the very end there was no indication from the funder that they

would not comply with their extended options for funding for the next two years. The project was under that shadow of uncertainty the entire time."

WAS THERE AN INCREASE IN CAPACITY FOR ICP & LE AND CHANGE MANAGEMENT PRACTICES AMONG SITE LEVEL PARTICIPANTS?

While it is not possible to measure short term outcomes within the timeframe of this project, a number of early indicators of success were identified in interviews and project documents. These can be organized by: 1) broader organization and or system, 2) providers/students, and 3) patient/family. The reader is reminded that these early indicators of success represent common themes across the four jurisdictions. For information on outcomes from each jurisdiction and sites please refer to the jurisdictional site reports located in Appendices F, G, H and I.

1. Broader organization or system

Institutional Support

In all of the jurisdictions, there was evidence of institutional support for ICP & LE. Examples of institutional support include but are not limited to:

- ICP curriculum/orientation packages for employees.
- A guide to building an effective ICP healthcare team.
- IP mentoring strategy (ICP clinical placement approach).
- Creation of IP student seminars.
- Online ICP & LE toolkit.
- ICP student placement guide for management.
- ICP language is integrated into regional job descriptions.
- Protocols for co-sharing complex clients between two therapists.
- ICP policy paper- *Strategies for organizational planning/sustainability of integrating inter-professional collaborative competencies in an organization*.
- Sites are looking at practice change to support ICP in areas such as altering discharge procedures and emergency room functioning.
- Conversations about unattached clients that resulted in a solution for increasing access of those clients to family physicians.
- Increased number of sites for ICP clinical student placements as a result of the project.

Working Culture Mechanisms

During project implementation all of the jurisdictions began to see changes in working culture. Some examples include:

- Teams met regularly and engaged in regular dialogue about ICP.
- Teams developed "simple rules" to guide behaviour.
- There was shared decision making about action plans, team goals and visions for the future.
- ICP became a regular item on team meeting agendas.

- Internal processes were revised to support ICP such as an ICP folder on shared drive.
- One team evaluated how information was shared with support staff. Currently, this team is working on improving processes for knowledge translation and access to educational materials for rehabilitation assistants.

In addition, most of the interview participants believed that project activities could be easily replicated in other settings. When asked, "To what extent to you believe the ICP activities can be replicated in other setting (1-low and 5-high)?" interview participants were very confident that the activities could be replicated (4.7 was the mean response). However, participants were quick to add that a number of contextual factors such as funding, leadership and commitment would need to be in place for the activities to be successful. This is promising as one of the objectives of the ICP & LE project was to create sites that could *serve as capacity centres to provide the essential tools, resources, processes and learning opportunities to facilitate replication of the successful interprofessional and change management practice for other clinical sites and settings in the future…."*

2. Provider/Students

Increase in provider knowledge related to ICP & LE competencies
There was an increased awareness, reflection and knowledge about ICP competencies among providers at the sites. Project partners reported an increased comprehension and understanding of ICP. Interestingly, some providers at the sites believed they were already high functioning in the area of ICP and as a result of participating in the project realized they have more work to do to enhance ICP within their respective teams.

Improved understanding of respective roles of team members and changes to team composition potentially contributing to enhanced workforce optimization
There was an increased understanding among healthcare providers of the roles and responsibilities of other healthcare providers. In some instances, this led to realignment of positions and professionals at the sites, reassessing how they work and how they could work "*even better*." The following comment illustrates the increased understanding of one another's roles: the ICP & LE intervention *"led to extensive conversations that enabled all team members to gain a greater understanding of each other's roles and the day to day difficulty each encountered in fulfilling those roles. The power of these conversations has led to small and large changes in how many team members function with one another*." Examples of changes in understanding of respective roles of team members and changes to team composition include but are not limited to:

- Senior management and general physicians having an increased understanding of each other's roles and responsibilities.
- Implementation of a nursing staff mix which now includes LPNs in direct care role, RNs and RPNs in leadership/supervisory roles and advanced practice nurses in CNS and NP roles.

- Implementation of nurse practitioner role working in collaboration practice with several family physicians.
- Evaluation of team composition in order to address the need for managing onsite resident care when the physician is not available. This resulted in the addition of a nurse practitioner to the team.
- Organizations experiencing greater communication between internal "silos".

Improved team functioning
Some of the sites reported improved team functioning as a result of project activities. Examples include:

- Increased staff awareness of team dynamics.
- Increased cohesion and team functioning.

Enhanced student understanding of ICP
In the jurisdiction that implemented ICP clinical student placements, students reported an increased knowledge about ICP competencies. In addition, the students reported gaining a greater awareness about how other practitioners work and that collaborative practice is an important part of client care.

3. Patient/Family
Due to the compressed timeframe, the project activities were primarily focused on ICP practice assessment and training for healthcare providers. There was little to no focus on tracking patient/family outcomes with the exception of one jurisdiction that completed mapping 2 patient experiences and another jurisdiction that has identified increasing their satisfaction survey to patients as an ongoing action item.

EVALUATION FINDINGS WITH RESPECT TO OVERALL PROJECT ACTIVITIES

The purpose of the overall project activities was to link all sites *"through the development of an integrated project framework and the creation of an infrastructure that will promote shared learning throughout the duration of this 'action research' based initiative."* Numerous activities were implemented to create and support the jurisdictions. The evaluation findings in this section report on the implementation of these activities. More specifically, the evaluation questions ask:

- Were the ***overall project*** activities (SNA, eCoP, KE, evaluation framework and operational activities) to support site, jurisdictional and national advancement of ICP & LE established?
- What were the factors that facilitated implementation of the ***overall project*** activities?
- What were the factors that challenged implementation of the ***overall project*** activities?

In addition, although the timeframe for the project was compressed, some early short term outcomes were also identified. These shed some insight into the question:

- How effective were the **overall project** activities in advancing ICP & LE?

WERE THE OVERALL PROJECT ACTIVITIES ESTABLISHED?

Despite the compressed timeline and uncertainty of extended project options, a significant amount of work was undertaken to create overall project support for the ICP & LE project. As with the jurisdictional activities, implementation of overall project activities was "*a bit of an iterative process*" as the activities evolved in a way that was responsive to the project partners. For example, activities at the face-to-face core team meeting in Calgary contributed to the enhancement of the eCoP and the creation of a definitions document.

All of the deliverables identified in the Project Charter were implemented, however many of the deliverables, such as the eCoP and Social Network Analysis (SNA), may not have reached their full potential. For example, while there was a good deal of activity on the eCoP, the level of engagement through the discussion forum was limited. There were varying levels of interest, comfort with technology and perceived value of the eCoP among project partners. When asked about utilization of the eCoP, project partners commented that they had limited time in their busy day to access the site. As noted earlier, a few project partners did not use the website at all and "*selectively chose not to participate and were very clear they were taking a stand against the eCoP."*

The SNA was conducted at the onset of the ICP & LE project and provided a snapshot of the network in the project. However, the majority of interview participants who commented on the SNA did not consider the results of the SNA to be integral to their network development. A few participants commented that the findings from the SNA were misleading as there was confusion among some survey participants about which organization they were representing on the survey (i.e., Forum, WCIHC, health authority). Despite efforts of the SNA project team to educate project partners about SNA through in-person meetings and webinars, there were varying levels of understanding about SNA and the underlying concepts among project partners.

Much of the work to implement the overall project activities was undertaken in consultation with project partners through the PSC, working committees and the Core Team. The activities associated with establishing overall project support are described in detail in Part I of this report.

WHAT WERE THE FACTORS THAT FACILITATED IMPLMENTATION OF OVERALL PROJECT ACTIVITIES?

There were two primary factors that the data suggests facilitated implementation of the overall project activities: support from the overall project team and communication and collaboration between jurisdictions. Table 5 provides quotes to support themes related to factors that facilitated implementation of activities at the overall project level.

Support from Overall Project Team

The support from the overall project team (i.e., contract managers, project manager, eCoP moderator and knowledge broker, SNA manager and evaluation consultants) was a facilitator to project implementation. The project team worked together collaboratively to implement overall project activities such as the development of the common evaluation framework, social network analysis, eCoP, knowledge exchange and administrative functions such as transfer of funds and development of the memorandum of agreements. As one of the team partners commented, "*The project team was pretty easy to work with and that was a bonus… The working relationship was good."*

Collaboration and Communication Between Jurisdictions

One of the most important supports that the overall project team provided was the opportunity for communication and collaboration between jurisdictions. The majority of project partners indicated that sharing and collaborating with one another through the PSC, Core Team and working committees facilitated their work. ICP & LE is a concept that project partners are passionate about. They view ICP as having great value and potential for a positive impact on healthcare service delivery redesign and "*there was lots of commitment to the actual vision of the project*." Thus, they were dedicated to the project and saw value in collaborating across jurisdictions. A variety of mechanisms for project partners to communicate and collaborate were provided by the overall project team these included: regular conference calls for the Core Team and PSC; electronic platforms, in-person meetings and a knowledge broker who was responsible for facilitating communication among team members.

The hosting of face-to-face meetings for the Core Team in Calgary and the PSC in Winnipeg were viewed as extremely beneficial to project partners. The meetings provided an opportunity for team members to meet one another in-person, discuss implementation and share experiences and viewpoints. At these meetings, key items were discussed such as the adoption of the CIHC and WHO frameworks, the Multi-Site ICP & LE Evaluation Framework, Logic Model and Program Theory, definitions, the Project Charter, and the SNA.

The role of the knowledge broker and eCoP moderator was "*instrumental*" in creating and facilitating communication and collaboration. She spent a significant amount of time working directly with project partners determining information needs and facilitating communication and sharing of information. In addition, she moderated the eCoP site, encouraged its use and organized and posted information relevant to ICP & LE.

The most active component of the eCoP site was the resource section which was utilized as a repository for information. Over 184 different resources including: meeting minutes, presentations, ethics reviews, resources/tools and reports, were posted on the site with some jurisdictions posting significantly more resources than others.

Though there were some challenges in terms of engaging project partners to utilize the eCoP, access to and use of the web site grew over the six months since its launch in December 2010. Web analytics show that as of July 2011, there were 59 registered

project partners on the eCoP and 536 visits to the site with 77percent of those visits representing returning visitors.

Table 5: Quotes to support themes related to factors that facilitated implementation of overall project activities

Support from Overall Project Team
"The whole concept of the project is a good one that has great value to all the various stakeholders. This is the cutting edge of where the health system is today…it is a very current issue for health managers across the country."
"There was good collaboration, good cooperation and good representation."
Collaboration and Communication Between Jurisdictions
"Every time I talked to someone (project member) they were generous with their knowledge and time and sharing of everything. They were really engaged and really supportive."
"The in-person workshops were good because we could really work with both those teams at in person meetings. I think we got a long way in September and with the Calgary group. Those meetings were really helpful."
"The knowledge broker was invaluable. I think that would be a big lesson out of the project. You have to have someone who is playing that role and linking people together and I think that has been really helpful."
"Getting the eCoP up and running in a timely way also helped with the collaboration and communication. That was a real tangible piece."

WHAT WERE THE FACTORS THAT CHALLENGED IMPLEMENTATION OF OVERALL PROJECT ACTIVITES?

While a significant amount was accomplished to support the overall project activities, the work was not without its challenges. The primary challenge interviewees identified was the project governance and to a lesser degree the links with other ICP & LE focused organizations.

As might be expected some of the factors that challenged jurisdictions were also challenging for the overall project. The compressed project timeframe and the fact that provinces were at different stages of "readiness" for site selection were noted at both levels. These two areas have been discussed in detail in the previous section on jurisdictional activities and are not repeated here.

Complicated Project Governance

In the judgement of many interview participants the governance structure consisted of "*too many layers*". This led to confusion and lack of clarity around the various roles and responsibilities associated with governance. For example, several interview participants commented that they were not sure if the mandate of the PSC was well understood, despite articulation of the terms of reference for the group in a document. In one of the jurisdictions there was concern about accountability and the communication pathway between the sites and the overall project team which bypassed the jurisdictional steering committee. They were concerned that reports were going directly to the overall project team and this meant that "*the jurisdictional steering committee didn't know what was going on and what the challenges were.*"

A few participants commented that the composition of the PSC was challenging. They believed that PSC members were at "*varying stages of engagement with the project*" and some were "*not aligned with the mandate of the committee*" and had "*differing agendas*." As a result the PSC did not feel like a "*cohesive group with a clear sense of overall direction*."

Ineffective Use of Organizational Links

There were varying opinions about the role of the WCIHC and their contribution to overall project activities. Some project partners recognized the strength of WCIHC as a collective group and were disappointed that there was not a stronger link with WCIHC as a collective group to develop various project components; rather "*they functioned as individual representatives within their jurisdictions*."

Other project partners indicated that some WCIHC members felt frustrated by the project process and perceived lack of communication during the development of the proposal. They commented that while WCIHC was involved with the development of the proposal to Health Canada, they were not involved with the final stages of the proposal and the negotiations with Health Canada. Several members believed that the final proposal "*changed quite substantially from what we had intended it to be*" with little input from WCIHC. In addition, a few interview participants commented that if members from WCIHC had been asked to provide input on the process for development of the evaluation framework and take the lead on its development, the process would have moved along more quickly.

Although not mentioned in interviews, it was originally intended that this project and the Atlantic Advisory Committee on Health, Human Resources (AACHHR) would collaborate, particularly around the evaluation, however this link was not effectively utilized. Members from the Atlantic group participated in an early meeting with the overall project team to discuss plans. The two groups did not develop a formalized collaborative relationship during the 12-month period of this initiative, however, there has been considerable discussion regarding the benefit of bringing the two groups together to discuss results and lessons learned.

Table 6 below provides additional quotes to support the themes noted above.

Table 6: Quotes to support themes related to factors that challenged implementation of overall project activities

Complicated Project Governance
"It was sometimes frustrating on the PSC calls because the kinds of questions that the larger project team needed directions and answers from, sometimes the people representing the jurisdiction needed to go back and get the answers from people who were a little closer to the project. I think you need to find that balance between the political need for people to be involved and what is actually helpful."
"The other challenge we faced in terms of implementation of this project was the lack of communication and coordination on the part of the PSC."
"I struggled with the fact that the PSC members were at varying stages of engagement."
"The committee structures were redundant. If you look at the levels, it is basically the same people. I didn't think it was a very good use of people's time. I think it actually impaired communication because people assumed you were on all the committee but you might not be."
"I found the governance structure to be cumbersome at times. I think there were maybe too many layers

to it sometimes. The same players showed up at different places sometimes. That made it hard to sort out what hat you were wearing at the table."
"The governance model and some of the roles and responsibilities were a little bit fuzzy. I think it made it more challenging for implementing the activities."
Ineffective Use of Organizational Links
"We really hoped that the WCIHC would be a real partner and be able to lend a lot of expertise, particularly in the area of evaluation."
"The WCIHC was supposed to be the key organization to help drive the intellectual development of the project and they didn't perform as a group at all."
"We could have had a bigger role in working with our colleagues (WCIHC) across Western Canada relating to the framework and evaluation piece but that didn't become our role…"
"I would say we (WCIHC) that there would have been a substantial contribution we could have made, especially around the evaluation and framework, providing background information and the expertise we have."

HOW EFECTIVE WERE THE OVERALL PROJECT ACTIVITES IN ADVANCING ICP & LE?

While it is far too early to tell how effective the overall project activities will be in advancing ICP & LE, there are a number of significant outputs that will be useful to other groups working to advance this area. These outputs have the potential to serve as building blocks for the next generation of ICP & LE.

Development of Project Charter

The development of the Project Charter was a significant accomplishment. The Project Charter, which is described in greater detail in Part 1 of this report, is an agreement among the various project partners participating in the ICP & LE project to work collaboratively in achieving the project vision and objectives. A copy of the Project Charter can be found in Appendix B.

ICP & LE Multi-Site Evaluation Framework

The Multi-Site ICP & LE Evaluation Framework was a key outcome of the overall project activities. The EWC, in collaboration with the PSC, worked to develop the Evaluation Framework which contains: 1) a program theory, 2) logic model, and 3) a common evaluation framework including short, intermediate and long term outcomes. The framework extends well beyond the frame of the existing project and can easily be adapted for use by other multi-site projects engaging in ICP & LE activities. A copy of the ICP & LE Multi-Site Evaluation Framework can be found in Appendix C.

eCoP

The eCoP was created to support exchange activities between the network of project partners across all four western provinces engaged in the project. Its potential for building and facilitating a larger interprofessional or models of care community may not have been fully realized. During the writing of this report, and at the direction of the Forum, arrangements were being made to make the eCoP into a public site.

ICP & LE Tools and Resources

As a result of project activities a number of tools and resources were sourced and/or documented. The majority of these resources, which are incredibly valuable to those working in ICP & LE, are presently housed on the eCoP.

Linking Workforce Optimization to the Competencies Required for Effective Interprofessional Practice

Due to the compressed timeline, the majority of project efforts were placed on ICP assessment and training and not as much on workforce optimization. However, although workforce optimization may not have been fully realized, there was excellent progress made on articulating a common definition of workforce optimization ,and linking it to the competencies required for interprofessional practice (see discussion in Part 2 of the report).

Knowledge Exchange and Translation Plan

To support knowledge exchange and translation, a detailed Knowledge Exchange and Translation Plan was created. A copy of the Knowledge Exchange and Translation Plan can be found in Appendix D.

Generic Site Intervention Plan

The project manger developed a generic site intervention plan which describes the common processes used at each of the sites to plan and implement project activities. A copy of the Generic Site Intervention Plan can be found in the next part of the report.

EVALUATION CONCLUSIONS

The vision of the ICP & LE project was *to establish and implement interprofessional collaborative practice and learning environments in a variety of multi-jurisdictional sites across the continuum of care*. All four jurisdictions successfully implemented intervention approaches designed to establish practice and learning environments, however, it is too early to conclude whether or not these approaches have been established to the extent that they will be sustained for any period of time.

The 12 month project timeframe is inadequate to make any conclusions regarding sustainability or achievement of anticipated outcomes. However, there were some early indications from qualitative data that short term outcomes were being achieved (i.e., provider and student knowledge of competencies, improved team functioning). Had the interventions been implemented for a longer period of time, it is feasible that there would have been measureable short term impacts leading to intermediate and long term outcomes (i.e., improved team effectiveness in ICP & LE, enhanced health and human resources planning and supply, and improved patient health outcomes).

Despite these limitations there are important gains that have been made in terms of insight regarding factors that facilitate and hinder implementation of an ICP & LE intervention in clinical settings. There have also been important lessons learned from implementing this multi-site project, as well as key products that will provide a foundation for the next generation of multi-site projects.

A number of factors were identified as important to supporting sites in implementing intervention components. The strongest themes to emerge were availability of resources to pay for items such as training and facilitation of teams, collaboration that occurred within jurisdictions, partnerships, and support from senior management. Another important factor was consistency of the project with provincial strategies.

Implementation of jurisdictional activities was supported by a number of overall project activities which aimed to enhance collaboration and communication among the jurisdictions. This role was identified as important to the success of jurisdictions. The factors perceived to hinder the success of the overall project included what was perceived as a cumbersome governance structure and ineffective linkages with other initiatives working in the same area (i.e., AACHHR and WCIHC).

The factors that hindered success of jurisdictions included the compressed timeframe and what projects perceived as a lack of common project elements. The fact that the four provinces were at different stages of "readiness" for site selection, team dynamics and lack of clarity around extended project funding were also barriers to success.

A principle underlying the proposal and the program theory for this project is that system-wide support and change are needed to fully realize effective interprofessional collaborative practice and learning approaches, a perspective integral to the *WHO Framework for Action on Interprofessional Education and Collaborative Practice* and consistent with the CIHC competencies. The evaluators found that a systems framework was useful in bringing together the results from this evaluation. This approach identifies important indicators for monitoring success and determining potential gaps in the system that should be addressed to achieve the long term vision of contributing to workforce optimization through ICP &LE.

This multi-site project provided opportunities for a wide range of stakeholders to share information, collaborate on the challenges they faced and compare their experiences in different contexts. Among the factors that hindered success was "a lack of common project elements". It is important to recognize that there are different types of "multi-site" projects ranging from tightly controlled studies using a randomized controlled design, to initiatives that have a common goal but use different approaches and disparate measures. In the latter case, evaluation focuses primarily on qualitatively identifying common themes and lessons learned. Somewhere in between these two extremes is a third approach in which multi-site projects apply different intervention approaches, but use a common set of core measures. The work that was conducted in this project would allow for this third approach. For future projects it will be important to specify the type of multi-site projects being funded, roles and responsibilities of all stakeholders, and anticipated gains from this approach.

While the findings presented in this chapter will be useful and provide valuable insight for program planners and decision makers, the reader is cautioned when interpreting the findings. The applicability of these results to similar initiatives in other contexts is

unknown. Additional studies in other locations, with similar programs, will add to this body of knowledge.

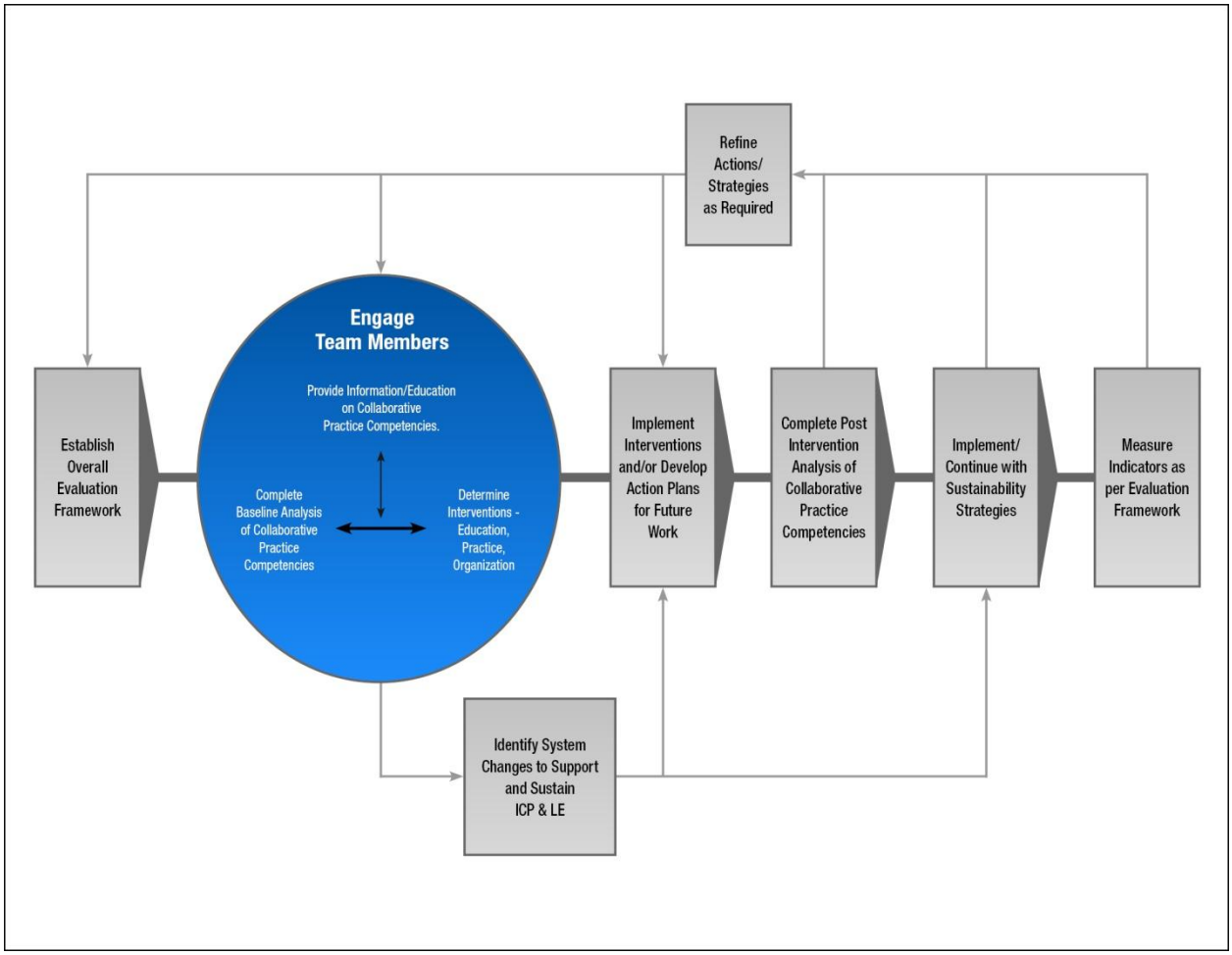
Though long term outcomes were not achievable in the life of this ICP & LE project, the jurisdictions and their related sites appear to be well positioned to achieve one of the project goals which was for the sites *to serve as capacity centers to provide the essential tools, resources, processes and learning opportunities to facilitate replication of successful interprofessional and change management practices for other clinical sites and settings in the future.* In order for this to be realized, continued leadership, resources and integration into existing service delivery redesign will be required.

PART VI: PROCESS OF DEVELOPING AN ICP & LE

The purpose of this part of the report is to provide a platform that could be used by others to replicate an interprofessional collaborative practice and learning environment.

Based on the work completed by each of the participating teams a generic site development plan was created. This model shows the steps that could be used to develop an ICP & LE:

Figure 2 – A Generic Site Development Plan



The balance of this part of the report outlines the guidelines, tools and resources associated with the overall process and specific elements of the generic development plan.

Interwoven with the guidelines, tools and resources are four text boxes summarizing the discussions from the final Core Team Meeting held June 23, 2011. This knowledge sharing event allowed each jurisdiction to reflect on the following questions:

Thinking about your clinical sites and/or project management responsibilities and considering your goals and anticipated outcomes at the outset of the project:

- *What were the highlights and key successes that your clinical teams / jurisdictions experienced? What are you most proud of?*
- *What unexpected outcomes / successes emerged?*
- *What are the greatest challenges that currently exist and what do you anticipate for the future?*
- *How do you think success of your project will impact collaborative practice / patient care for the future? What are the opportunities to build on this foundational work?*
- *If other clinical sites express an interest / need to create an ICP & LE, what key learnings / words of advice would you share with them?*

The guidelines proposed below have been developed to reflect the evaluation outcomes as well as discussions held with the Core Team and Project Steering Committee. The tools and resources identified are examples of those used by the various sties as they completed their work. A more detailed inventory of all the project resources can be found in Appendix N.

OVERALL PROCESS

The following guidelines are proposed regarding the overall process:

❖ ***Ground the work within the CIHC and WHO Competency Frameworks.***
Central to forming an ICP & LE is the need for developing competencies related to collaborative practice among members of care delivery teams and redesign of the way in which providers work together to maximize the effective utilization of all team members. As discussed in Part II of this report, the CIHC framework identifies the six competencies required for effective collaborative person centred care and services. The WHO framework highlights the need to take action in three key areas in order to make and sustain change: interprofessional education, collaborative practice, system level supportive structures. Together these frameworks provided a common language for the creation of an ICP & LE and point to where and how interventions can be planned and deployed. They also provided the basis for development of common indicators and measures of collaborative practice.

❖ ***Employ dedicated facilitators to work with teams.***
The facilitator is a dedicated resource that functions as a key 'intervention' with team members as well as a guide for the process of creating the ICP & LE. Investing in this resource signals that this is an important process and is deserving of the team's energy and time. It also allows the team members to focus on how they would like to change rather than being concerned with the process.

❖ ***Begin the work with those who demonstrate willingness to change their practice.***

Consider asking teams to 'volunteer' or 'apply' to be part of the process of creating the ICP & LE. They could be asked to explain why they should be involved; why and how they are willing to change their practice and approach.

❖ ***Identify and foster links to other elements of the organization's strategic agenda.***

Build support for the ICP & LE by showing the linkages between project activities and other strategic primary healthcare and/or service redesign initiatives at the organization, provincial and national levels.

❖ ***Identify and establish leaders/champions at many levels.***

Look for leaders/champions within the team, their department, and the broader organization. These are people who will speak to the benefits of ICP &LE and highlight how practice change is advancing the organization's agenda and improving patient care.

Core Team Final Reflections - Highlights

- All four provinces got projects implemented
- Successful outcomes in allotted time, despite some provinces having very tight timelines
- Physician / executive member engagement
- Time over the course of the project to get to know and work with the teams
- Gained knowledge and tools for all phases of project implementation
- Increased awareness of IP collaborative practice
- Demonstrations of increased collaboration
- Involvement of executive members
- Achievable despite vast geographic distances
- Partnerships with universities
- Project facilitators to implement and maintain momentum

❖ ***Utilize multiple methods of communication.***

Use formal and informal communication approaches (i.e., meetings, presentations, email, etc.) within the team and to communicate with others about the development of the ICP & LE. Consider developing an electronic community of practice (eCoP) to further support participants.

❖ ***Incorporate principles of continuous quality improvement.***

As with any change management process it is important to allow for modifications to the approach and opportunities to review and incorporate evaluation results.

❖ ***Engage a Knowledge Broker in the process.***

This guideline is directed more at a multi site process but could also be considered for a single site ICP & LE, and as an intervention. See Part IV for a discussion of the role and scope of the knowledge broker in the current project.

Examples of Tools and Resources Utilized

Resource Title	Author	Location
The National Interprofessional Competency Framework (2010)	Canadian Interprofessional Health Collaborative (CIHC)	http://www.cihc.ca/files/CIHC_IPCompetencies_Feb1210r.pdf
Framework for Action on Interprofessional Education and Collaborative Practice (2010)	WHO	www.who.int/hrh/resources/framework_action/en/index.html

IDENTIFY SYSTEM CHANGES TO SUPPORT AND SUSTAIN ICP & LE

The following guidelines are proposed regarding identifying system changes:

❖ ***Work simultaneously in different parts of the system.***
One of the principles underlying the proposal and the program theory for this project is that system wide support and change are needed to fully realize effective ICP & LE. This perspective is one of the principles underlying the *WHO Framework for Action on Interprofessional Education and Collaborative Practice*.

The evaluators brought a systems perspective to the evaluation findings by identifying different levels of the system represented in the data that influence the larger goal of the project which is, "*effective ICP & LE in a variety of settings, across a range of clinical settings and multiple jurisdictions, reflecting the continuum of healthcare deliver*". The idea is to work simultaneously in these different parts of the system recognizing that different patterns of change will occur within each, but that all are necessary in order to fully realize the potential of ICP & LE in impacting workforce optimization. Five basic levels of system influences were identified, including:

1. National, provincial and organizational policy context.
2. Site teams in clinical practice settings.
3. Healthcare personnel.
4. Students in the healthcare professions.
5. Patients/family/community.

Based on the findings from the evaluation (described in PART V) and drawing from the WHO Framework, as well as the CIHC competencies the evaluators developed a framework (Table 7) that shows how a focus on multiple levels of the system influence the ultimate goal of this initiative[10].

[10] This approach is derived from the work of Beverly Parsons, a recognized expert and author in systems evaluation- Parsons B, Hargreaves M. Evaluating Complex System Interventions. Presented at American Evaluation Association Conference, Orlando FL, November 2009.http://www.insites.org/pub_AEA2009.html

Parsons B, Evaluating Patterns of Change in Complex Systems: Strengthening Families Example. Presented at American Evaluation Association Conference, Orlando FL, November 2009.

Aspects of change over time for each subsystem are identified beginning with a baseline assessment, identification of potential intervention approaches, the "tipping point" needed within that system to facilitate ICP &LE, and finally the actions needed to sustain gains. It is important to note that although all levels of the system need to progress, there is not an expectation that they will change at the same rate or timeframe.

Table 7: A systems perspective on factors that support development of ICP & LE

POINTS OF INFLUENCE	BASELINE ANALYSIS Extent to which:	ACTION/ INTERVENTION	TIPPING POINT FOR CHANGE	SUSTAINING CHANGE
Policy Context (national, provincial, organizational) Examples: Health Canada, Provincial Ministries, Universities Health Authorities, clinical sites, relevant NGO's	Current policies/strategic plan encourage and support collaborative practice as a means to enhance workforce optimization. Resources available to support development of knowledge and knowledge exchange in collaborative practice.	Policies adjusted with stakeholder input and valuing of multiple perspectives.	Policies clearly encourage implementation and evaluation of collaborative practice across different types of practice settings, a range of clinical settings, and across the continuum of care.	Review and update policies to ensure they support best practices in ICP &LE that contribute to workforce optimization. Ongoing support and funding for development of new knowledge, evaluation of programs, and an infrastructure to support knowledge exchange.
Clinical practice setting Examples: mental health clinic, long term care facility, women's wellness centre, healthcare for seniors, community care programs, healthcare clinic	Health professionals at the site are at a level of team readiness that will make collaborative practice feasible. Support for ICP &LE from senior management and supervisors at all levels.	Team development activities to raise awareness of CIHC competencies, group dynamics, and enhance communication. Increase awareness of at organizational level regarding ICP & LE.	Multiple communities of practice that collaborate and function at a high level. Organizational culture is positive and supportive regarding ICP & LE.	Work with teams on an ongoing basis to maintain high functioning working relationships. Maintain infrastructure for ICP & LE, communications, support development activities.
Professional development for healthcare personnel Examples: Physicians, nurses, nurse	Attitudes, level of awareness and skill related to competencies for interprofessional collaboration.	Professional development and continuing education on collaborative practice	Professional development for collaborative practice is readily available and accessible for vast majority of healthcare	Ongoing improvement and updating of professional development and continuing education

http://www.insites.org/pub_AEA2009.html

POINTS OF INFLUENCE	BASELINE ANALYSIS Extent to which:	ACTION/ INTERVENTION	TIPPING POINT FOR CHANGE	SUSTAINING CHANGE
practitioners, social workers, occupational and physiotherapists, pharmacists, case managers	Understanding regarding the link between collaborative practice and workforce optimization.	competencies and concepts related to collaboration, workforce optimization and patients outcomes	personnel who have not been exposed to the approach.	(build on best practices, incorporation of new knowledge).
Student Education & Training Examples: Physicians, nurses, nurse practitioners, social workers, occupational and physiotherapists, pharmacists, case managers	Student Attitudes, level of awareness and knowledge and abilities related to competencies for interprofessional collaboration.	Training and clinical experience in collaborative practice that is supported by educational institutions and clinical training sites.	Training in collaborative practice is embedded within the curriculum.	Ongoing improvement and updating of curricula (build on best practices, incorporation of new knowledge).
	Mentors are committed to ICP, have knowledge and skill, knowledge regarding the competencies, skills in student assessment and feedback.	Faculty Development	Faculty development is readily available and accessible for vast majority of healthcare personnel who have not been exposed to the approach.	Ongoing improvement and updating of faculty development (build on best practices, incorporation of new knowledge).
	Institutions' training health professionals incorporate ICP competencies framework into their curriculum. Understanding regarding the link between collaborative practice and workforce optimization.	Initiatives to advocate and support educational institutions in adopting the ICP competencies framework in education and training.	Vast majority of training programs have curriculums that address the competencies.	Ongoing improvement and updating of curricula (build on best practices, incorporation of new knowledge).
Patients / family / community*	Patients and their families aware of what collaborative practice means. Patients engaged with their caregivers in supportive ways.	Patient education on collaborative practice and their role on the team.	A critical mass of patients and their families are familiar with collaborative practice and know what to expect from a practice team and are an integral member of the team.	Work with staff and patients/family to ensure meaningful engagement of patients/family in care decisions and appropriate role on collaborative team.

*Results do not include "Patients/Family/Community"; however, this category was included in the systems analysis based on the logical extension of interventions to these groups and the fact that they are the primary target group.

❖ ***Begin sustainability discussions early in site development.***

Work with the team members to identify how the practice changes they are planning and implementing can be embedded within their ongoing operations and within the broader organization.

Consider:

- What factors will influence sustainability?
- What questions do we ask to assure sustainability in our work?

Core Team Final Reflections - Lessons Learned

- Start early
- Teams need to be ready to critically look at their practice & be ready for change
- Highlight the importance of mentoring students in IP experiences
- Be realistic about the time commitment required by all team members
- Need strong leadership and champions at all levels
- Stress the value of internal facilitators working with external facilitators
- Consider shift from "project" to "initiative"
- Demonstrate the link between collaborative practice and client outcomes

Examples of Tools and Resources Utilized

Resource Title	Author	ICP & LE Site Location
Table 7 in Final Report (shown above)	Evaluation Consultants	ICP&LE Proejct Documents /ICP&LE Final Report / Final Report & Appendices
SPOTLIGHT FEATURE: Getting Connected: Realizing and Optimizing the Value of Networks for Sustainability May 2011	Knowledge Broker	ICP&LE Clinical Site Toolkit / Identify System Supports for Sustainability/Project Resources
SPOTLIGHT FEATURE: On Solid Ground: Organizational Infrastructure to Support IP Collaborative Practice June 2011	Knowledge Broker	ICP&LE Clinical Site Toolkit / Identify System Supports for Sustainability/Project Resources
Legacy Sustainability Model	Alberta	ICP&LE Clinical Site Toolkit / Identify System Supports for Sustainability/General Resources
Legacy Sustainability Model Knowledge Exchange Teleconference Notes - May 12_2011	Knowledge Broker	ICP&LE Project Documents/ ICP&LE Final Report / Other Project Documents
Project Sustainability Review through the Legacy Sustainability Model June_2011	Project Staff	ICP&LE Project Documents / ICP&LE Final Report / Other Project Documents
Embedding Interprofessional Collaboration Competencies at Vancouver Island Health Authority_White Paper June 2011	British Columbia	ICP&LE Clinical Site Toolkit / Identify System Supports for Sustainability/Project Resources

ESTABLISH OVERALL EVALUATION FRAMEWORK

The following guidelines are proposed regarding the overall evaluation framework:

- ***Link improvements in collaborative practice to improvements for clients/patients and their families.***

The ultimate goal in creating collaborative practice and learning environments is to influence positive outcomes at the patient, provider and health system levels over time. It is important to demonstrate in the overall evaluation framework, and in other project documentation, how the anticipated changes will impact clients/patients and their families.

Examples of Tools and Resources Utilized

Resource Title	Author	ICP & LE Site Location
Project Evaluation Framework_FINAL July_2011	Evaluation Consultants	ICP&LE Clinical Site Toolkit/ Establish Evaluation Framework/Project Resources
Evaluation Interview Questions	Evaluation Consultants	ICP&LE Clinical Site Toolkit/ Establish Evaluation Framework / Project Resources

ENGAGE TEAM MEMBERS - COMPLETE BASELINE ANALYSIS AND DETERMINE INTERVENTIONS

The following guidelines are proposed regarding engaging team members:

- ***Consider providing education and information on the competencies for collaborative practice prior to conducting a baseline analysis with team members.***

Members of an interprofessional team will generally rate their practice as being collaborative; however, they will not typically understand what that means. Providing education and information on collaborative competencies may allow them to provide a more accurate rating of their status at baseline.

Core Team Final Reflections – Impact on Patient Care

- Raised awareness and expectations for being more collaborative
- Practitioners have more tools and confidence to provide interprofessional, collaborative care
- Project deliverables have created strong foundation for continued work
- The timing of this project aligned with other regional initiatives which will strengthen based for collaborative practice; able to replicate in other sites

❖ ***Utilize a methodology/process that allows for critical self/team assessment.***
Appreciative Inquiry and Future Search are examples of processes that allow for critical self/team assessment and engagement of all people involved with the client/patient. In the development of an ICP & LE these types of processes serve as an intervention with team members as well as a method of identifying other interventions that will contribute to the development of collaborative practice.

❖ ***Identify a variety of interventions.***
Work with team members, and others as required, to identify education, practice and organizational interventions that will enhance collaborative practice (see definitions in Part II). A range of interventions is required in order to make change.

❖ ***Engage and actively involve physicians.***
Make every effort to involve all the physicians who are members of the team. This may mean adapting meeting schedules (outside of office hours), paying sessional fees, or other accommodations.

Examples of Tools and Resources Utilized

Resource Title	Author	ICP & LE Site Location
Appreciative Inquiry Process: Guidelines for Planning, Organizing and Conducting Appreciative Inquiry 2010	Manitoba	ICP&LE Clinical Site Toolkit/Engage Team Members / Project Resources_Engagement & Baseline Analysis
Adapted Appreciative Inquiry Process at the WRHA Sites	Manitoba	
National Interprofessional Competency Framework Self Assessment (electronic survey format) 2011	British Columbia	
In Person Interview Questions	British Columbia	
Health Region Survey: INTRANET / INTERNET Interprofessional Resources May 2011	Knowledge Broker	
Assessing Team Attitudes & Functions: A Set of Pre & Post Questionnaires 2011	Saskatchewan	
IP COMPASS Tool Brochure	Manitoba	
IP Environmental Checklist May 2010	Alberta	
Graphic Recording Sample	British Columbia	
Future Search Strategy Final Report:	British Columbia	

Resource Title	Author	ICP & LE Site Location
Broadmead Care Society (TLAB) February 2011		
Future Search Strategy Final Report: Seniors at Risk Integrated Network (SARIN) February 2011	British Columbia	
SPOTLIGHT Feature: Engaging Frontline Staff in Change Initiatives – 2011	Knowledge Broker	

IMPLEMENT INTERVENTIONS

The following guidelines are proposed regarding implementing interventions:

- ***Establish a timeline for implementing the interventions.***

Work with team members, and others as required, to determine the overall timeline for implementation of each intervention identified during the engagement phase – document short, medium and longer term action items. Consider incorporating this timeline/action plan into any relevant individual and/or team performance plans. Also consider how this timeline/action plan aligns with the broader organization's strategic and operational plans; confirm and document intersections.

- ***Move to establish some 'quick wins'.***

Demonstrate willingness to change by quickly taking action on some items raised during the engagement phase.

- ***Ensure a focus on activities that enhance workforce optimization.***

As discussed in Part II of this report, workforce optimization enables organizations to optimize patient outcomes while ensuring the most effective, flexible and cost effective use of human resources. It is the product of multiple, integrated and interacting organizational interventions focused on: appropriate staff mix; continued education to ensure health service provider continued competency in a

Core Team Final Reflections – Challenges:

- Time and resources to continue
- Challenge to maintain momentum without facilitators
- Maintain student placements
- Need to continue education / engagement around IP competencies
- Getting teams open to looking at their practice and engaging a willingness for change; how to get people / teams to embed this work into everyday practice
- Geographic distances
- Project Timeline
- Communication complexities
- Ownership of student mentoring
- Team resistance to change
- Sustainability
- Impact of systemic issues i.e., physician compensation for engagement

changing health system; optimal deployment of staff members' competencies; and optimal practice environments. [11]

Examples of Tools and Resources Utilized

Resource Title	Author	ICP & LE Site Location
IP Information Resources		
WHRA Guiding Principles on Collaborative Patient-Centred Care and Services (pdf)	Manitoba	ICP&LE Clinical Site Toolkit/Implement Interventions / Project Resources_IP Information
WHRA: World Health Organization Framework for Action on Interprofessional Education and Collaborative Practice: - Overview - Action Area 1: Interprofessional Education - Action Area 2: Collaborative Practice - Action Area 3: System Level Supportive Structures •	Manitoba	
WHRA: Overview and Information Sheets - CIHC: Competencies Overview - Competency #1: Person Centred Care - Competency #2: Role Clarification - Competency #3: Team Functioning - Competency #4: Collaborative Leadership - Competency #5: Interprofessional Communication - Competency #6: Interprofessional Conflict Resolution	Manitoba	
Organization/ Operational Resources		
Embedding Interprofessional Collaboration Competencies at Vancouver Island Health Authority_White Paper June 2011	British Columbia	ICP&LE Clinical Site Toolkit/ Implement Interventions / Project Resources_Org/Operations
IPE/IPC Job Description Development Process 2011	Manitoba Jurisdictional Team	
IP Position Description – Frontline Healthcare Provider - 2011	Manitoba Jurisdictional Team	
IP Position Description – First Line Manager 2011	Manitoba Jurisdictional Team	
SPOTLIGHT FEATURE: On Solid Ground: Organizational Infrastructure to Support IP Collaborative Practice June 2011	Knowledge Broker	

[11] Definition adapted from Dubois, CA. and Singh, D. (2009). From staff-mix to skill-mix and beyond: towards a systemic approach to health workforce management. Human Resources for Health. 7 (87): p. 1-19.)

Resource Title	Author	ICP & LE Site Location
A Guide for Effective Interprofessional Teams in Primary Health Care - 2011	Saskatchewan	
Staff Development And Teaching Resources		
SPOTLIGHT FEATURE: Interprofessional Education: Learning Activities for Engaging Learners March 2011	Knowledge Broker	ICP&LE Clinical Site Toolkit/ Implement Interventions / Project Resources_IP Teaching Resource
Teaching Resources Inventory March 2011	Knowledge Broker	
Interprofessional Education Session Learning Plan / Facilitator Guide: Café Style Format	Manitoba	
Questions for Reflection on IP Competencies 2010	Alberta	
IP Competencies Education Session Powerpoint Presentation: Collaborative Care. What does this mean to me? What does this mean to Residents? - February 2011	Manitoba	
Table of IPC/IPE Resources 2011	Manitoba	
IP Health Collaborative of Saskatchewan: IP Workshop Agenda - March 2011	Saskatchewan	
Sunrise HR: Lunch and Learn Evaluation Tool March 2011	Saskatchewan	
Student Practice Teaching Resources		
A Guide to Effective Interprofessional Student Placements in Primary Healthcare Teams 2011	Saskatchewan	ICP&LE Clinical Site Toolkit/ Implement Interventions / Project Resources_Student Resources
Interprofessional Practice Based Learning: A Competency Reflection Journal – Sun Country Health Region – 2011	Saskatchewan	
Workforce Optimization		
Workforce Optimization Knowledge Exchange Teleconference Notes - Feb20_2011(pdf)	Knowledge Broker	ICP&LE Clinical Site Toolkit/ Implement Interventions / Project Resources_Workforce Optimization
Workforce Optimization: Core Team Workshop Discussion Notes - December_2010 (pdf)	Knowledge Broker	
Role Optimization: Competency Based Approach to Clarifying Roles of RNs Presentation to RNs at LTC Invitational Symposium (ppt)	Jeanne Besner	ICP&LE Clinical Site Toolkit/ Implement Interventions / General Resources

COMPLETE POST INTERVENTION ANALYSIS

There are no guidelines proposed regarding post intervention analysis.

Examples of Tools and Resources Utilized

Resource Title	Author	ICP & LE Site Location
Sun Country HR Learning Event Presentation to the Team: A Post Training Evaluation Tool – 2011	Saskatchewan	ICP&LE Clinical Site Toolkit / Complete Post Intervention Analysis / Project Resources_Post Intervention Analysis
Sun Country HR Learning Event Presentation to the Team: A Post Interview Questionnaire – 2011	Saskatchewan	
A Preceptor/Lead/Facilitator Questionnaire 2011	Saskatchewan	
Sun Country HR: Student Evaluation of an IP Placement: A Pre-Placement Questionnaire – 2011	Saskatchewan	
Sun Country HR: Student Evaluation of an IP Placement: A Mid-Placement Questionnaire 2011	Saskatchewan	
Sun Country HR: Student Evaluation of an IP Placement: A Post-Placement Questionnaire 2011	Saskatchewan	
IP Placement Optional Student Interview: A Mid and/or Post Interview Guide 2011	Saskatchewan	

PART VII: CONCLUSION AND RECOMMENDATIONS

This report brings together highlights, as well as some of the main aspects, of a complex, multi-stakeholder, multi- jurisdictional project. Nine diverse service delivery teams participated in a journey to improve how they function by becoming interprofessional collaborative practice learning environments. Given the project's timeline it is too early to conclude whether or not these approaches have been established to the extent that they will be sustained for any period of time.

Despite this limitation there are important gains that have been made in terms of insight regarding factors that facilitate and hinder implementation of an ICP & LE intervention in clinical settings. There have also been important lessons learned from implementing this multi-site project, as well as key products that will provide a foundation for the next generation of multi-site projects.

Though long term outcomes were not achievable in the life of this ICP & LE project, the jurisdictions and their related sites appear to be well positioned to achieve a major element of the project vision which was for the sites *to serve as capacity centers to provide the essential tools, resources, processes and learning opportunities to facilitate replication of successful interprofessional and change management practices for other clinical sites and settings in the future.*

In order for this to be fully realized and sustained, both within the participating health regions and within their respective provincial health systems, continued leadership and resources will be required at the policy and practice levels. Additionally, integrating and improving collaborative practice into ongoing service delivery model redesign, perhaps through the linkage with workforce optimization, will be required.

All of the deliverables outlined in the original proposal were accomplished. Achievement of major activities that helped to reach the goals of the project included:

- Successful completion of a Value Management Review and several knowledge exchange events with all partners and key stakeholders.
- Successful establishment of the project team, Project Steering Committee and project governance structure – endorsed through the Project Charter.
- Development of an HHR planning and research network to support the project, including the development and moderation of an electronic community of practice to facilitate communication and knowledge translation and exchange.
- Development of a knowledge translation (KT) and dissemination plan.
- Common guidelines for development of ICP & LE and workforce optimization approaches developed.
- Development and documentation of a generic site intervention plan and logical process for implementation.
- Baseline scans and analysis undertaken and documented for each site.
- Initial change development plans for each site developed and documented.

- Evaluation framework developed and documented, including development of a minimal evaluation indicator set.
- Evaluation plan documented and initiated.

Collectively, completion of all project activities resulted in a number of recommendations that would build on the accomplishments of the project and enhance future work.

OVERALL PROJECT RECOMMENDATIONS[12]

- Ensure adequate time and funding to implement project activities and realize short and long term outcomes. ICP & LE is a complex intervention that requires change at multiple levels of the healthcare system. This twelve month project provided a reasonable amount of time to ensure inputs were in place (i.e., team development, educational sessions). However, the twelve months, combined with a decrease in funding was inadequate to achieve even the short term outcomes necessary to realize the potential impact of interprofessional collaborative practice on positive outcomes at the patient, provider and health system levels.

- Fund multi-site projects with an overall project infrastructure. This will be a beneficial way to accelerate the generation of knowledge in ICP. An overall project infrastructure allows people to connect in an efficient manner and provides opportunities for collaboration. This can be accomplished by implementing the kind of communication activities that were implemented in this project such as the provision of a knowledge broker to stimulate and facilitate communication and coordination and establishment of a variety of communication mechanisms such as in person meetings, eCoP, and conference calls.

- For future projects it will be important to be clear about the type of multi-site project being funded, roles and responsibilities of all stakeholders, and anticipated gains from this approach. It is important to recognize that there are different types of "multi-site" projects ranging from rigorously controlled experimental studies, to multiple projects that have a common goal but use different approaches and disparate measures. Somewhere in between these two extremes is a third approach in which multi-site projects apply different intervention approaches, but use a common set of core measures. The work that was conducted in this project would allow for this third approach.

- For multi-site projects create a governance structure that is efficient and provides opportunities for project partners to participate in a way that makes the best use of their time and expertise. Be certain that everyone understands their roles and responsibilities and that there are clear lines of accountability. Review the governance structure at key points in the process to ensure the project it is serving the needs of the project.

[12] There were a number of recommendations emerging from the evaluation that are perceived as being important factors to successful implementation of similar ICP & LE programs. The overall project and jurisdictional recommendations are based on the themes discussed in the challenges and facilitators to project implementation.

JURISDICTIONAL RECOMMENDATIONS

- Incorporate best practice and theory based interventions into planning, implementation and evaluation of project activities. This will strengthen project activities by enabling efforts to *build* on lessons learned and previous experiences in ICP & LE rather than *recreating* ICP activities.[13]

- Conduct a baseline assessment at the onset of project activities to understand the dynamics of participating site teams before engaging team members in change activities. This includes understanding how the teams function, as well as their level of understanding about ICP. It is important that teams understand the concept of ICP so they are able to gain the most value out of ICP interventions.

- Engage a broad range of stakeholders in the development and implementation of project activities ranging from frontline mangers to community members to high level decision makers. This broad engagement allows stakeholders to work and learn together to facilitate change at all levels of the system. Where possible, capitalize on existing relationships and identify leaders/champions within the group of stakeholders.

- Facilitate and encourage engagement of senior management in project activities. These individuals can provide insight and linkages between project activities and other strategic primary healthcare initiatives in the jurisdictions as well as provide political support. Activities that clearly align with existing or planned healthcare service delivery and/or strategic directions at national, provincial and regional levels are more likely to gain support and be successful.

[13] This item did not emerge as a facilitator or barrier during the evaluation however participants voiced their strong belief that these two elements are the necessary foundation for a successful program.

APPENDICES

***Appendices are found on the electronic community of practice [www.icple.com] in ICP&LE Project Documents.*

Appendix A Members of the Project Steering Committee
Appendix B Project Charter
Appendix C Common Evaluation Framework
Appendix D Knowledge Exchange and Translation Plan
Appendix E Sample Memorandum of Agreement
Appendix F British Columbia Site Report
Appendix G Alberta Site Report
Appendix H Saskatchewan Site Report
Appendix I Manitoba Site Report
Appendix J SNA Final Report
Appendix K Job Description for Knowledge Broker
Appendix L Guidelines for eCoP Data Management
Appendix M Phase One Evaluation Interview Questions
Appendix N Inventory of Project Resources