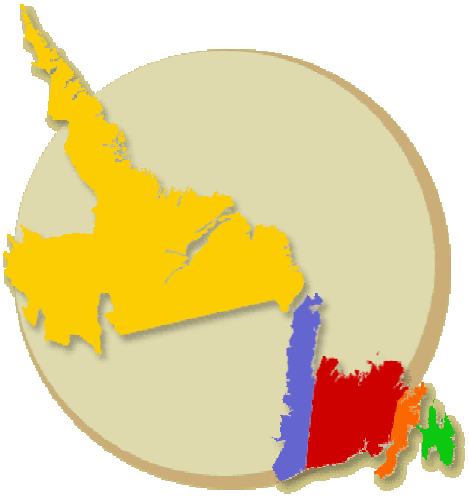
**Office of Primary Health Care, Newfoundland & Labrador**

# Newfoundland and Labrador Primary Health Care Renewal Initiative

## *Final Evaluation Report*

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## Abbreviations

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| APR | Administrative Process Record |
| CAC | Community Advisory Committee |
| CCB | Community Capacity Building |
| CCBT | Community Capacity Building Tool |
| CDM | Chronic Disease Management |
| CPST | Client/Patient Satisfaction Tool |
| CRHCS | Central Regional Health and Community Services |
| CRIHA | Central Regional Integrated Health Authority |
| CWHB | Central West Health Board |
| EM | Evaluation Matrix |
| ERHCS | Eastern Regional Health and Community Services |
| GRHSB | Grenfell Regional Health Services Board |
| HLC | Health Labrador Corporation |
| NLCHI | Newfoundland and Labrador Centre for Health Information |
| OPHC | Office of Primary Health Care |
| PHC | Primary Health Care |
| PHCC | Peninsulas Health Care Corporation |
| PHCTF | Primary Health Care Transition Fund |
| PLM | Program Logic Model |
| SOP | Scope of Practice |
| TET | Team Effectiveness Tool / Scope of Practice Tool |
| WRHCS | Western Regional Health and Community Services |

## 1.0 EXECUTIVE SUMMARY

In September 2003, a Framework document was developed by Newfoundland and Labrador to support the implementation of primary health care renewal. *Moving Forward Together: Mobilizing Primary Health Care* reflects the principles and directions presented in the Provincial Strategic Health Plan, and the Federal, Provincial and Territorial vision for primary health care.

A number of goals were established by the province to guide the renewal of primary health care in Newfoundland and Labrador. This included promoting self reliant and healthy citizens and communities; supporting the provision of comprehensive, integrated, and evidence-based primary health care services; enhancing accessibility and sustainability of primary health care services; and enhancing accountability and satisfaction of primary health care professionals in relation to primary health care.

The Primary Health Care (PHC) Renewal Initiative in Newfoundland and Labrador was supported by the Government of Canada through the Primary Health Care Transition Fund (PHCTF), which provided $800 million in funding across Canada ending in March 2006. Newfoundland and Labrador received $9.7 million from the PHC Transition Fund to implement the provincial Renewal Initiative and evaluation.

The provincial Renewal Initiative was implemented using an incremental approach that was designed to build on the existing strengths and capacities of the system, and support voluntary participation of primary health care stakeholders. The range of services to be provided at the primary health care level of the health care system continuum was determined by a needs assessment and available resources.

The Initiative was intended to address a number of features that would provide the foundation for primary health care renewal in Newfoundland and Labrador including the establishment of primary health care teams, maximizing scopes of practice, enhancing access to primary health care, promoting/enhancing community input and community capacity building, and maximizing involvement of individuals and communities in improving and protecting quality of life and well being through health promotion, illness prevention and wellness promotion.

The Initiative was supported at the provincial level by the Office of Primary Health Care (OPHC) and the Primary Health Care Advisory Council. OPHC provided provincial policy direction, and overall implementation and evaluation direction for the Initiative while the Primary Health Care Advisory Council provided advice to OPHC and the Minister of Health and Community Services to ensure implementation and evaluation was consistent with the Strategic Social Plan, and the Federal/Provincial/Territorial vision for primary health care.

To be eligible to participate in the initial implementation of the Primary Health Care Renewal Initiative, team areas were required to submit a full proposal to OPHC that included a detailed community/demographic profile of the team area, a health status summary of the residents in the area, a service provider profile, and a summary of the strengths and challenges that were anticipated in implementing the primary health care initiative in the area. The following eight PHC team areas were selected to participate in the two-year Renewal Initiative: Bonavista, Bonne Bay, Connaigre, Grenfell, Labrador East, Placentia, St. John's and Twillingate/New World Island.

The governance structure for each of the eight PHC team areas was linked to existing regional health board structures and a Project Coordinator was appointed by the senior executive in each team area to provide operational management of the team.

The Renewal Initiative had a strong evaluation component which was developed and implemented by Med-Emerg Inc. and evaluation consultants from Harry Cummings and Associates Inc. Extensive consultations and site visits were conducted with stakeholders across the province in developing a comprehensive evaluation plan for each team area. Each evaluation plan included a program logic model, an evaluation matrix, and a set of research instruments that were used to collect data on the key evaluation questions.

The main research instruments used in the evaluation included an administrative process record which was maintained by the Project Coordinator on an ongoing basis, a team effectiveness survey which included a baseline and two follow-up surveys, a client/patient satisfaction survey which included a baseline and follow-up survey, key informant interviews with service providers to assess scope of practice at the end of the Renewal Initiative, and an end of evaluation focus group with health care service providers and community representatives/organizations from each of the eight team areas.

This report presents the findings for the final evaluation of the Newfoundland and Labrador Primary Health Care Renewal Initiative. The evaluation examines the successes and challenges of the Initiative in addressing the features in the Provincial Primary Health Care Framework including establishing effective primary health care teams, maximizing scope of practice, enhancing access to the primary health care team, and promoting and enhancing community input and community capacity building.

### *PHC Team Development and Team Effectiveness*

One of the key features of the Primary Health Care Renewal Initiative was the development of effective Primary Health Care teams. PHC teams were established in eight team areas including Bonavista, Bonne Bay, Connaigre, Grenfell, Labrador East, Placentia, St. John's and Twillingate/New World Island. The Initiative in St. John's was

delayed as the focus of the team changed midway through the Renewal Initiative. Thus, the bulk of the analyses presented in this report are for seven team areas.
A survey of PHC team members in seven team areas was conducted to assess team effectiveness over time. Although low response rates limited the degree of analysis that could be conducted at the individual team area level there was a sufficient number of responses at the composite level to identify trends.

The results from the PHC team survey show an improvement in team effectiveness over time. Statistically significant ($p \leq 0.05$) improvements were observed in relation to service provider awareness and understanding of team purpose/vision/roles, team communication, team support, service delivery, scope of practice, and personal satisfaction. As well, the analyses show that team areas that conduct more team development activities are likely to experience a more positive change in team effectiveness (although not always at the above mentioned conventional level of statistical significance).

***PHC teams experienced statistically significant improvements in relation to awareness and understanding of team purpose and vision, team communication, team support, service delivery, and personal satisfaction.***

The success of the PHC Initiative in improving team effectiveness is notable in light of a number of challenges experienced in the team areas including: the restructuring of the regional health boards which occurred concurrently with the implementation of the PHC Initiative; limited support from physicians in some team areas; staff turnover and lack of leadership in some team areas; large catchment areas and team sizes in some team areas which restricted team development; and uncertainty about the sustainability of the initiative in terms of funding and human resources.

### *PHC Team Development and Maximizing Scope of Practice*

***PHC teams experienced statistically significant improvements in relation to scope of practice. More pronounced improvements in scope of practice were associated with areas that conducted more team development activities.***

Another key feature of the Primary Health Care Renewal Initiative was maximizing providers' scopes of practice (SOP). All of the team areas prepared scope of practice action plans which identified short-, intermediate- and long-term issues and actions for addressing service delivery gaps and overlaps. The PHC team survey revealed that by the second follow-up period there was about a 10% increase in agreement among providers that their scopes of practice were fully utilized and that there was a good match between the providers skills and the clients' needs ($p \leq 0.05$). Further, team areas that conducted more team development activities were likely to

experience a more positive change in scope of practice (although not at the conventional level of statistical significance).

While the results show some progress in addressing short-term issues, most of the team area action plans are still in the early stages of implementation and team areas have needed to respond to a number of challenges including difficulties related to educating staff and management about maximizing scope of practice; limited opportunities to meet to discuss roles and become more familiar with other providers roles; loss of momentum due to conflicting priorities of staff and management; loss/turnover of staff and management; the regional health board restructuring process; and limited ability of health service providers to share relevant information due to lack of electronic records.

As well, many of the long-term SOP issues were identified as being beyond the control/influence of the local PHC team and required the attention/actions of regional and/or provincial organizations. Further monitoring and analysis of the SOP process is merited to better understand the outcomes associated with the process.

### *Enhancing Access to Primary Health Care*

There is some evidence which indicates that the PHC Renewal Initiative enhanced client/patient access to primary health care. Clients/patients who resided in team areas that experienced more improvement in team effectiveness tended to experience lower wait times for appointments (p=0.038), fewer visits to emergency departments (p=0.025), and higher perceived ease of access to primary health care services (p=0.061).

***Clients/patients who resided in team areas that experienced more improvement in team effectiveness tended to experience lower wait times for appointments, fewer visits to emergency departments, and higher perceived ease of access to primary health care services.***

The results also show that clients/patients in team areas that experienced more improvement in team effectiveness also tended to report a greater willingness to visit providers other than a family physician in the area if they provided similar services as the family physician. Although not statistically significant, this association is consistent with the observations that clients/patients in team areas that experienced more improvement in team effectiveness also tended to report fewer visits to family physicians and specialists and increased visits to registered nurses and public health nurses. The movement away from reliance on physicians to other health service providers is supportive of the team approach being promoted through the PHC Initiative.

Another indication of enhanced access to PHC is the establishment of the CDM diabetes collaborative approach in each of the team areas. Clients/patients are now receiving diabetes care that was not typically provided in the past and the collaborative approach has addressed some of the service delivery gaps as patients can see more than one health care provider for consultations. Results from the client/patient survey show that most participants in the diabetes collaborative have reported an improvement in their health as a result of their involvement in the collaborative.

While the above results show progress in enhancing access to health services, wait times for appointments and the lack of health professionals continue to represent the most common types of barriers experienced by clients/patients. As well, gaining the support of physicians in relation to the diabetes collaborative approach remains an ongoing challenge in some team areas.

### *Maximizing Individual and Community Involvement in Improving and Protecting Quality of Life and Well Being*

All of the team areas participated in activities designed to promote individual and community involvement in health and wellness initiatives. Most of the teams reported that they received training for the Circle of Health/Wellness Framework. Given that the Circle of Health training came at the later stages of the PHC Initiative, the intent was for team areas to increase their awareness of the Framework and begin to explore its application in developing health promotion/wellness initiatives. In general, the team areas found the Framework to be useful in helping their group develop and plan their health promotion/wellness initiatives.

### *Promoting and Enhancing Community Input and Community Capacity Building*

***Community Advisory Committees were established in all of the team areas and widely recognized as a key achievement. PHC teams experienced statistically significant improvements in the development of partnerships with community organizations and their responsiveness to community input.***

All of the team areas developed Community Advisory Committees (CAC). The establishment of CACs was widely viewed by health service providers and community members in all team areas as an important achievement as they promoted public participation and strengthened community involvement and ownership of the PHC Renewal Initiative. Health service providers and community members alike reported that the CAC helped to some extent in moving PHC forward in their team area.

All of the team areas participated in activities designed to enhance community input and community capacity building. Most of the team areas reported that community capacity building

training (CCBT) had occurred or was in progress. In general, the team areas have not found the CCBT to be very helpful as the tool was reported to be too cumbersome and difficult to use in the early stages of planning. Some of the team areas also experienced time constraints in completing the tool and in a couple of cases the local Community Advisory Committee focused on completing the Circle of Health Framework rather than the CCBT.

Results from the PHC team survey showed statistically significant ($p \leq 0.001$) improvements in the development of team area partnerships with community residents and organizations (e.g. increased community engagement in the planning and delivery of programs and services, increased service provider responsiveness to client/patient and community input, increased/enhanced partnerships with intersectoral groups to plan and deliver services). The results also revealed that team areas that conducted more team development activities are likely to experience a more positive change in community partnership development (although not at the conventional level of statistical significance).

### *Improved Client/Patient Satisfaction and Health Status*

Results from the client/patient survey indicate that, at a composite level, clients/patients reported a slight but statistically significant ($p=0.025$) increase in satisfaction with the health services they received most recently. All of the team areas with the exception of two reported an increase in satisfaction, and the increase experienced in two team areas was found to be significant at the $p \leq 0.01$ level. The results revealed that team areas that experienced a higher total improved team effectiveness score also experienced a higher degree of client/patient satisfaction (although not at the conventional level of statistical significance).

***Clients/patients reported increased satisfaction with health services over the course of the evaluation. The results revealed that team areas that experienced a higher total improved team effectiveness score also experienced a higher degree of client/patient satisfaction.***

The results from the client/patient survey indicated very minimal change in self-reported general health status between the baseline and follow-up survey. Long-term outcomes such as reduced prevalence of diabetes were beyond the scope of this two-year evaluation

### *Conclusion*

The PHC Renewal Initiative in Newfoundland and Labrador has led to a number of significant short-term outcomes. From the health service provider perspective the Initiative resulted in the establishment of PHC teams in eight team areas and the PHC teams experienced improved team effectiveness and some enhancement in providers'

scopes of practice over the course of the Renewal Initiative. From the client/patient perspective, the Initiative resulted in client reports of lower wait times, fewer visits to the emergency department, improved ease of access, and increased client satisfaction. Although the Initiative encountered several challenges in relation to team building and enhancing scopes of practice, the evaluation revealed important progress in moving PHC forward. The Renewal Initiative warrants continuation with ongoing monitoring and evaluation to assess intermediate- and long-term outcomes.

## 2.0 INTRODUCTION

Primary health care (PHC) is the first level of contact people have with the health and community services system. Primary health care is a health services system philosophy, a strategy for organizing health services, and includes a range of health services. In 2002, the government of Newfoundland and Labrador released the document *"Healthier Together: A Strategic Health Plan for Newfoundland and Labrador"*. The Strategic Health Plan identifies primary health care as the central focus for the delivery of health and community services.

In 2003, the provincial Department of Health and Community Services invited organizations to submit expressions of interest to pursue the development of proposals that would enhance primary health care. Eight primary health care projects or 'team areas' were selected from across the province to participate in the initial implementation of the Primary Health Care Renewal Initiative. The eight team areas include Bonavista, Bonne Bay Region, Connaigre Peninsula, Grenfell Region, Labrador East, Placentia, St. John's, and Twillingate/New World Island.

In September 2003, the Office of Primary Health Care (OPHC) secured evaluation consultants (Med-Emerg International Inc. and Harry Cummings and Associates Inc.) to develop and assist in implementing an evaluation framework to assess the degree of success achieved by the Primary Health Care Renewal Initiative.

This report presents findings for the evaluation of the Newfoundland and Labrador Primary Health Care Renewal Initiative. The report is divided into several chapters. Chapter 3 provides background information on the PHC Renewal Initiative and situates the evaluation framework and the evaluation itself within the context of recent federal and provincial government health initiatives. Chapter 4 provides a summative description of each of the eight Team Areas including the population of the catchment area, location of services and service provider profile for each team area.

Chapter 5 introduces the objectives of the evaluation while Chapter 6 describes the evaluation models and methods used to assess the PHC initiative in each Team Area. This includes a detailed overview of the program logic model (PLM) and evaluation matrix (EM), evaluation design, data collection methods and instruments developed, evaluation timeframe, and ethical considerations related to the evaluation.

Chapter 7 presents the study results associated with the major initiatives including interdisciplinary team development and scope of practice, delivery of accessible services, chronic disease management, and community involvement and satisfaction. Chapter 8 presents the conclusions as guided by the evaluation observations and results. The Appendices are presented in a separate report.

# 3.0 PRIMARY HEALTH CARE RENEWAL INITIATIVE IN NEWFOUNDLAND AND LABRADOR

## 3.1 Context of the Primary Health Care Renewal Initiative

### 3.1.1 Federal Government

In September 2000, First Ministers agreed that "improvements to primary health care are crucial to the renewal of health services. Governments are committed to ensuring that Canadians receive the most appropriate care, by the most appropriate providers, in the most appropriate settings." (http://www.hc-sc.gc.ca/phctf-fassp/english/). In response to this commitment, the Government of Canada announced the Primary Health Care Transition Fund (PHCTF), which is an investment of $800 million ending in March 2006. Newfoundland and Labrador received $9.7 million from the PHC Transition Fund to implement the provincial Renewal Initiative and evaluation (Health Canada, 2004).

The PHCTF is intended to support the transitional costs of implementing sustainable, large-scale, primary health care renewal initiatives. As a result of such initiatives, it is expected that fundamental and sustainable change to the organization, funding and delivery of primary health care services will result in improved access, accountability and integration of services.

The common objectives of the PHCTF, which were agreed to by federal, provincial and territorial governments, are to:

- increase the proportion of the population having access to primary health care organizations accountable for the planned provision of a defined set of comprehensive services to a defined population;
- increase emphasis on health promotion, disease and injury prevention, and management of chronic diseases;
- expand 24/7 access to essential services;
- establish interdisciplinary primary health care teams of providers, so that the most appropriate care is provided by the most appropriate provider; and
- facilitate coordination and integration with other health services (e.g. in institutions and in communities).

### 3.1.2 Newfoundland and Labrador

In the fall of 2001, the Minister of Health and Community Services for Newfoundland and Labrador began a consultation process known as Health Forums 2001. These sessions brought together over 500 health stakeholders, with an additional 300 people providing written and oral submissions. The feedback from Health Forums 2001, together with the work of task forces and committees, set the framework for the

Provincial Strategic Health Plan (*Healthier Together: A Strategic Health Plan for Newfoundland and Labrador, 2002)*.

The provincial framework identified key challenges facing the health and community services system including:

- Health status of the population - Newfoundland and Labrador has among the highest rates of circulatory disease, cancer, and diabetes. Additionally, Newfoundlanders and Labradorians tend to rank high on the risk factors of smoking, obesity, alcohol consumption, and inactivity which are strongly linked to many chronic diseases;
- Demographic change - the population size and structure in Newfoundland and Labrador is undergoing significant change. The population is declining, showing the largest percentage decline of any province in Canada. Additionally, urban areas are becoming more populated while many rural regions are seeing population decreases, the average age of the population is increasing, and more and more young people are leaving;
- Quality and accessibility of health services - quality and access issues in this province exist in the areas of primary health care, location of services, organizational boundaries, long-term care and supportive services, and mental health services; and
- Sustainability of health services - the health and community services system is facing increased costs during a time of fiscal restraint. Higher costs will continue to occur with new technologies, pharmaceuticals, and the aging of the population.

Economically, the province is showing signs of recovery from the losses incurred during the first half of the 1990s with the collapse of the fishing industry. Average employment dropped from 207,400 in 1990 to a low of 187,000 in 1996 and since 1997, annual average employment has grown by 2.4% per year and in 2002 reached 213,900, about 6,500 above the peak recorded in 1990. Another positive aspect of the labour market is that almost all (94%) of the employment growth since 1996 has been in full-time employment. Full-time employment increased 19% since 1996 while part-time employment has grown by 6%. Full-time employment now represents 85% of total employment compared to 83% in 1996 (Statistics Canada, Labour Force Survey 2003, 2004, 2005).

In response to the declining fisheries, the province has turned to developing its other natural resources. Today Newfoundland and Labrador relies the most of any province on the minerals sector, which represents approximately one-third of the economy. This is likely to intensify in the coming years with further development of the energy sector and the Voisey's Bay nickel deposit.

The Provincial Strategic Health Plan presents a new direction for the delivery of health and community services in Newfoundland and Labrador by positioning primary health care practice as the central focus for the delivery of health and community services.

In September 2003, a Framework document was developed for the province to support the implementation of primary health care renewal. *Moving Forward Together: Mobilizing Primary Health Care* reflects the principles and directions presented in the Provincial Strategic Health Plan, and the Federal, Provincial and Territorial vision for primary health care. The Framework supports the population health approach to care, which is the improvement of the health of the entire population and the decrease of health inequities (e.g. employment, poverty, age, education, culture) among population groups. Its design embodies the lessons learned and recommendations from the Primary Care and Family Medicine in Canada: A Prescription for Renewal document, the Provincial Primary Health Enhancement Project, the Nurse Practitioner Implementation Evaluation, the Primary Care Advisory Committee Report, the Provincial Primary Health Care Advisory Council, and a provincial consultation process.

### 3.3 Goals and Objectives for Primary Health Care in Newfoundland and Labrador

The goals and objectives for primary health care, as envisaged in the Framework document, complement those outlined in the province's Strategic Health Plan. They will guide the renewal of primary health care in Newfoundland and Labrador.

*Goal 1: To promote self reliant and healthy citizens and communities.*

Objectives:

- To increase supports for healthy behavior changes.
- To enhance programs/services in order to improve health outcomes and reduce negative impact of selected diseases.
- To enhance programs and services that impact on the healthy growth and development of children and youth.
- To enhance participation of citizens with government and community sectors to improve the health of their community.
- To enhance citizen confidence in and satisfaction with the primary health care system.
- To support and advocate for healthy public policy within all sectors and levels of government.
- To support and promote implementation of provincial public health policies and direction.

*Goal 2: To support the provision of comprehensive, integrated, and evidence-based primary health care services.*

Objectives:

- To provide needs-based, effective and efficient services across the continuum of primary health care that reflect best practices.
- To establish, within available resources, primary health care teams and networks.
- To provide effective and efficient client/patient services, and follow-up, within the primary health care system.

*Goal 3: To enhance accessibility and sustainability of primary health care services.*

Objectives:

- To provide reasonable and timely access to a core set of appropriate primary health care services.
- To provide provincial standards, consistent with the Strategic Health Plan, to support primary health care services that are needs-based, cost-effective, and sustainable.

*Goal 4: To enhance accountability and satisfaction of primary health care professionals in relation to primary health care.*

Objectives:

- To apply standards of accountability in professional practice.
- To provide clear accountability processes for teams, boards, communities, and government.
- To foster a rewarding work environment.

### 3.3 Features of Primary Health Care Renewal

The Primary Health Care Framework is being implemented using an incremental approach that will build on the existing strengths and capacities of the system, and will support voluntary participation of primary health care stakeholders. The range of services that is provided at the primary health care level of the health care system continuum is to be determined by a needs assessment and available resources.

The Framework identifies nine features, which will provide the foundation for primary health care renewal in Newfoundland and Labrador:

- Establishing primary health care teams
- Establishing physician networks
- Establishing primary health care networks
- Maximizing scope of practice

- Enhancing emergency transportation and related services
- Enhancing access to the primary health care team
- Promoting and enhancing community input and community capacity building
- Maximizing involvement of individuals and communities in improving and protecting quality of life and well being through health promotion, illness prevention and wellness promotion
- Enhancing information and communications technology

Although each of the nine features of the Framework is seen as essential, the Framework allows for flexible and unique implementation solutions in different regions of the province.

One of the key features of the primary health care initiative is the establishment of primary health care teams. These teams will provide interdisciplinary services, with the appropriate infrastructure for population health approaches within the team structure. Members of the primary health care team can include general practitioners/family practitioners, nurses (including nurse practitioners, and public and community health nurses), and other practitioners (e.g. paramedics, dentists, pharmacists, physiotherapists, social workers, etc.). As noted in the Primary Health Care Framework, this team of professionals will work together to promote health and wellness, provide comprehensive primary health care services and, within available resources, respond to the health needs of the population.

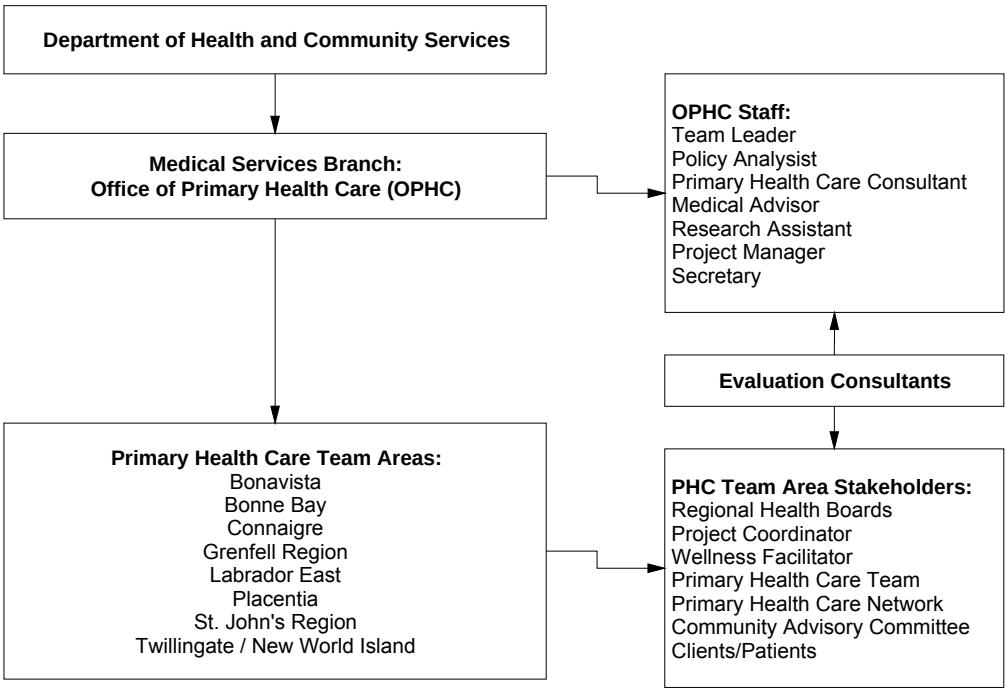
### 3.4 Organizational Structure and Accountability

The eight PHC team areas were supported at the provincial level by the Office of Primary Health Care (OPHC) and the Primary Health Care Advisory Council until March/April 2006. OPHC provided provincial policy direction, and overall implementation and evaluation direction for the Framework. The Primary Health Care Advisory Council provided advice to OPHC and the Minister of Health and Community Services to ensure implementation and evaluation was consistent with the Healthier Together, the Strategic Social Plan, and the Federal/Provincial/Territorial vision for primary health care.

The governance structure for each of the eight PHC team areas is linked to existing regional health board structures. A regional senior executive person within the Board provided support for primary health care practices in the region. This senior executive for primary health care had resources to provide a supportive and facilitative role to the team. It was through this office that the primary health team(s) could expect executive support for service planning, implementation, monitoring and evaluation. The senior executive provided this support based on her/his regional perspective/responsibilities, and through a Project Coordinator who was appointed by the senior executive, in consultation with the team members.

The Project Coordinator was responsible and accountable for operational management of the team. The Project Coordinator was a member of the team and reported, on behalf of the team, to the senior executive responsible for primary health care. In cooperation with the senior executive, the Project Coordinator was responsible and accountable for coordinating and facilitating all aspects of team-based services planning, implementation, monitoring and evaluation. Administrative support for human resources, finance, information technology and communication was provided through existing regional board structures. Figure 1 presents an organizational overview of the different agencies and stakeholders in the PHC Renewal Initiative.

**Figure 1: Organizational Structure of the Primary Health Care Renewal Initiative**



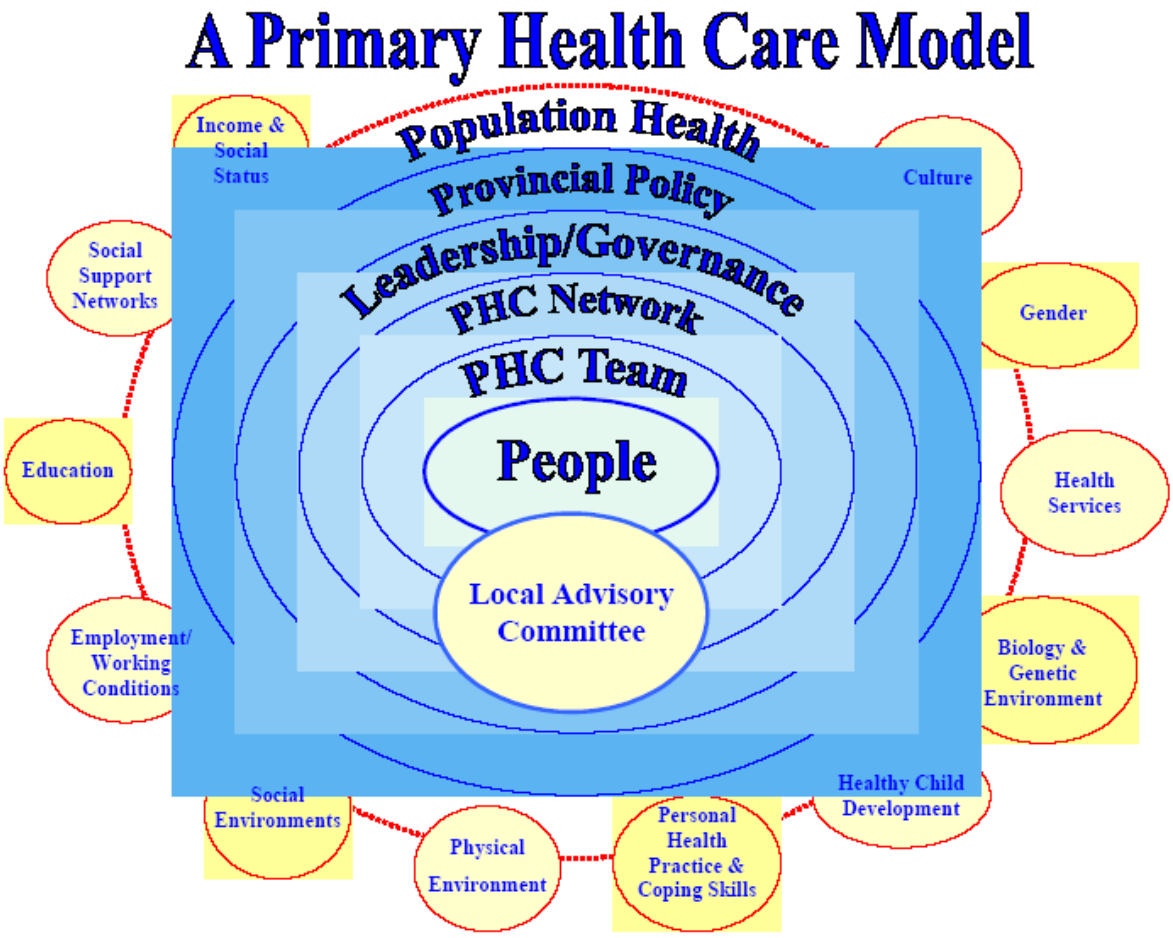

The responsibility and accountability for the development, implementation, monitoring, and evaluation of primary health care teams and networks was shared by OPHC, regional health boards, primary health care teams and networks, and health care service providers. As outlined in the provincial Framework (p.6) multiple accountability relationships exist between:

- the Department of Health and Community Services and regional boards;
- regional boards and primary health care teams and networks;
- the Department of Health and Community Services, physician groups, and regional boards;
- primary health care teams and the registered population;

- primary health care teams and local advisory committees; and
- the Department of Health and Community Services and the public.

Figure 2 presents a model that integrates the above relationships and accountabilities.

**Figure 2: Primary Health Care Model**




Source: Moving Forward Together: Mobilizing Primary Health Care. September 2003.

## 4.0 DESCRIPTION OF THE PRIMARY HEALTH CARE TEAM AREAS

Team areas selected to participate in the initial implementation of the Primary Health Care Renewal Initiatives were required to submit a full proposal to the Office of Primary Health Care. The proposal included a detailed community/demographic profile of the team area, a health status summary of the residents in the area, a service provider profile, and a summary of the strengths and challenges that are anticipated in implementing the primary health care initiatives in the area. The proposal also presented an implementation plan and budget for the team areas PHC initiatives over two years (2005/2006 fiscal years). An evaluation plan molded for the individual team area was submitted and approved by the Office of Primary Health Care for the implementation of the evaluation process. The following descriptions of the team areas are adapted from the team areas' proposals (2004).

### 4.1 Bonavista

The Bonavista Primary Health Care Team covers an area that spans from Cape Bonavista to Southern Bay (the junction of Route 235 and 230). It includes towns and incorporated/unincorporated areas along Trinity and Bonavista Bays. The catchment area corresponds to Ward 1 of Economic Zone 15. The catchment population is approximately 9,000 (Statistics Canada, 2001 Population Census).

The Central Strategic Social Plan's Community Accounts lists the following 36 communities for this area:

- Bonavista Area: Bonavista, Spillar's Cove.
- Catalina Area: Elliston, Little Catalina, Catalina, Port Union, Melrose.
- Trinity-Trinity Bay Area: Trinity, Port Rexton, Champney's East, Champney's West, English Harbour, Trinity East, Dunfield, New Bonaventure, Old Bonaventure, Trouty.
- Black Head Bay: Birchy Cove, Duntara, Hodderville, Keels, King's Cove, Knight's Cove, Lower Amherst Cove, Middle Amherst Cove, Newman's Cove, Stock Cove, Upper Amherst Cove.
- Southern Bay Area: Open Hall, Plate Cove East, Plate Cove West, Princeton, Red Cliff, Tickle Cove, Southern Bay, Summerville.[1]

The greatest distance between communities in the catchment area is 64 km – Bonavista to New Bonaventure. All communities in the area are connected by road. Figure 3 provides a map of the Bonavista PHC Team catchment area.

[1] The Community Accounts includes the 285 residents living in the communities of Sweet Bay and Charleston. However, these two communities are located outside of the PHC Project catchment area.

**Figure 3: Bonavista PHC Team Area**

*Location of Services*

Health care services are provided by the Peninsulas Health Care Corporation (PHCC) and Eastern Regional Health and Community Services (ERHCS).[2] PHCC offers primary health care services at the Bonavista Peninsula Health Centre (BPHC) – located in Bonavista, Golden Heights Manor Nursing Home (GHM) and Trinity (Clinic) Site.

ERHCS has offices located in GHM, BPHC, the Hayley Building and the Trinity (Clinic) Site. Services are provided from these sites as well as in schools and private homes. Traveling clinics operating out of Clarenville are also offered in the area. Secondary services are provided by PHCC at Dr. G.B. Cross Memorial Hospital (GBC) located in Clarenville (a maximum distance of 110 km from Bonavista).

As noted in the Bonavista PHC Project Proposal, some people in the area choose to go to St. John's for primary and secondary care because of historical attachment (prior to the opening of the hospital in Clarenville) or personal choice (e.g. access to or staying with family members in St. John's while receiving care). During times when a family doctor and/or a female family doctor was not available in the area some people migrated to Clarenville or St. John's for primary care and continue to have a family doctor there.

*Service Provider Profile*

Six salaried physicians, who work out of BPHC, two fee-for-service physicians in Catalina, nurse practitioners in Bonavista and Trinity, serve the area and a variety of professionals employed by the two regional Boards provide a wide range of services in a variety of settings.

## 4.3 Bonne Bay Region

The Bonne Bay Primary Health Care Team covers a geographic area that encompasses the Bonne Bay/Daniel's Harbour area. Communities in the Bonne Bay area include Bonne Bay, Big Pond, Glenburnie, Birchy Head, Shoal Brook, Norris Point, Sally's Cove, Rocky Harbour, Trout River, and Woody Point and Wiltondale. Communities in the Daniel's Harbour area include Cow Head, Bellburns, Daniel's Harbour, Parson's Pond, Portland Creek, St. Paul's, and Three Mile Rock. This Team Area also covers Gros Morne National Park. Figure 4 provides a map of the Bonne Bay Team catchment area. The Bonne Bay/Daniel's Harbour area has a total population of approximately 4,990 (Statistics Canada, 2001 Population Census).

[2] As of 2005 the Eastern Health Authority incorporated the territory and services of the Health Care Corp. of St. John's Health and Community Services, St. John's Nursing Home Board, Health and Community Services Eastern, Avalon Health Care Institutions, and the Peninsulas Health Care Corp.

**Figure 4: Bonne Bay PHC Team Area**

*Location of Services*

The Bonne Bay Health Centre is located in Norris Point and provides a focal point for many of the health care services in the area. The facility was opened in 2001. Both Western Regional Health and Community Services (WRHCS) and Western Health Care Corporation (WHCC) provide services through the centre.[3] WHCC also provides medical services through clinics located in Trout River, Woody Point, Cow Head, Parsons Pond, and Daniel's Harbour. Staff of WRHCS are also located in Woody Point and Cow Head.

Some services in the area are provided through traveling clinics. These services include speech language pathology, occupational therapy, developmental psychology, audiology, palliative care consultation, and mental health services.

The Bonne Bay Health Center is located 125 km from Corner Brook, which is the major site for regional health and community services for the west coast.

*Service Provider Profile*

Residents in the Bonne Bay region are served by health professionals from HCSW and WHCC as well as by private primary health care providers.

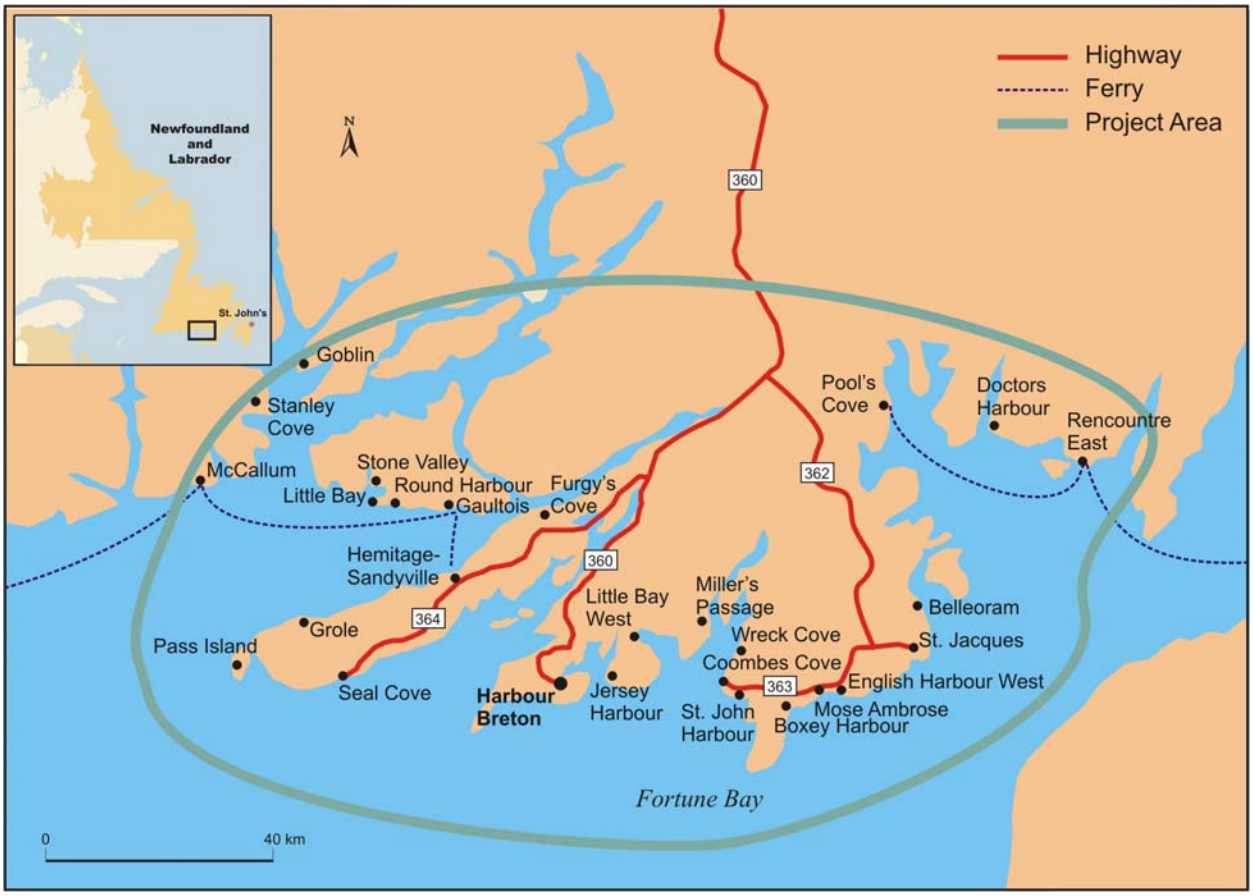
### 4.3 Connaigre Peninsula

The Connaigre Peninsula Primary Health Care Team covers a geographic area that encompasses approximately 2,000 square kilometers.[4] The region is adjacent to Fortune Bay, Hermitage Bay and Belle Bay on the south coast of Newfoundland.

Connaigre Peninsula includes a total of 13 communities, 10 of which are incorporated. The total population for the region is approximately 5,300 (Statistics Canada, 2001 Population Census). Communities in Connaigre Peninsula include Rencontre East, McCallum, Seal Cove, Hermitage, Gaultois, Harbour Breton, Belleoram, St. Jacques, Mose Ambrose, English Harbour West, Coombs Cove, Boxey, and Wreck Cove. The communities range in population from 2,079 in Harbour Breton to 202 in Rencontre East. Figure 5 provides a map of the Connaigre Peninsula Team catchment area.

[3] As of 2005 the Western Health Authority incorporated the territory and services of Health and Community Services Western and Western Health Care Corp.
[4] Connaigre Peninsula is part of Economic Zone 13 which includes Bay D'Espoir and Conne River areas. It is anticipated that these communities will be included in the Connaigre Peninsula PHC service area at a future date.

**Figure 5: Connaigre Peninsula PHC Team Area**




Paved two lane highways connect all of the communities with the exception of two. These communities are within an hour driving distance from the Community Health Centre in Harbour Breton. Rencontre East and McCallum are the two communities where access is restricted to boat or air travel (both with a maximum travel time of approximately 1½ hours from Harbour Breton). Travel times can be impacted by inclement weather conditions.

Cell phone access is not available in some areas of the region, necessitating satellite telephones being used by ambulances or emergency vehicles.

*Location of Services*

The Connaigre Peninsula Community Health Centre is located in Harbour Breton and provides a focal point for many of the health care services in the area. The facility was opened in 2000. Both Central West Health Board (CWHB) and Western Health Care Corporation (WHCC) provide services through the centre.[5] The Connaigre Peninsula Community Health Centre provides secondary services such as acute care, long term care, palliative care, respite care, 24 hour emergency service, and diagnostic services. A dental clinic is also housed in the centre.

Satellite clinics provide ambulatory care at Mose Ambrose and Hermitage. Weekly visits from the ambulatory clinics are provided to Rencontre East, McCallum and Gaultois. These services are supported by a 1-800 telephone service to provide all areas outside of Harbour Breton with emergency access after regular clinic hours. The Connaigre Peninsula Community Health Centre is located 2½ hours from the Central Newfoundland Regional Health Centre in Grand Falls-Windsor, which is the major site for regional health and community services for central Newfoundland. During the winter the trip to the Regional Centre in Grand Falls-Windsor can take three hours.

The Town of Harbour Breton has engaged a consultant to develop a proposal for the implementation of the Broadband network on the Connaigre Peninsula. This will lead the way to establishing electronic communication linkages with all of the health care sites in the region. Broadband capability will enable the use of video-conferencing, telehealth and faster Internet service across the region.

*Service Provider Profile*

Residents on the Connaigre Peninsula are served by health professionals from Health and Community Services Central (HCSC) and CWHC as well as by private primary health care providers.

## 4.4 Grenfell Region

The Grenfell Region PHC Team Area covers a geographic area that is divided by the Strait of Belle Isle. On the western side of the Strait is the southern Labrador coast, which spans from L'Anse-au-Clair to Norman Bay. On the eastern side of the straits the team covers an area from New Ferolle/Reef's Harbour on the western side of the Northern Peninsula, up the coast and around the eastern side as far south as Englee in the White Bay area. Figure 6 provides a map of the Grenfell Region Team Area.

[5] As of 2005 the Central Health Authority incorporated the territory and services of Health and Community Services Central, Central West Health Corp., and Central East Health Care Institutions Board.

**Figure 6: Grenfell Region PHC Team Area**

The region has a total of 70 communities, 23 of which are incorporated. The total population for the area served by the Grenfell Regional Health Services Board (GRHSB)[6] is approximately 15,750 (Statistics Canada, 2001 Population Census).

Almost all of the communities in the region are accessible by road since the Trans Canada Highway was opened between Red Bay and Cartwright in 2002. However, the conditions of the roads in some parts of the region make it inadvisable to use road ambulance services (i.e. the risk to clients is too great). Travel within the region also becomes difficult during winter months as road conditions become hazardous and commercial air transportation schedules become irregular. Poor weather conditions can strand health care staff as well as clients/patients. The only communities that remain inaccessible by road are Pinsent's Arm, Norman Bay and William's Harbour.

Telephone and cell phone access is not available in some areas of the region, necessitating satellite telephones being placed on GRHS ambulances or emergency vehicles on the Labrador coast.

*Location of Services*

As an integrated health and community services board, GRHSB delivers both primary and secondary health services to the residents of the region. The regional hospital (Charles S. Curtis Memorial Hospital) is located in St. Anthony. Health centres are located in Forteau (Labrador South Health Centre), Flower's Cove (Strait of Belle Isle Health Centre), and Roddickton (White Bay Central Health Centre). Community clinics are located in Charlottetown, Harbour Deep, Mary's Harbour, Port Hope Simpson, and St. Lewis. A long-term care facility (John M. Gray Centre for Seniors) is located in St. Anthony. Forteau also features a long-term care facility.

The Strait of Belle Isle Health Centre in Flower's Cove is a 75 minute drive from the regional hospital in St. Anthony while the White Bay Central Health Centre is a 90 minute drive from the hospital. For the residents along the southern Labrador coast a trip to the regional hospital involves driving to Blanc Sablon in Quebec to cross on the St. Barbe ferry and then driving 90 minutes to reach St. Anthony. The ferry service is seasonal, operating from May to late December or early January. An alternative is to fly by regular commercial carrier to St. Anthony Airport and then drive to the hospital (30-45 minute drive).

[6] As of 2005 the Labrador-Grenfell Health Authority incorporated the territory and services of Health Labrador Corp. and Grenfell Regional Health Services Board.

*Service Provider Profile*

Residents in Grenfell Region area are served by health professionals from the Grenfell Regional Health Services Board. Residents can also access health care services though private primary health care providers. For example, there is one fee-for-service family physician practicing in the region. This physician has a close relationship with GRHSB and currently conducts traveling clinics in Charlettetown through a contractual relationship.

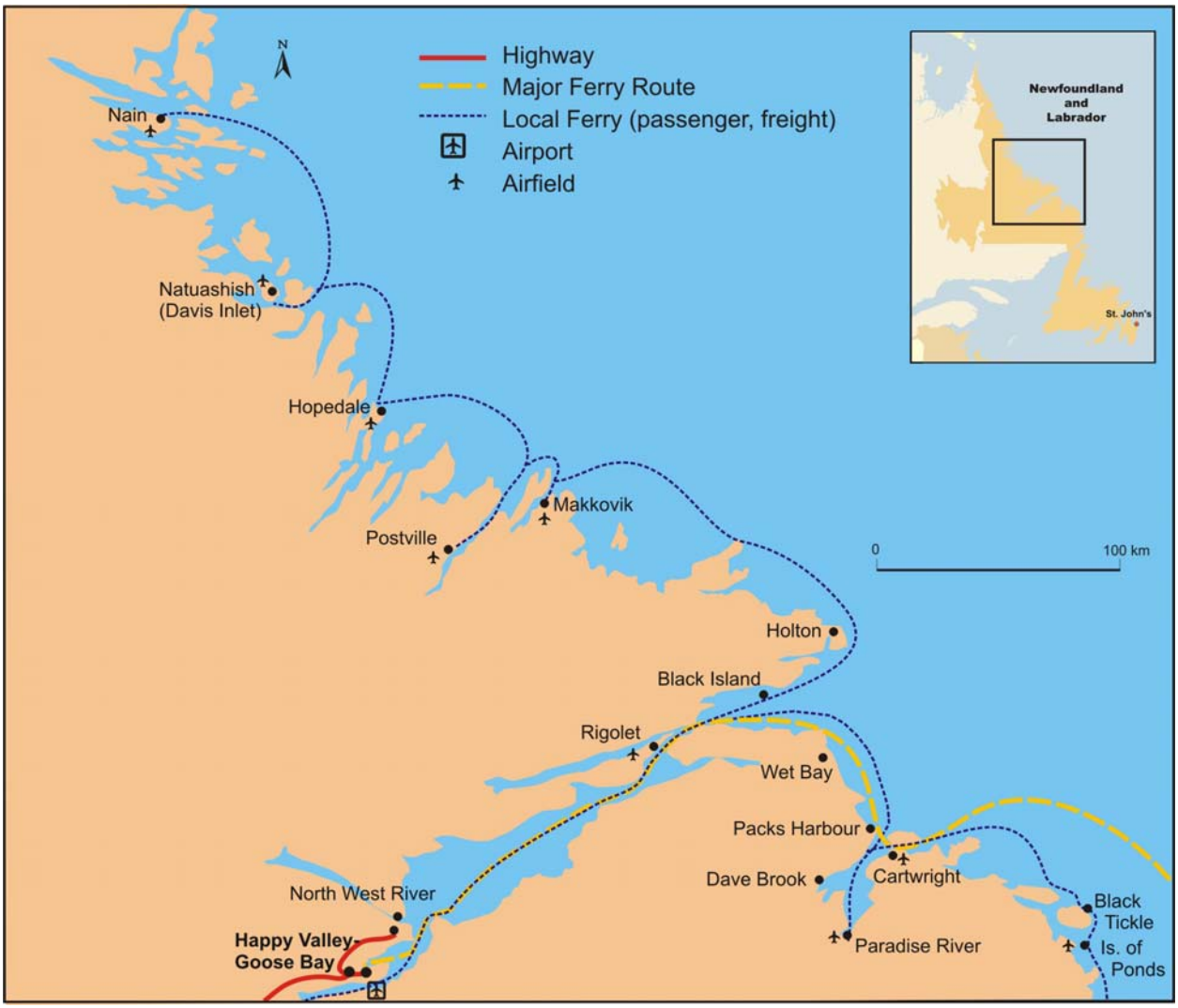
For the purpose of developing PHC Teams, this region has been divided into five sub-regions that take into account existing geographic obstacles (Strait of Belle Isle), the current clustering of the population in the region, and the known client traffic patterns. This division also ensures that 95% of the population has road access of 60 minutes or less to a PHC Team or facility. One PHC Team was established in each of the following areas: Forteau, Flower's Cove, Roddickton, St. Anthony, and Labrador South Coast. Each team included general practitioners and nurses (including nurse practitioners, public health nurses and community mental health nurses) as well as other practitioners (e.g. dentists, paramedics, social workers, pharmacists and others).

GRHSB has seven existing Community Liaison Committees in the region. The liaison committees are designed to assist GRHS respond more effectively to health issues in the community. The liaison committees also serve as a mechanism to reflect/interpret Board policy to communities. As GRHS moves toward full implementation of the PHC Framework the role and configuration of these committees will need to be adapted. In the short term, GRHSB has invited the chairs of the various Liaison Committees to participate in the new Community Advisory Committees established for the PHC initiative.

## 4.5 Labrador East

The Labrador East PHC Team covers a large geographic area that includes the North Coast region, the Central East (or Upper Lake Melville Area) region, and the Southeast Coast region. The North Coast region includes the communities of Nain, Natuashish, Hopedale, Makkovik, Postville, and Rigolet. The Central East region includes the communities of Happy Valley-Goose Bay, Northwest River, and Sheshatshui. The Southeast Coast region includes the communities of Cartwright, Black Tickle, and Paradise River. Most communities in the area are small and isolated and are accessed primarily by air. Figure 7 provides a map of the Labrador East catchment area.

**Figure 7: Labrador East PHC Team Area**




The total population of the Labrador East area is approximately 13,650 (Statistics Canada, 2001 Population Census). There are four distinct cultures in Labrador East: Inuit, Innu, Metis, and mixed culture. Populations in the communities range from 200 to 8,000 people with Happy Valley-Goose Bay being the largest community in the region. Approximately 42% of the population[7] is aboriginal compared to 3% for the total population of Newfoundland and Labrador.

[7] This figure refers to the population within the entire catchment area of Health Labrador Corporation (HLC). The aboriginal organizations report their membership numbers as follows: Labrador Inuit Association: 5,300 (www.nunatsiavut.com/en/overview.php); Innu Nation: 1,600 (www.innu.ca/the_innu.html); and Labrador Metis Nation: 5,000 of whom 3,200 reside in HLC communities (www.labmetis.org/au.htm).

The population and primary ethnicity of each community in the Labrador East area is presented in the following table:

**Table 1. Population and Primary Ethnicity of Communities in the Labrador East Area**

| Community | Distance from Happy Valley – Goose Bay | Population | Primary Ethnicity |
|---|---|---|---|
| Black Tickle | 156 (air miles) | 230 | Metis |
| Cartwright | 124 (air miles) | 630 | Metis |
| Natuashish | 185 (air miles) | 580 | Aboriginal (Mushuau Innu) |
| Happy Valley-Goose Bay | N/A | 7,970 | Mixed |
| Hopedale | 140 (air miles) | 560 | Aboriginal (Inuit) |
| Makkovik | 200 (air miles) | 380 | Aboriginal (Inuit) |
| Nain | 230 (air miles) | 1,160 | Aboriginal (Inuit) |
| Northwest River | 42 (road miles) | 528 | Aboriginal (Mixed) |
| Postville | 110 (air miles) | 215 | Aboriginal/Settler |
| Rigolet | 102 (air miles) | 317 | Aboriginal (Inuit) |
| Sheshatshui | 41 (road miles) | 1,082 | Sheshatshui (SSS Innu) |

Source: Labrador East PHC Project Proposal. Undated draft.

*Location of Services*

Health Labrador Corporation (HLC)[8] holds the mandate for the governance of provincial health services in the Labrador East area. HLC is joined by the Labrador Inuit Health Commission, two Innu Band Councils, the Labrador Metis Association, Health Canada, and private practice clinics in meeting the health care needs of the residents of Labrador East.

Health Labrador Corporation is an integrated institutional and community services health board established in 1994 with regional offices in Goose Bay. HLC operates a hospital in Happy Valley-Goose Bay (Labrador Health Centre). It also operates the Harry L. Paddon Memorial Home long term care facility in Happy Valley-Goose Bay.

HLC operates community clinics (staffed by Regional Nurses working in an expanded role) in Nain, Hopedale, Natuashish, Makkovik, Postville, Rigolet, Sheshatshui, Cartwright, and Black Tickle. Stand-alone community service offices are located in Nain, Natuashish, Makkovik, Happy Valley-Goose Bay, Sheshatshui, Hopedale, and Cartwright.

HLC has placed an emphasis on following strategic issues:

1. Establishing financial health;
2. The need to define parameters of programs and services;

[8] As of 2005 the Labrador-Grenfell Health Authority incorporated the territory and services of Health Labrador Corp. and Grenfell Regional Health Services Board.

3. The need to identify gaps, overlaps and redundancies that influence the maximum utilization of human resources talents and skills;
4. Primary health care reform;
5. Communication; and
6. Evidence based decision-making processes.

In the aboriginal communities, HLC is joined by Health Canada and three federally funded aboriginal health commissions in delivering culturally appropriate programs and services to their respective members. Limited secondary health care services are provided in Happy Valley-Goose Bay. Tertiary care services are located in St. John's, 460 air miles from Happy Valley-Goose Bay, with some follow-up in Labrador provided by visiting specialists.

*Service Provider Profile*

Residents in the Labrador East region are served by health professionals from HLC as well as by private primary health care providers. Service partners in the region include Innu Band Councils, Labrador Inuit Health Commission, Labrador Metis Nation, Health Canada, Freakes Ambulance Service, Pine Lodge personal care home, 5Wing Goose Bay, Dental clinics, Labrador Physiotherapy clinic, Scrivens Optometry clinic, Pharmacies, Labrador School Board, Libra House Shelter for Battered Women, Fonemed (health call centre located in St. John's Newfoundland), and others.

The region faces a number of challenges related to health care provision including travel and cultural challenges associated with providing care to Inuit, Innu, Metis settler, and Quebec French. There are also contrasts with regard to demographics. As noted in the Proposal "these circumstances have resulted in a climate in which the regional health care organization must balance the high needs of some communities with the high expectations of the others." The Proposal also noted: "while larger urban areas are experiencing surpluses of health care providers, northern rural areas continue to face shortages. Quite often, remote areas such as Labrador are the last to recruit staff and the first to experience staff departures."

## 4.6 Placentia

The Placentia PHC Team covers an area that spans from Ship Harbour to Harricott and encompasses all the communities on Route 102 and 100. The catchment area corresponds to Economic Zone 18, the Avalon Gateway Regional Economic Development Inc (Figure 8).

**Figure 8: The Avalon Peninsula**

The Strategic Social Plan's Community Accounts lists 18 communities in the proposed catchment area. Table 2 presents the names of the various communities within the catchment area and their distance from Placentia.

**Table 2: Communities in the Catchment Area of the Placentia Area PHC Project and Distance from Placentia**

| Community | Distance from Placentia (km) |
|---|---|
| Ship Harbour | 27 |
| Fox Harbour | 18 |
| Dunville | 7 |
| Freshwater | 4 |
| Jerseyside | 2 |
| Point Verde | 5 |
| Placentia | 0 |
| Little Barasway | 12 |
| Great Barasway | 13 |
| Ship Cove | 26 |
| Patrick's Cove | 32 |
| Angel's Cove | 32 |
| Cuslett | 41 |
| St. Bride's | 46 |
| Branch | 64 |
| Point Lance | 71 |
| North Harbour | 124 |
| Harricott | 45 |
| Colinet | 38 |

Source: Government of Newfoundland and Labrador. *Community Accounts of the Strategic Social Plan.* Available at: www.communityaccounts.ca.

The 1996 and 2001 Census Data for the communities in the catchment area are summarized in Table 3. The population for Placentia includes Point Verde, Placentia, Little Barasway, Great Barasway, Ship Cove, Patrick's Cove, Angel's Cove, and Cuslett. The population for Branch includes Point Lance. The total catchment population includes approximately 8,100 people in the Placentia-Cape Shore area.

**Table 3: Population of Communities within the Catchment Area for the Placentia Area PHC Team, 1996 and 2001**

| Geographic Area | 1996 Census | 2001 Census | % Change |
|---|---|---|---|
| Ship Harbor | 190 | 180 | -5.3% |
| Fox Harbour | 395 | 345 | -12.7% |
| Dunville | 1,600 | 1,475 | -7.8% |
| Freshwater | 945 | 750 | -20.6% |
| Jerseyside | 590 | 520 | -11.9% |
| Placentia | 2,455 | 2,115 | -13.8% |
| St. Bride's | 540 | 470 | -13.0% |
| Branch | 490 | 460 | -6.1% |
| North Harbour | 315 | 290 | -7.9% |
| Colinet | 210 | 170 | -19.0% |
| Zone 18 | 9,415 | 8,135 | -13.6% |
| Newfoundland and Labrador | 551,795 | 512,930 | -7.0% |

Source: Government of Newfoundland and Labrador. *Community Accounts of the Strategic Social Plan.* Available at: www.communityaccounts.ca.

*Location of Services*

Health professionals from Eastern Regional Health and Community Services (ERHCS) and Avalon Health Care Institutions Board (AHCIB), and private individuals and organizations provide primary health care services to the PHC Project area.[9] The two boards cover slightly different geographical areas. Although the boards are separate, restructuring will occur in the near future.

Links between the AHCIB and the EHCSB are formal and informal and include Management Liaison meetings, single entry process for accessing home supports/long term care, and discharge planning. Many components of Primary Health Care are already in place and the Primary Health Care Renewal Framework will guide the Boards in the implementation of the local PHC plan.

EHCSB has offices located in Placentia Health Centre and in St. Bride's. Services are provided from these sites as well as in schools, private homes, and other community centres. Nurses provide regularly scheduled services at the Placentia office and at the St. Bride's office five days per week. Addictions services are available at Whitbourne. There is 0.5 FTE social worker position available for mental health counselling in the Placentia area.

[9] As of 2005 the Eastern Health Authority incorporated the territory and services of the Health Care Corp. of St. John's Health and Community Services, St. John's Nursing Home Board, Health and Community Services Eastern, Avalon Health Care Institutions, and the Peninsulas Health Care Corp.

A broad range of programs and services are provided through EHCSB including:

- Health promotion and protection,
- Community Health Nursing and Mental Health Services,
- Addictions,
- Community Support Program,
- Child Care and Intervention Services, and
- Child, Youth, and Family Services and Community Corrections.

Personal Care Homes in the Placentia area include the Gateway Residence in Dunville, which features 22 beds and is a licensed Level I and II facility. The Bay View Manor in St. Brides is a licensed Level I and II personal care home with 10 beds. Alternate Care Homes are approved and monitored by the EHCSB to provide care and supervision to individuals who have a developmental disability and are no longer able to be cared for by family or relatives. There are eight alternate care homes in this area with 10 individuals residing in these homes.

The Avalon Health Care Institutions Board provides primary health care services from Placentia Health Centre. Visiting providers from Carbonear General Hospital provide services upon referral, including Respiratory Therapy, Infection Control, Speech Language Pathology, and Pharmacy.

The range of services at Placentia Health Centre include Ambulatory Care, Emergency Care, Acute Inpatient Care, Palliative Care, Long Term Care and Supportive Care, Rehabilitative Care, and Health Promotion and Disease Prevention.

Secondary services are divided between Carbonear General Hospital and hospitals under the Health Care Corporation of St. John's. Carbonear General Hospital is the regional referral centre for AHCIB and is located 110 km from Placentia. There is no public transportation system to Carbonear, other than ambulance services. Specialists and diagnostics not available at Carbonear General Hospital are accessed through the Health Care Corporation of St. John's. Service trends indicate that many patients choose to access primary and secondary care in St. John's and this is attributed to historical attachment, particularly prior to regionalization in 1994, or to personal reasons such as transportation and accommodations. Distance for travel to St. John's is comparable at 125 km from Placentia. Patients requiring tertiary care are obligated to go to St. John's.

*Service Provider Profile*

Placentia area is served by six physicians (two fee-for-service and four salaried). Four physicians work out of Placentia Health Centre and two fee-for-service physicians work out of private clinics in the community of Placentia. Primary health care services are also provided in many settings by a variety of professionals employed by both boards.

## 4.7 St. John's

St. John's is an urban city with a population of 99,812 inhabitants (Statistics Canada, 2001 population census). In the original proposal, the downtown east end of St. John's was identified (based on initial PHC needs/capacity assessment) as the neighbourhood that is most in need of increased access to PHC services. This neighbourhood included all areas north of Harbour Drive to Empire Avenue; west to Leslie Street/Campbell Avenue and east to Signal Hill and Quidi Vidi. There are approximately 25,220 people living in this area (St. John's Region PHC Project Proposal. June 1, 2004. p.20). St. John's Team's model for the delivery of PHC services was a vision of a PHC Urban Centre.[10]

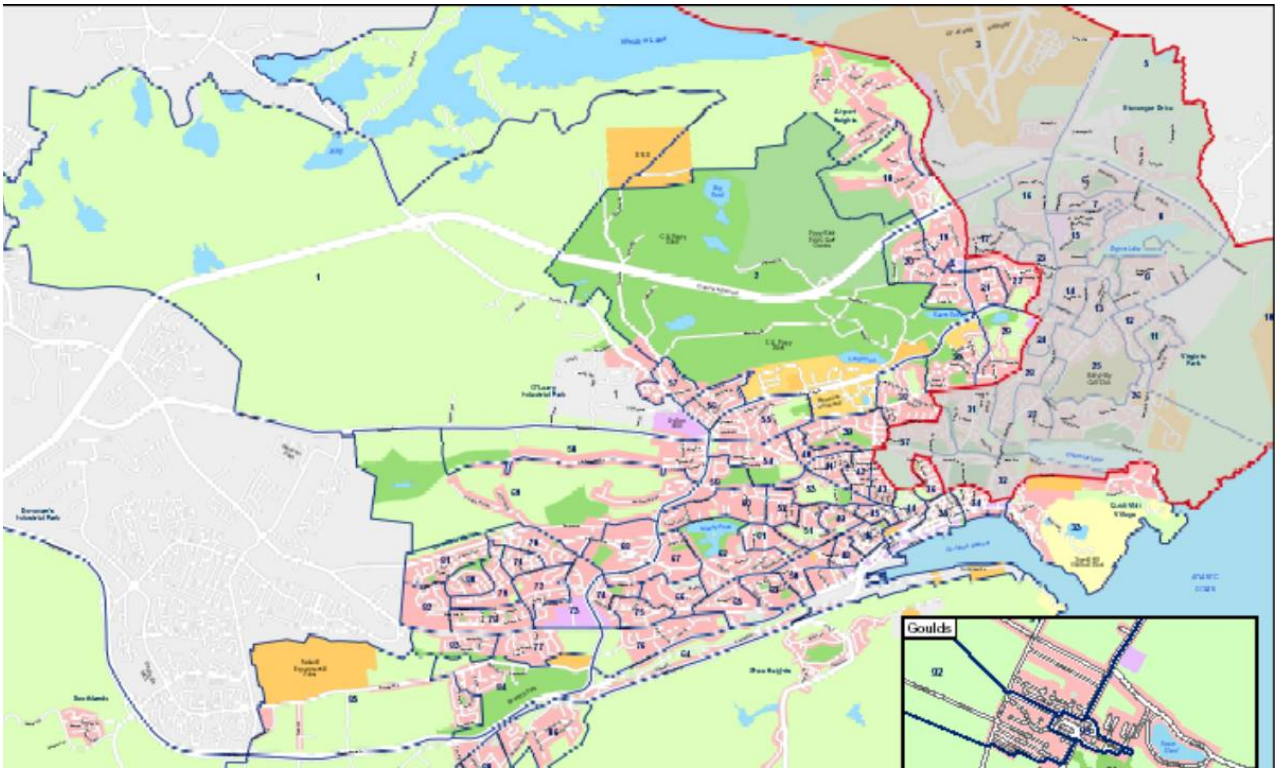
The PHC Urban Centre was to be located in the downtown east end of St. John's in a geographic area adjacent to four institutions: St. Clare's Hospital, the Leonard A Miller Centre, the Health Sciences Centre, and the Janeway Children's Hospital.

St. John's also had a goal to create a PHC Regional Strategy. The purpose of this strategy was to increase access to sustainable primary health care services throughout the St. John's Region focusing on building capacity and strengthening linkages with those service providers/partners (including fee for service physicians).

During the implementation phase, the Department of Health and Community Services (DOHCS) identified a concern regarding the vision and direction for primary health care in the urban areas. The vision for PHC Renewal within the St. John's urban area was revised and involved an expansion of the Chronic Disease Management, Diabetes Collaborative model to other physician practices in the urban areas (Zone 1) and development and implementation of Mental Health programs (Zone 2). The former St. John's Primary Health Care Working Group was reconfigured into a Leadership Team to reflect the revised PHC vision for St. John's and the restructured health care system. Figure 9 shows the general location of service for the Zone 1 initiative.

[10] As of 2005 the Eastern Health Authority incorporated the territory and services of the Health Care Corp. of St. John's Health and Community Services, St. John's Nursing Home Board, Health and Community Services Eastern, Avalon Health Care Institutions, and the Peninsulas Health Care Corp.

**Figure 9: St. John's Team Area, Zone 1 (highlighted in red)**




## 4.8 Twillingate / New World Island

The area covered by the Twillingate/New World Island proposal is located in the central northeastern portion of Newfoundland Island. Twillingate Island and New World Island are connected to the mainland by causeways and all communities in the area are connected by road. As noted in the PHC Proposal (January 2004, p.7), the greatest distance between communities on Twillingate Island is 14km (Crow Head to Kettle Cove) and on New World Island is 39km (Sunnyside to Boyd's Cove). The farthest distance among all communities in the area is the distance between Crow Head in the north to Boyd's Cove in the south (48km).

The Central Strategic Social Plan's Community Accounts lists the following 29 communities for this area:

- Twillingate Island: Twillingate (including Black Duck Cove), Crow Head, Kettle Cove, Purcell's Harbour, Durrell.

- New World Island: Herring Neck (including Cobb's Arm), Fairbank, Green Cove, Hatchet Harbour, Indian Cove, Merritts Harbour, Newville, Pikes Arm, Roger's Cove, Salt Harbour, Shoal Cove, Sunnyside, Toogood Arm, Virgin Arm (including Carters Cove), Chanceport, Bridgeport, Moreton's Harbour, Valley Pond, Summerford, Cottlesville, Boyd's Cove.

Figure 10 provides a map of the Twillingate/New World Island Team catchment area.

**Figure 10: Twillingate/New World Island PHC Team Area**

The Twillingate/New World Island area has a total population of approximately 6,980 (Statistics Canada, 2001 Population Census).

*Location of Services*

Both Central Regional Integrated Health Authority (CRIHA) and Central Regional Health and Community Services (CRHCS)[11] provide primary health care through two sites – the Notre Dame Bay Memorial Health Centre in Twillingate and the New World Island Clinic in Summerford. Secondary services are primarily provided at the James Paton Memorial Hospital in Gander. The maximum distance between this facility and the furthest community in the study area is 119km (Crow Head to Gander). Some secondary services are also provided in Twillingate at the Notre Dame Bay Memorial Health Centre. Secondary services not available in Twillingate or Gander (e.g. urology, ERCP) are provided by the CRIHA in Grand Falls. The maximum distance between this facility and the furthest community in the study area is 155km (Crow Head to Grand Falls).

*Service Provider Profile*

Residents in the Twillingate/New World Island area are served by health professionals from CRIHA and CRHCS as well as by private primary health care providers.

[11] As of 2005 the Central Health Authority incorporated the territory and services of Health and Community Services Central, Central West Health Corp., and Central East Health Care Institutions Board.

## 5.0 EVALUATION OBJECTIVES

The role of the evaluation consultants was to work with the Office of Primary Health Care and the various stakeholder groups in the eight team areas to develop the general evaluation framework and the evaluation plan for each team area. The evaluation consultants also provided ongoing support/advice to the team areas through OPHC and the Project Coordinators.

The evaluation was designed to assess the degree of successes of the Primary Health Care Initiatives being implemented in Newfoundland and Labrador. The key objective of the evaluation was to identify whether the following goals and objectives for Primary Health Care in Newfoundland and Labrador are being met:

- Promote self reliant and healthy citizens and communities,
- Support comprehensive, integrated PHC services,
- Enhance accessibility and sustainability of PHC services, and
- Enhance accountability and satisfaction of PHC professionals.

During the implementation of the evaluation, the evaluation consultants continued to serve as a resource to OPHC and the Project Coordinators to respond to methodological questions and provide guidance to ensure that the evaluation process proceeded as outlined in the evaluation plan. The evaluation consultants also took a lead role in reviewing and analyzing the data collected in the administrative process record and the data compiled from the PHC Team surveys and client surveys.[12]

[12] In the case of the PHC Team surveys, the survey was self-administered. The PHC Team survey questionnaire was machine readable and the data was compiled by the evaluation consultants. In the case of the PHC client surveys, the survey was conducted by phone by a team of trained surveyors from OPHC and NLCHI. The client survey data was compiled by OPHC and NLCHI surveyors and the data base was forwarded to the evaluation consultants for analysis.

# 6.0 METHODOLOGY

## 6.1 Development of the Evaluation Framework

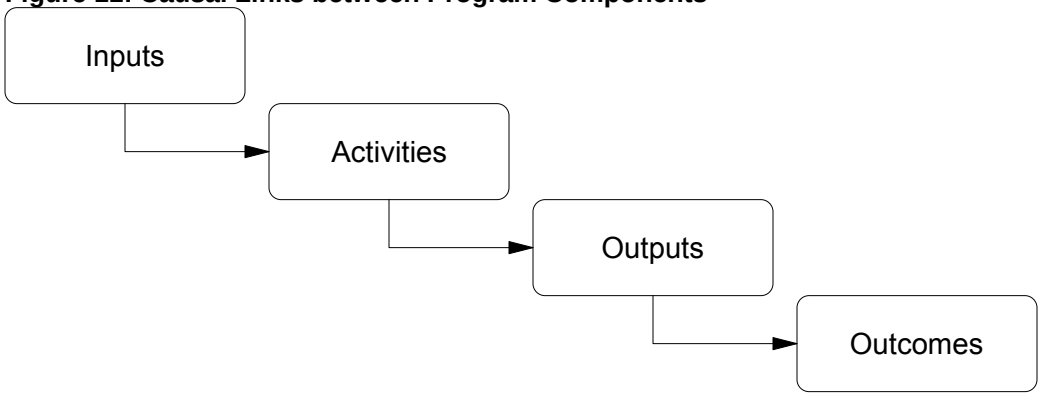
The development of the evaluation framework for the Newfoundland and Labrador Primary Health Care Renewal Initiative was initiated in November 2003. Given that the PHC Renewal Initiative was in the early stages, a formative evaluation was deemed to be the most appropriate evaluation process. Formative evaluations are generally carried out during program implementation to determine whether programs are achieving, or are likely to achieve their objectives, and to identify what is working well and what needs adjustment.

A results based evaluation framework was used for guiding the evaluation of the Primary Health Care Renewal Initiative. This framework uses a *Program Logic Model* (PLM) to provide a graphic and narrative description of a program, its component parts, and the expected results to be achieved by the program. A PLM is a tool to help design and evaluate projects. It is a "picture" of the logical cause and effect relationships among four program components: inputs, activities, outputs, and outcomes.

- Inputs are all resources which contribute to project activities.
- Activities are descriptions of the day-to-day work of the project staff and stakeholders/project delivery agents described under inputs.
- Outputs are indications of activities completed.
- Outcomes are Results and indicate changes taking place in project delivery agents and patients as a result of the project.

The logical relationships can be understood as follows. The inputs must be made available if the activities are to be completed. Activities must be completed for the outputs to be produced. Outputs must be produced and used if the outcomes are to be realized (Figure 11).

**Figure 11: Causal Links between Program Components**



Performance indicators are generally identified across all parts (inputs, outputs, activities, outcomes) of the PLM. The indicators serve as the measures of success toward which the program is striving, and against which the program may be evaluated.

The PLM as developed for the Primary Health Care Renewal Initiative consists of three sections: narrative summary, performance indicators, and assumptions and risks. The ***narrative summary*** in each column contains only words and does not attempt to indicate quantity or quality.

This is followed by a row of ***indicators*** of performance or success, which is often the focus of monitoring and evaluation efforts. Indicators seek to measure results and to provide evidence that progress is being made toward the achievement of the goal. Indicators consider quantity, quality, and time.

The last row of the PLM features *assumptions and risks*. Assumptions refer to the external conditions beyond the control of the project that must exist for the cause and effect relationships expressed in the PLM to behave as expected. Risk refers to the probability that the assumptions will not hold true. Risks can be rated as High, Medium, Low. Table 4 presents the key features of a results based Program Logic Model.

**Table 4: Program Logic Model Template**

| PROGRAM LOGIC MODEL | | | | | | |
|---|---|---|---|---|---|---|
| | Inputs | Activities | Outputs | Outcomes | | |
| | | | | Short term (1-2 yrs) | Medium term (2-5 yrs) | Long term Impact |
| Narrative Summary | | | | | | |
| Performance Indicators | | | | | | |
| Assumptions and Risks | | | | | | |

An **evaluation matrix** (EM) is used in conjunction with the PLM to systematically identify evaluation questions, indicators of success, and appropriate data sources and data collection methods. Whereas the PLM provides a picture of the whole project, the matrix indicates the aspects of the program that will be the focus of the evaluation.

Some of the more common issues addressed in evaluations are rationale, efficiency, effectiveness, access/reach, and impact.

***Rationale*** refers to the extent to which the project contributes to the overall goal or strategic direction of the organization. The exploration of rationale considers questions such as: is this the most appropriate way to achieve the goal? are there other ways to manage the resources that would improve on outcomes?

***Efficiency*** refers to the extent to which project inputs were supplied and managed and activities organized and outputs produced in the most appropriate manner at the least cost to produce the outputs. It is the link between the activities and outputs columns in the PLM. Efficiency questions usually refer to the timeliness, quality and quantity of the delivery of inputs, activities and outputs in relation to the project plans and needs.

***Effectiveness*** refers to the extent to which the project produced its outcomes and thereby contributed to the project goal. It records changes in the beneficiary group(s) that have happened as a result of the project. It is the link between outputs and outcomes in the program logic model. Effectiveness refers to outcomes or results and the output-outcome relationship.

***Access and reach*** are concerned with determining whether the project and its benefits are accessible and of benefit to all members of the population, and whether the community was given the opportunity to participate in the development of the project. It applies to all columns of the program logic model.

***Impact*** refers to the long-term and sustainable changes experienced as a result of the project such as changes in the overall health status of the population.

Once the evaluation issues and questions are established, indicators must be identified to measure results and to provide evidence that progress is being made toward the achievement of the program goals. In deciding on the types of indicators to be used in the evaluation the evaluator must also consider the data that is required to determine the indicator, where the data will be sourced (e.g. key informants, program participants, documents, reports, etc.), and the data collection methods that will be used to gather the data that will measure results. Other key considerations to be mapped out in advance of the evaluation are the techniques that will be used in analyzing the data, the agents who will take responsibility for collecting and analyzing the data and time frame in which these activities will occur. As shown in Table 5, the evaluation matrix brings these details together to provide a structured picture of the evaluation research process.

**Table 5: Evaluation Matrix Template**

| EVALUATION MATRIX | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Evaluation Issues | Evaluation questions | Indicators | Data required | Source of data | Method of collection | Analysis | Responsi-bility | Time-line |
| Rationale | | | | | | | | |
| Efficiency | | | | | | | | |
| Effectiveness | | | | | | | | |
| Access and Reach | | | | | | | | |
| Impact | | | | | | | | |

### 6.1.1 Newfoundland and Labrador PHC PLM and Evaluation Matrix

*PHC Program Logic Model*

Table 6 represents a composite PLM based on the eight individual PLMs that were developed for each of the PHC team areas. This generic version of the PLM presents the key program inputs, activities, outputs and outcomes that are consistent across all PHC team areas.

*PHC Evaluation Matrix*

Table 7 represents a composite matrix based on the eight individual matrices that were developed for each PHC team area. This generic version of the matrix presents the key evaluation issues, questions and indicators that are consistent across all team areas.

## Table 6: Program Logic Model

**Page 1 of 6**

**Program Logic Model Narrative Summary (1)**

| Inputs | Activities | Outputs | Outcomes | | |
|---|---|---|---|---|---|
| | | | Short term (1-2 yrs) | Medium (2-5 yrs) | Long term Impact |
| • Dept. of Health and Community Services - Office of Primary Health Care (OPHC)<br>• Primary Health Care Advisory Council<br>• Evaluation Advisory Group<br>• Working Groups (Wellness, Scope of Practice, etc.)<br>• Regional Health Boards<br>• Building Better Tomorrows<br>• Community profile information (Community Health Needs and Resources Assessment, Community Accounts, etc.)<br>• PHC Project Coordinator<br>• Health Care service providers (physicians, nurse practitioners, community health nurses, dieticians, physiotherapists, mental health counsellors, addictions counsellors, child youth and family services social workers, etc.)<br>• Primary Health Care Network<br>• Other key stakeholders (e.g. Personal Care Homes, School Boards, Family Resource Centres, RCMP, Private Ambulance Operators, etc.)<br>• Community Members/Partners<br>• Clients/Patients<br>• Health Care Facilities, equipment, supplies, etc.<br>• Financial Resources | • OPHC consultations with Project Coordinators and local PHC working groups<br>• Develop PHC Team<br>• Conduct monthly PHC Team meetings<br>• Develop inventory of job descriptions for PHC Team members<br>• Develop practice protocols and referral processes<br>• Develop conflict resolution processes<br>• Develop and conduct PHC orientation sessions for new employees<br>• Conduct PHC Team building activities<br>• Consultations between PHC Team and PHC Network<br>• Develop working groups to address coordination of specific services and initiatives (e.g. youth services, diabetes management, cervical screening)<br>• Develop Terms of Reference for working groups<br>• Establish the Community Advisory Committee (CAC)<br>• Develop CAC Terms of Reference<br>• Develop PHC orientation and team building activities for CAC members<br>• Conduct monthly CAC meetings<br>• Establish communication structure between CAC and PHC Team | • PHC Team and PHC Network established<br>• Participation of PHC Team members in monthly team meetings<br>• Participation of PHC Team members in team building activities<br>• Inventory of job descriptions for PHC Team members<br>• Formal practice protocols and referral processes<br>• Formal conflict resolution processes<br>• Participation in PHC orientation sessions for new employees<br>• Participation of PHC Team members in professional development and interdisciplinary training sessions<br>• Working groups to address coordination of specific services and initiatives<br>• Terms of Reference for working groups established<br>• Reports/recommendations submitted by the working groups<br>• CAC established with Terms of Reference<br>• PHC orientation sessions and team building activities provided to the CAC<br>• Participation of community members in monthly CAC meetings<br>• Input, feedback, and recommendations from the CAC to PHC Team | • Increased understanding of PHC Team goals and objectives<br>• Increased understanding and knowledge of the role and ability of each PHC Team member<br>• Increased provider participation in PHC planning, implementation and evaluation processes<br>• Increased support provided to individual Team members<br>• Improved communication between PHC Team members<br>• Improved coordination of intervention services<br>• Enhanced scope of practice for PHC Team members<br>• Increased involvement of community and intersectoral partners in planning and delivery of programs.<br>• Increased community participation in PHC initiatives/programs<br>• Increased participation by client/patient in decisions related to self, family, and community programs | • Enhanced satisfaction of PHC professionals<br>• Increased efficiency of health care system<br>• Increased participation by client/patient in decisions related to self, family, and community programs<br>• Increased community satisfaction with health care access and quality of health care | • Improved health status for community members<br>• Increased self-reliance among community members in regards to health care |

## Table 6: Program Logic Model (Cont'd)

**Page 2 of 6**

Program Logic Model **Narrative Summary continued (2)**

| Inputs | Activities | Outputs | Outcomes | | |
|---|---|---|---|---|---|
| | | | Short term (1-2 yrs) | Medium (2-5 yrs) | Long term Impact |
| | • Develop PHC promotional materials and public awareness campaign for communities | • Articles written and published in local newspapers highlighting PHC programs and health issues<br>• Public information sessions on the PHC Team conducted by PHC Team members/Project Coordinator | • Increased community awareness and knowledge of PHC services/programs provided in the Bonne Bay region | | |
| | • Develop Terms of Reference for the local Wellness Facilitator<br>• Identify wellness initiatives (e.g. physical, mental, youth, seniors health programs)<br>• Identify funding sources to support wellness initiatives | • Local Wellness Facilitator hired<br>• Wellness initiatives identified, planned and implemented<br>• Funding secured to support wellness initiatives | • Increased community participation in PHC initiatives/programs | | |
| | • Introduction of Broadband communication capacity<br>• Installation of video conferencing equipment | • Broadband communication available in all PHC team areas<br>• Video conferencing equipment available in all PHC team areas | • Increased access to and effective use of Internet and video- conferencing by PHC Team members | | |
| | • Register the PHC population with the PHC Team<br>• Meditech and Client Referral Management System (CRMS) is made available to all relevant service providers<br>• Development of electronic client/patient record | • Population registered with the PHC Team<br>• All relevant service providers have access to Meditech and Client Referral Management System (CRMS)<br>• Electronic client/patient record established (agreed record structure for file recording and sharing of information) | • Increased effectiveness of technology in PHC Team communications | • Increased use of common client/patient records | |

## Table 6: Program Logic Model (Cont'd)

**Page 3 of 6**

Program Logic Model **Performance Indicators (1)**

| Inputs | Activities | Outputs | Outcomes | | |
|---|---|---|---|---|---|
| | | | Short term (1-2 yrs) | Medium (2-5 yrs) | Long term Impact |
| • Number of paid OPHC person days in each PHC Project on an annual basis and associated wage and benefit costs<br>• Number of participants in the Primary Health Care Advisory Council and number of meetings on an annual basis<br>• Number of participants in the Evaluation Advisory Group and number of meetings on an annual basis<br>• Number of paid PHC Project Coordinator person days and wage and benefit costs<br>• Number of Health Care service providers by professional discipline participating in the Project (e.g. Primary Health Care Team, Primary Health Care Network)<br>• Number of other key stakeholders/interest groups participating in the Project<br>• Quarterly or semi-annual financial statements (comparison of planned budget vs. actual) | • Number of meetings between OPHC and PHC Project stakeholders within the 1st and 2nd year of the Project<br>• Development of the PHC Team within the 1st year of the Project<br>• Number of PHC Team meetings conducted on an annual basis<br>• Development of an inventory of job descriptions for PHC Team members within the 1st year of the Project and updated semi-annually<br>• Development of practice protocols and referral processes within the 1st year of the Project<br>• Development of conflict resolution processes within the 1st year of the Project<br>• Number of PHC orientation sessions offered to new employees on an annual basis<br>• Number of PHC team building activities conducted on an annual basis<br>• Number and type of interdisciplinary training sessions offered to service providers on an annual basis<br>• Number and type of consultations between PHC Team and PHC Network<br>• Development of partnerships with other key stakeholders/interest groups | • Number of health care service providers by professional discipline participating on the PHC Team<br>• Number of PHC Team members participating in monthly meetings<br>• Number of PHC Team job descriptions listed in the Internet based inventory<br>• Practice protocols and referral processes formally defined by the end of year 1<br>• Conflict resolution processes formally defined by the end of year 1<br>• Number and percentage of new employees attending PHC orientation sessions on an annual basis<br>• Number and percentage of PHC Team members participating in team building activities on an annual basis<br>• Number of PHC Team members by professional discipline participating in interdisciplinary training sessions on an annual basis<br>• Number of health care service providers by professional discipline participating in the PHC Network<br>• Number of partnerships established with other stakeholders/interest groups and types of activities | • Increased understanding of PHC Team goals and objectives (Score on TET questions Q1,Q4-Q8,Q10: 2004 baseline results compared to Oct. 2005 and April 2006 results)<br>• Increased understanding and knowledge of the role and ability of each PHC Team member (Score on SPT questions Q46-Q49, Q64: 2004 baseline results compared to Oct. 2005 and April 2006 results)<br>• Increased provider participation in PHC planning, implementation and evaluation processes (Score on TET questions Q2,Q3,Q9: 2004 baseline results compared to Oct. 2005 and April 2006 results)<br>• Increased support provided to individual Team members (Score on TET questions Q24-Q34: 2004 baseline results compared to Oct. 2005 and April 2006 results)<br>• Improved communication between PHC Team members (Score on TET questions Q11-Q23: 2004 baseline results compared to Oct. 2005 and April 2006 results) | • Enhanced satisfaction of PHC professionals (Score on TET questions Q10,Q23,Q34,Q42,Q43-Q45: 2004 baseline results compared to Oct. 2005 and April 2006 results ; Score on SPT questions Q68-Q71: 2004 baseline results compared to Oct. 2005 and April 2006 results)<br>• Increased efficiency of health care system (Score on SPT questions Q51,Q52,Q61,Q64: 2004 baseline results compared to Oct. 2005 and April 2006 results)<br>• Increased participation by client/patient in decisions related to self, family, and community programs (Score on TET questions Q36,Q40: 2004 baseline results compared to Oct. 2005 and April 2006 results)<br>• Increased community satisfaction with health care access and quality of health care (Score on CPST: Feb. 2005 baseline results compared to Feb. 2006 results) | • Improved health status for the residents of the region (Selected health status indicators: Increase in the percentage of women having annual pap smears – baseline results compared to 2005 results)<br>• Increased self-reliance among community members in regards to health care (Score on CPST: Feb. 2005 baseline results compared to Feb. 2006 results) |

## Table 6: Program Logic Model (Cont'd)

**Page 4 of 6**

Program Logic Model **Performance Indicators continued (2)**

| Inputs | Activities | Outputs | Outcomes | | |
|---|---|---|---|---|---|
| | | | Short term (1-2 yrs) | Medium (2-5 yrs) | Long term Impact |
| | • Conduct Circle of Health training<br>• Identify and implement Health Promotion initiatives<br><br>• Conduct Community Capacity Building (CCB) tool training<br>• Identify and 'map out' the 10 CCB features<br>• Develop and implement CCB action plans<br><br>• Establish Scope of Practice (SOP) inventory of skills/practice activities<br>• Validate SOP gaps and areas of overlap<br>• Develop inter-professional SOP action plans<br><br>• CAC established with Terms of Reference within the 1st year of the PHC Project<br>• Number of CAC meetings conducted on an annual basis<br>• Number of CAC team building sessions conducted on an annual basis<br><br>• PHC promotional articles and advertising developed within year 1<br>• PHC public information sessions developed within year 1 | • Circle of Health training completed<br>• Number and type of health promotion initiatives identified and implemented<br><br>• CCB tool training completed<br>• Number of CCB features mapped out<br>• Number of CCB action plans developed and implemented<br><br>• SOP skills inventory established<br>• SOP gaps and areas of overlap validated<br>• Number and type of SOP action plans developed (short, medium, long-term) and implemented<br><br>• Number of participants in the CAC by gender, sector/interest group and place of residence<br>• Number of CAC members participating in monthly CAC meetings<br>• Number of CAC members participating in CAC team building sessions<br>• Number of reports/recommendations prepared by the CAC and submitted to the PHC Team on an annual basis<br><br>• Number of articles or promotional features appearing in local newspapers on an annual basis<br>• Number, type and location of PHC public information sessions conducted on an annual basis | • Improved coordination of intervention services involving PHC Team members and network providers (Score on TET/SPT questions Q37,Q38/Q63,Q67: 2004 baseline results compared to Oct. 2005 and April 2006 results)<br>• Enhanced scope of practice for PHC Team members (Score on SPT questions Q46-Q71: 2004 baseline results compared to Oct. 2005 and April 2006; key informant interviews with service providers)<br>• Increased involvement of community and intersectoral partners in planning and delivery of programs (Score on TET questions Q35,Q38,Q39: 2004 baseline results compared to Oct. 2005 and April 2006 results)<br>• Increased community awareness and knowledge of PHC services/programs provided in the region (Score on TET question Q41: 2004 baseline results compared to Oct. 2005 and April 2006 results; Increased percentage of the population registered with the PHC Team 2004-2005) | • Increased involvement of community and intersectoral partners in planning and delivery of programs (Number of CAC recommendations submitted compared to the number acted on as reported in the APR: year 1-2 baseline results compared to year 3, 4, 5) | |

## Table 6: Program Logic Model (Cont'd)

**Page 5 of 6**

Program Logic Model **Performance Indicators continued (3)**

| Inputs | Activities | Outputs | Outcomes | | |
|---|---|---|---|---|---|
| | | | Short term (1-2 yrs) | Medium (2-5 yrs) | Long term Impact |
| | • Development of Terms of Reference for Local Wellness Facilitator within year 1<br>• Number of wellness strategies identified on an annual basis<br>• Number and type of funding sources identified to support wellness strategies within year 1 and 2 | • Wellness Facilitator hired within the first year of the PHC Project<br>• Number of wellness strategies implemented on an annual basis in comparison to the number of strategies identified<br>• Number of citizens by age, gender, education, income and place of residence participating in Wellness initiatives<br>• Amount and type of funding (cash and in-kind) raised to support initiatives on an annual basis | • Increased community participation in PHC initiatives/programs (e.g. health and wellness programs) as reported in the APR: year 1 baseline results compared to year 2 results; Increase in program leaders and volunteers as reported in the APR: year 1 baseline results compared to year 2 results) | | |
| | • Introduction of Broadband communication capacity in the region by March 2006<br>• Installation of video conferencing equipment in PHC team areas by March 2006 | • Number and location of PHC team areas with or without Broadband access by end of year 1, 2, 3 etc.<br>• Number and location of PHC team areas with or without videoconferencing equipment by end of year 1 and 2 | • Increased use of video conferencing equipment (Increase in hours of use and reduction of travel costs as reported in APR: year 1 baseline results compared to year 2 results) | | |
| | • Development of the PHC client/patient roster within year 1 and 2 of the project<br>• All relevant service providers have access to Meditech and CRMS<br>• Development of electronic client/patient record | • Number and percentage of population registered with the PHC Team by age, gender and place of residence by the end of year 1 and 2<br>• Number and percentage of relevant service providers using Meditech and CRMS by the end of year 1 and 2<br>• Number and percentage of PHC Team members using the common electronic patient record by the end of 2006 (this timeline is contingent on the development and activation of a common client/patient record system) | • Increased effectiveness of technology in PHC Team communications (Score on TET question Q16: 2004 baseline results compared to Oct. 2005 and April 2006 results) | • Increased use of common client/patient records (Score on SPT question Q60: 2004 baseline results compared to Oct. 2005 and April 2006 results – this timeline is contingent on the development and activation of a common patient record system) | |

## Table 6: Program Logic Model (Cont'd)

**Page 6 of 6**

Program Logic Model **Assumptions and Risks (1)**

| Inputs | Activities | Outputs | Outcomes | | |
|---|---|---|---|---|---|
| | | | Short term (1-2 yrs) | Medium (2-5 yrs) | Long term Impact |

**Assumptions:**

- The majority of health care service providers in the Project region are committed to pursuing PHC approach to service delivery.
- Improvements/adjustments will be made to current funding methods to provide fair remuneration to Fee for Service Physicians and other private service providers (i.e. for time and involvement in activities such as consultations, case conferences, PHC Team meetings, interdisciplinary clinics, and investment involved in the transition to an electronic network).
- All health service providers will work collaboratively as custodians of client/patent records to ensure the confidentiality of files.
- Improvements/adjustments will be made to current funding methods for salaried employees to address PHC Team collaboration and communication time needs including flexible time arrangements and overtime where applicable.
- Salaried employees work responsibilities will be redefined to include scheduled interactions between various providers (activities such as consultations, case conferences, PHC Team meetings, interdisciplinary clinics, etc.)
- Community members will take an interest in providing input throughout the process.

**Risks:**

- Loss of interest by local leaders could result in lost momentum.
- Integration of boards could impact the delivery of coordinated services.
- The past merger of institutional boards and of community boards with programs from Department of Human Resources and Employment are still evolving processes.
- Participation by service providers may change if an adequate funding method is not developed - could result in loss of providers.
- PHC staff turnover may disrupt and slow pace of adoption.
- The system introduced may not be sustainable beyond the funding horizon.

## Table 7: Evaluation Matrix

**Page 1 of 10**

Evaluation Matrix – Rationale (1)

| Issue | Evaluation questions | Indicator | Data required | Source of data | Method of collection | Analysis | Responsibility | Timing |
|---|---|---|---|---|---|---|---|---|
| **Rationale** | 1. Are the goals and objectives of the PHC Project consistent with the principles, goals and objectives outlined in the Framework for PHC Renewal in Newfoundland and Labrador? | 1. The PHC Project features activities and initiatives that: promote self-reliant and healthy citizens and communities; support the provision of comprehensive, integrated, and evidence based primary health care services; enhance accessibility and sustainability of primary health care services; enhance accountability and satisfaction of primary health care professionals | 1. Compare the goals and objectives of the PHC Project to the Provincial Framework | 1. Project records; OPHC proposal review (Criteria for Assessing and Funding Proposals) | 1. File review | 1. Content analysis | 1. Office of Primary Health Care (OPHC) and Project Coordinator will review Project files. Project Coordinator will include a copy of the criteria assessment in the Administrative Process Record (APR) | 1. Review files July/August 2004 |
| | 2. Are the specific activities and initiatives being used by the PHC Project likely to achieve the Project objectives? | 2. Literature and research supports Projects' selection of activities and initiatives | 2. Project documents and research literature | 2. Project records | 2. File review | 2. Review of background documents | 2. OPHC and Project Coordinator will collect and archive relevant documents and research literature | 2. Review files in July/August 2004 |
| | 3. Is the Project acceptable to health care providers? | 3. a) Number and percentage of health care providers by professional discipline on the PHC Team; b) Increased satisfaction of PHC Team members (Score on TET questions Q10,Q23, Q34,Q42,Q43-Q45; Score on SPT questions Q68-Q71) | 3. a) List of all health care providers and their status with the PHC Team; b) PHC Team members' survey | 3. a) Project Coordinator, Regional Health Board; b) PHC Team members | 3. a) File review; b) Self administered survey - Team Effectiveness Tool (TET) and Scope of Practice Tool (SPT) | 3. a) Review inventory of health care providers and track their PHC Team membership status, compare Feb. 2005 baseline results to Oct. 2005 and April 2006 results; b) Develop SPSS data base and compare Feb. 2005 TET/SPT baseline results to Oct. 2005 and April 2006 results | 3. a) Project Coordinator will compile and update list of PHC Team members on a semi-annual basis in the APR; b) OPHC will distribute the surveys and Team members will forward to HCA for data entry and analysis | 3. a) Review list of PHC Team members in Feb. 2005, Oct 2005 and April 2006; b) Conduct TET/SPT survey in Feb. 2005, Oct. 2005 and April 2006 |

## Table 7: Evaluation Matrix (Cont'd)

**Page 2 of 10**

**Evaluation Matrix – Rationale (2)**

| Issue | Evaluation questions | Indicator | Data required | Source of data | Method of collection | Analysis | Responsibility | Timing |
|---|---|---|---|---|---|---|---|---|
| **Rationale** | 4. Is the project acceptable to community members and key stakeholders? | 4. a) Number and percentage of community members by age, gender and place of residence registered with the PHC Team; b) Number of community members participating in the CAC by age, gender, place of residence, socio-economic status, sector, etc.) | 4. a) Population statistics and list of residents registered with the PHC Team; b) List of CAC membership and related CAC Terms of Reference | 4. a) Population statistics, Regional Health Boards, PHC roster; b) CAC (membership list, Terms of Reference); | 4. a) Document/file review; b) File review | 4. a) Track change in number and percentage of community members registered with the PHC Team; b) Track change in the number of participants in the CAC, composition, and rate of membership turnover | 4. a) Project Coordinator will compile and review records and consult with Regional Health Boards; b) Project Coordinator will consult with CAC Chairperson and maintain record in the APR | 4. a) Review files in Dec. 2004, Oct. 2005 and April 2006 – all community members should be registered by April 2006; b) Review CAC membership in June 2004 and Oct. 2005 and April 2006 |
| | 5. Is the Project responding to the health related needs and interests of the community? | 5. a) PHC Project activities and initiatives relate to the community needs and issues identified in the community needs assessment, community health status indicators, etc.; b) Increased satisfaction of clients and patients (Score on CPST); c) Number of CAC recommendations submitted and acted on in year 1 and 2 | 5. a) Project documents including Project proposal; b) Client/patient perception of Project responsiveness to community needs; c) Reports and recommendations submitted by CAC to PHC Team | 5. a) Project Proposal, PHC Team Chairperson, Wellness Facilitator, Working Group Coordinators; b) Survey – Client Patient Satisfaction Tool (CPST); c) CAC Chairperson, PHC Team Chairperson | 5. a) File review and consultation with PHC Team Chairperson, Wellness Facilitator, Working Group Coordinators; b) Survey; c) File review and consultation with CAC and PHC Team Chairpersons | 5. a) Compare identified community needs with the PHC initiatives implemented; b) Develop SPSS data base and compare 2005 baseline results to 2006 results; c) Compare the number of CAC recommendations submitted and the number of CAC recommendations acted on | 5. a) Project Coordinator will compare community needs with PHC activities and maintain record in the APR; b) OPHC will coordinate and implement the survey. HCA will process and analyze the data; c) Project Coordinator will maintain record of CAC recommendations in the APR and compare with PHC Team actions | 5. a) Review files and consult with stakeholders in Dec. 2004 and Dec. 2005; b) Conduct CPST survey in Feb. 2005 and Feb. 2006; c) Review the number of CAC recommendations submitted and acted on for the year ending Dec. 2004 and Dec. 2005 |

## Table 7: Evaluation Matrix (Cont'd)

**Page 3 of 10**

**Evaluation Matrix – Efficiency (1)**

| Issue | Evaluation questions | Indicator | Data required | Source of data | Method of collection | Analysis | Responsibility | Timing |
|---|---|---|---|---|---|---|---|---|
| **Efficiency** | 1. Is the PHC Project being implemented as scheduled in the implementation plan? | 1. a) The PHC Project activities and initiatives are being implemented as planned (e.g. initiation of monthly PHC Team meetings in spring 2004; all team areas have access to broadband Internet and video conferencing equipment by March 2006, etc.); b) Introduction and use of Circle of Health, CCB , SOP tools by Dec. 2005; c) Number of activities and initiatives planned for and implemented in year 1 and 2 | 1. a) b) and c) Project documents, record of PHC activities and initiatives | 1. a) b) and c) Project records, Project Coordinator, PHC Team Chairperson, Wellness Facilitator, Director of Information Systems | 1. a) b) and c) File review, consultation with PHC Team Chairperson, Wellness Facilitator, Director of Information Systems | 1. a) b) and c) Review of Project records and comparison of the type and timing of the actual initiatives implemented and degree of implementation with the planned initiatives as presented in the Project proposal and implementation plan | 1. a) b) and c) Project Coordinator and Wellness Facilitator will review documents and consult with relevant stakeholders and maintain record of PHC related activities in the APR | 1. a) b) and c) Review files and consult with stakeholders on a regular basis to check status of activities. Prepare summary reports in Dec. 2004, July 2005 and April 2006 as part of the APR |
| | 2. Have adequate resources been allocated for timely and efficient implementation of PHC Project activities and initiatives? | 2 a) Number of paid OPHC person days invested in the PHC project on an annual basis and associated wage and benefit costs; b) Project Coordinator hired by fall 2004, Wellness Facilitator hired by Dec. 2004; c) Actual project expenditures correspond with planned expenditures | 2. a) Record of paid OPHC person days and associated costs; b) Status of personnel hired to coordinate PHC Project and the Wellness initiative; c) Quarterly or semi-annual financial statements and records | 2. a) OPHC project records; b) Project Coordinator, management; c) OPHC, Project Coordinator, management | 2. a) File review and consultation with OPHC; b) Consultation with management, Project Coordinator; c) File review and consultation with OPHC, Project Coordinator, and management | 2. a) Review of OPHC records, percentage of OPHC staff time dedicated to each PHC project; b) Confirm status of personnel hired; c) Compare actual project expenditures with projected/planned expenditures (e.g. salaries, operational expenses, capital expenses) | 2. a) Project Coordinator will consult with OPHC and maintain record in the APR; b) Project Coordinator will maintain record in the APR; c) Project Coordinator will review financial data, consult with OPHC, and keep record of actual and planned expenses in the APR | 2. a) b) and c) Prepare summary reports in Dec. 2004, July 2005 and April 2006 as part of the APR |

## Table 7: Evaluation Matrix (Cont'd)

**Page 4 of 10**

**Evaluation Matrix – Effectiveness (1)**

| Issue | Evaluation questions | Indicator | Data required | Source of data | Method of collection | Analysis | Responsibility | Timing |
|---|---|---|---|---|---|---|---|---|
| **Effectiveness** | 1. Has the PHC Team and Network been established? | 1. a) PHC Team and Network established by Dec. 2004; b) Number of service providers by profession on the PHC Team and Network; c) Percentage of Team members attending monthly meetings and team building activities | 1. a) and b) Project documents including PHC Team membership list and profiles; c) Record of attendance at meetings and team building activities | 1. a) b) and c) Project Coordinator, PHC Team Chairperson and Team members | 1. a) and b) Consultation with PHC Team Chairperson, Review PHC Team membership list; c) Review minutes from meetings, Self reported record of attendance as indicated in the TET survey | 1. a) and b) Track development and composition of PHC Team; c) Track level of participation at monthly meetings and team building activities | 1. a) and b) Project Coordinator will consult with PHC Team Chairperson and track team development in APR; c) OPHC will distribute the surveys and Team members will forward to HCA for data entry and analysis | 1. a) and b) Prepare summary reports in Dec. 2004, July 2005 and April 2006 as part of the APR; c) Conduct TET survey in Feb. 2005, Oct. 2005 and April 2006 |
| | 2. Have Team members' awareness and understanding of Team goals and objectives increased?<br><br>3. Have Team members' knowledge and understanding of the role of other Team members increased?<br><br>4. Have Team members become more involved in PHC planning, implementation and evaluation processes?<br><br>5. Has the Team become more supportive of individual Team members?<br><br>6. Have communications between PHC Team members improved? | 2. Increased understanding of Team goals and objectives (Score on TET questions Q1-Q4-Q8, Q10)<br><br>3. Increased understanding and knowledge of the role and ability of each Team member (Score on SPT questions Q46-Q49, Q65)<br><br>4. Increased Team member participation in planning and implementation processes (Score on TET questions Q2, Q3, Q9)<br><br>5. Increased support provided to individual Team members (Score on TET questions Q24-Q34)<br><br>6. Improved communications between Team members (Score on TET questions Q11-Q23) | 2, 3, 4, 5 and 6 PHC Team member perception of the Teams' effectiveness and scope of practice | 2, 3, 4, 5 and 6 PHC Team members | 2, 3, 4, 5 and 6 Self administered survey – TET and SPT | 2, 3, 4, 5 and 6 Develop SPSS data base and compare Feb. 2005 TET/SPT baseline results to Oct. 2005 and April 2006 results, conduct multivariate analysis | 2, 3, 4, 5 and 6 OPHC will distribute the surveys and Team members will forward to HCA for data entry and analysis | 2, 3, 4, 5 and 6 Conduct TET/SPT survey in Feb. 2005, Oct. 2005 and April 2006 |

## Table 7: Evaluation Matrix (Cont'd)

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**Evaluation Matrix – Effectiveness (2)**

| Issue | Evaluation questions | Indicator | Data required | Source of data | Method of collection | Analysis | Responsibility | Timing |
|---|---|---|---|---|---|---|---|---|
| **Effectiveness** | 7. Have practice protocols and referral processes been established? | 7. a) Practice protocols and referral processes developed by Dec. 2004; b) Increased Team member awareness of practice protocols (Score on SPT questions Q58,Q59, Q62) | 7. a) Project documents; b) PHC Team member awareness of the practice protocols | 7. a) Project Coordinator, PHC Team Chairperson; b) PHC Team members | 7. a) File review and consultation with PHC Team Chairperson; b) Self administered survey – SPT | 7. a) Track development of practice protocols; b) Develop SPSS data base and compare Feb. 2005 SPT baseline results to Oct. 2005 and April 2006 results, conduct multivariate analysis | 7. Project Coordinator will track development of protocols in APR; b) OPHC will distribute the surveys and Team members will forward to HCA for data entry and analysis | 7. a) Prepare summary reports in Dec. 2004, July 2005 and April 2006 as part of the APR; b) Conduct SPT survey in Feb. 2005, Oct. 2005 and April 2006 |
| | 8. What health promotion activities and initiatives have been established based on the prioritization of needs? Has community participation in PHC activities and initiatives increased? | 8. a) Number and type of projects proposed and implemented annually (e.g. diabetes management, cervical screening); b) Number of area residents by age, gender and place of residence attending wellness initiatives | 8. a) Record of health promotion activities and projects; b) Record of initiatives, Record of participants | 8. a) File review, Project Coordinator, Wellness Facilitator; b) File review, Wellness Facilitator | 8. a) and b) Review of project files and consultation Wellness Facilitator | 8. a) Compare number and type of wellness initiatives proposed with actual initiatives implemented; b) Track change in the number of participants involved in wellness initiatives | 8. a) and b) Project Coordinator will review records, consult with Wellness Facilitator and compile results in APR | 8. a) and b) Prepare summary reports in Dec. 2004, July 2005 and April 2006 as part of the APR |
| | 9. Has there been an improvement in the coordination of intervention services? | 9. Improved coordination of intervention services involving team members and network providers (Score on TET/SPT questions Q37,Q38/Q63,Q67) | 9. PHC Team member perception of the Teams' effectiveness in coordinating service delivery | 9. a) PHC Team members | 9. Self administered survey – TET and SPT | 9. a) Develop SPSS data base and compare Feb. 2005 TET/SPT baseline results to Oct. 2005 and April 2006 results | 9. OPHC will distribute the surveys and Team members will forward to HCA for data entry and analysis | 9. Conduct TET/SPT survey in Feb. 2005, Oct. 2005 and April 2006 |

## Table 7: Evaluation Matrix (Cont'd)

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**Evaluation Matrix – Effectiveness (3)**

| Issue | Evaluation questions | Indicator | Data required | Source of data | Method of collection | Analysis | Responsibility | Timing |
|---|---|---|---|---|---|---|---|---|
| **Effectiveness** | 10. Has the Project provided the PHC Team with opportunities for professional development, interdisciplinary training, etc. | 10. a) Number and type of professional development and training activities offered on an annual basis; b) Number of PHC Team members by profession participating in professional development activities; c) Increased level of Team member satisfaction (Score on TET questions Q29,Q30) | 10. a) Project documents; b) Record of activities offered; Record of PHC Team member participation; c) PHC Team member perception of professional development | 10. a) and b) Project Coordinator, PHC Team members; c) PHC Team members | 10. a) and b) File review and consultation with PHC Team members; c) Self administered survey – TET | 10. a) Compare number and type of activities proposed with actual activities offered; b) Track the number of PHC Team members participating in the activities; c) Develop SPSS data base and compare Feb. 2004 baseline results to Oct. 2005 and April 2006 results - conduct multivariate analysis | 10. a) and b) Project Coordinator will review records, consult with PHC Team members, and compile results in APR; c) OPHC will distribute the surveys and Team members will forward to HCA for data entry and analysis | 10. a) and b) Prepare summary reports in Dec. 2004, July 2005 and April 2006 as part of the APR; c) Conduct TET survey in Feb. 2004, Oct. 2005 and April 2006 |
| | 11. Are the Team members working within their full scope of practice? | 11. a) Enhanced scopes of practice for Team members (Score on SPT questions Q46-Q71); b) Change in relations between professions, change in personal scope of practice, impact on practice (key informant interviews with PHC team members) | 11. a) PHC Team member perception of enhanced scopes of practice; b) Personal experience of PHC Team members | 11. a) PHC Team members and file review; b) PHC Team members | 11. a) Self administered survey – SPT; b) Key informant interviews with PHC Team members | 11. a) Develop SPSS data base and compare Feb. 2005 baseline results to Oct. 2005 and April 2006 results - conduct multivariate analysis; Review actual vs. intended results; b) Review the changes, impacts and unexpected outcomes experienced by PHC Team members | 11 a) OPHC will distribute the surveys and Team members will forward to HCA for data entry and analysis; b) Project Coordinator will submit list of key informants (PHC Team members) to OPHC. OPHC and Med-Emerg will conduct key informant interviews. Med-Emerg will conduct analysis | 11. a) Conduct SPT survey in Feb. 2005, Oct. 2005 and April 2006; b) Conduct key informant interviews in March/April 2006 |

## Table 7: Evaluation Matrix (Cont'd)

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**Evaluation Matrix – Effectiveness (4)**

| Issue | Evaluation questions | Indicator | Data required | Source of data | Method of collection | Analysis | Responsibility | Timing |
|---|---|---|---|---|---|---|---|---|
| **Effectiveness** | 12. What activities and initiatives have been established to inform the public about the PHC services provided in the region? | 12. a) Number of public information sessions conducted and attendance; b) Number of PHC related articles in newspapers | 12. a) Record of promotional activities; b) Articles and PHC related promotions appearing in newspapers | 12. a) and b) Project Coordinator, PHC Team members | 12. a) and b) File review, consultation with PHC Team members | 12. a) Compare the number and location of public information events planned with actual events implemented and degree of community participation; b) Review number and type of articles appearing in different community newspapers | 12. a) Project Coordinator will maintain a record of the PHC public information sessions and attendance in the APR; b) Project Coordinator will collect and archive all newspaper articles related to the PHC initiative | 12. a) and b) Record of promotional activities will be maintained by the Project Coordinator on an ongoing basis. Prepare summary reports in Dec. 2004, July 2005 and April 2006 as part of the APR |
| | 13. Has community awareness and knowledge of PHC services and programs increased? | 13. a) Increased community awareness of PHC services and programs (Score on Client/Patient Satisfaction Tool CPST); b) Increased requests for health information (Score on TET question Q41); c) Percentage of community members registered with the PHC Team | 13. a) Survey of community members; b) PHC Team members' account of requests for information; c) Record of residents registered with the Team | 13. a) Survey; b) PHC Team members; c) Project roster, Project Coordinator, Regional Health Board | 13. a) Randomized survey of community members; b) Self administered survey – TET; c) File review, consultation with Regional Health Board | 13. a) Develop SPSS data base and compare Feb. 2005 baseline results to Feb. 2006 results, conduct multivariate analysis; b) Develop SPSS data base and compare Feb. 2005 baseline results to Oct. 2005 and April 2006 results; c) Review number and percentage of community members registered in Dec. 2004 and July 2005 and April 2006 | 13. a) OPHC will conduct the survey and HCA will process and analyze the data; b) OPHC will distribute the surveys and Team members will forward to HCA for data entry and analysis; c) Project Coordinator will consult with Regional Health Board and maintain record of roster development in the APR | 13. a) Conduct CPST survey in Feb. 2005 and Feb. 2006. Prepare summary reports in July 2005 and April 2006 as part of the APR; b) Conduct TET survey in Feb. 2005, Oct. 2005 and April 2006. Prepare summary reports in Dec. 2004, July 2005 and April 2006 as part of the APR; c) Review status and prepare summary reports in Dec. 2004, July 2005 and April 2006 as part of the APR |

## Table 7: Evaluation Matrix (Cont'd)

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**Evaluation Matrix – Effectiveness (5)**

| Issue | Evaluation questions | Indicator | Data required | Source of data | Method of collection | Analysis | Responsibility | Timing |
|---|---|---|---|---|---|---|---|---|
| **Effectiveness** | 14. Has community and client/patient involvement in planning and delivery of PHC services increased? | 14. a) Community Advisory Committee established; b) Number of CAC meetings conducted on an annual basis; c) Number of recommendations submitted by CAC and acted on by PHC Team; d) Increased community involvement in planning services (Score on TET questions Q35, Q36, Q38-Q40; e) Number of partnerships developed with other stakeholders (e.g. Personal Care Homes, School Board, Family Resource Centre, RCMP, etc.) | 14. a) b) and c) Project documents, CAC Terms of Reference and records; d) PHC Team member perception of community and client/patient involvement in planning services; e) List of partnerships established | 14. a) b) and c) Project Coordinator, CAC chairperson; d) PHC Team members; e) Project Coordinator, PHC Team Members | 14. a) b) and c) File review and consultation with CAC chairperson; d) Self administered survey – TET; e) File review and consultation with PHC Team Members | 14. a) b) and c) Review of records; track frequency of CAC meetings and attendance; compare recommendations submitted by CAC and recommendations acted on by PHC Team; d) Develop SPSS data base and compare Feb. 2005 baseline results to Oct. 2005 and April 2006 results; e) Review of records, Track number and type of partnerships established or terminated with other key stakeholders over time | 14. a) b) and c) Project Coordinator will consult with CAC chairperson and review record of CAC meetings and activities; d) OPHC will distribute the surveys and Team members will forward to HCA for data entry and analysis; e) Project Coordinator will consult with PHC Team Members | 14. a) b) and c) Record of CAC meetings and activities will be maintained by the Project Coordinator on an ongoing basis as part of the APR. Prepare summary reports in Dec. 2004, July 2005 and April 2006; d) Conduct TET survey in Feb. 2005, Oct. 2005 and April 2006; e) Record of partnerships with other key stakeholders will be maintained by the Project Coordinator on an ongoing basis as part of the APR |
| | 15. Has communication technology enhanced the capacity of PHC Team members to communicate in an effective and efficient manner? | 15. a) Availability of Broadband by community by end of year 2004 and 2005; b) Percentage of PHC Team members with access to videoconferencing equipment by end of year 2004 and 2005; c) Increase in hours of use and reduction of travel costs on an annual basis; d) Effective use of technology (Score on TET question B6) | 15. a) b) and c) Project records; d) PHC Team member perception of effective use of technology | 15. a) b) and c) Director of Information with Regional Health Board, PHC Team members, Administrative records; d) PHC Team members | 15. a) b) and c) File review including review of comments provided by PHC Team members; d) Self administered survey – TET | 15. a) b) and c) Review records and track usage of equipment over time; determine travel cost savings through use of technology on an annual basis; d) Develop SPSS data base and compare Feb. 2005 baseline results to Oct. 2005 and April 2006 results | 15. a) b) and c) Project Coordinator will consult with Director of Information with Regional Health Board and review relevant records; d) OPHC will distribute the surveys and Team members will forward to HCA for data entry and analysis | 15. a) b) and c) Record of the availability and usage of videoconferencing equipment will be maintained by the Project Coordinator on an ongoing basis as part of the APR. Prepare summary reports in Dec. 2004, July 2005 and April 2006; d) Conduct TET survey in Feb. and Oct. 2005 and April 2006 |

## Table 7: Evaluation Matrix (Cont'd)

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**Evaluation Matrix – Access and Reach (1)**

| Issue | Evaluation questions | Indicator | Data required | Source of data | Method of collection | Analysis | Responsibility | Timing |
|---|---|---|---|---|---|---|---|---|
| **Access and Reach** | 1. Does the PHC Team include/involve health care service providers from all practice settings and all geographic areas of the region? | 1. Diverse representation on the PHC Team | 1. Project documents, PHC Team membership list | 1. Project Coordinator | 1. File review | 1. Review records, track change in PHC Team composition, and compare June 2004 baseline profile to June 2005 and Jan. 2006 profile | 1. Project Coordinator will maintain record of PHC Team membership and develop team profile for the APR | 1. List of PHC Team members will be maintained by the Project Coordinator and updated on an ongoing basis in the APR. Prepare summary reports in Dec. 2004, July 2005 and April 2006 |
| | 2. Do all relevant service providers in the region have equal access to Meditech and CRMS? | 2. Percentage of relevant service providers with access to Meditech and CRMS | 2. Project records | 2. Project Coordinator, Director of Information with Regional Health Board | 2. File review and consultation with the Director of Information with Regional Health Board | 2. Track change in Meditech and CRMS coverage/usage comparing June 2004 baseline results to June 2005 and Jan. 2006 results | 2. Project Coordinator will consult with Director of Information with Regional Health Board and maintain record of Meditech and CRMS coverage/usage in the APR | 2. Prepare summary reports in Dec. 2004, July 2005 and April 2006 as part of the APR |
| | 3. Does the Project allow for community and client/patient involvement in the planning and delivery of PHC services | 3. See item number 14 under Effectiveness | 3. See item number 14 under Effectiveness | 3. See item number 14 under Effectiveness | 3. See item number 14 under Effectiveness | 3. See item number 14 under Effectiveness | 3. See item number 14 under Effectiveness | 3. See item number 14 under Effectiveness |
| | 4. Do clients and patients in the region have access to their preferred health care provider? | 4. Clients and patients are able to seek and receive care from the provider of their choice at the time of their choice (Score on Client/Patient Satisfaction Tool - CPST) | 4. Client/patient satisfaction with health care service | 4. Clients and patients | 4. Survey – Client Patient Satisfaction Tool (CPST) | 4. Develop data base and compare Feb. 2005 baseline results to Feb. 2006 results; multivariate analysis using age, gender, income, education, place of residence, etc. | 4. HCA will develop survey tool and data base template. OPHC will coordinate and implement the survey, and process and analyze e data | 4. Conduct CPST survey in Feb. 2005 and Feb. 2006. Prepare summary reports in Dec. 2004, July 2005 and April 2006 as part of the APR |

## Table 7: Evaluation Matrix (Cont'd)

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**Evaluation Matrix – Impact (1)**

| Issue | Evaluation questions | Indicator | Data required | Source of data | Method of collection | Analysis | Responsibility | Timing |
|---|---|---|---|---|---|---|---|---|
| **Impact** | 1. Has the Project resulted in improved delivery of PHC services in the region? Have there been any unplanned effects? | 1. a) Improved level of service delivery as perceived by PHC Team members (Score on TET questions Q35, Q39; Score on SPT questions Q51, Q61, Q64-Q66, C3); b) Increased level of client/patient satisfaction (Score on CPST) | 1. a) PHC Team member perception of improvements in service delivery; b) Client, patient perception of quality of service delivery | 1. a) PHC Team members; b) Clients and patients | 1. a) Self administered surveys – TET and SPT, Focus group with PHC Team members; b) Survey | 1. a) Develop SPSS data base and compare Feb. 2005 TET/SPT results to Oct. 2005 and April 2006 results, conduct multivariate analysis; Review of actual vs. intended results, review of unexpected positive and negative results; b) Develop data base and compare Feb. 2005 results to Feb. 2006 results; multivariate analysis using age, gender, income, education, etc. | 1. a) OPHC will distribute the surveys and Team members will forward to HCA for data entry and analysis; HCA will conduct focus group with the PHC Team; b) HCA will develop survey tool and data base template. OPHC will coordinate and implement the survey, and process and analyze the data | 1. a) Conduct TET and SPT baseline surveys in Feb. 2005 and follow-up surveys in Oct. 2005 and April 2006; Conduct focus group in Feb. 2006; b) Conduct CPST survey in Feb. 2005 Feb. 2006. Prepare summary reports in Dec. 2004, July 2005 and April 2006 as part of the APR |
| | 2. Has the Project resulted in improved health status of the population? | 2. a) Increase in the number of community residents participating in wellness programs; b) Improvement in health status indicators | 2. a) Registration records; b) Record of participation in cervical screening programs, diabetes management programs, etc.; Health status data collected by NLCHI, Statistics Canada, Regional Health Board, Memorial University, etc. that applies to the region | 2. a) Project Coordinator, Wellness Facilitator, registration records; b) Cervical Screening Working Group, Diabetes Management Working Group, etc.; NLCHI, Statistics Canada, Regional Health Board, Memorial University | 2. a) File review and consultation with Wellness Coordinator; b) File review and consultation with Cervical Screening Working Group; Consultation with NLCHI, Statistics Canada, Regional Health Board, Memorial University | 2. a) Review records, compare number of initiatives and level of participation in June 2004 to June and Dec. 2005; b) Review records, compare number of program participants in 2004 with 2005; Review records, compare change in status 2004 - 2006 | 2. a) Project Coordinator will consult with Wellness Facilitator and maintain record of Wellness initiatives and community participation; b) Project Coordinator will consult with Working Groups and report on community participation; Consult with NLCHI, Regional Health Board, Memorial University, etc. and review available files on health status indicators | 2. a) and b) Prepare summary reports in Dec. 2004, July 2005 and April 2006 as part of the APR |

### 6.1.2 Evaluation Design

The evaluation of the PHC Renewal Initiative used two approaches: quasi-experimental and historical/retrospective.

The **quasi-experimental** approach is generally used to demonstrate the effectiveness of a project. This approach attempts to prove that an intervention produced a desired result. This approach involves planning for the evaluation prior to the implementation of the project. The methods associated with this approach are generally quantitative in nature and emphasize measuring, summarizing, aggregating and comparing measurements in order to draw conclusions. Basic elements of this approach include:

- Collecting base line data on project beneficiaries prior to project implementation (e.g. pre-test of PHC Team members and clients prior to full implementation of the project);
- Collecting information from the same beneficiaries after the project has been in place for some time (e.g. post-test of PHC Team members and clients 12 months after the initiation of the project); and
- Assessing the change in beneficiaries and trying to attribute the change or some portion of the change to the project.[13]

Baseline data was collected from PHC Team members and clients using standardized survey instruments in each of the eight team areas to track changes over time (e.g. changes in PHC Team effectiveness and scopes of practice, changes in client/patient satisfaction, etc.).

The other major approach used for this evaluation is the **historical/retrospective** approach, which relies on the memory of people who participated in the project. This approach asks project participants to contribute information and opinions based on their professional experiences. The historical approach also relies on records/documents that can be used to recreate and evaluate the project. Key informant interviews, focus groups and standardized records were used as part of this approach. Additional details on the evaluation methods are presented in Section 6.2.

[13] The quasi-experimental approach differs somewhat from the true experimental approach in that it does not include a control group (i.e. a similar group of people who do not participate in the project). The benefit of using a comparison group is that it enables the researcher to assess the 'internal validity' of the evaluation study. This term refers to the extent to which the differences observed in the study can be attributed to the experimental treatment (i.e. PHC project activities) rather than other rival plausible explanatory factors (Palys, 1992. p.245).

The combination of the approaches described above facilitates the examination of both process and outcome related performance indicators. Resources, activities, and units produced (outputs) typically relate to process indicators (e.g. Did the project do what it intended to do?) while outcome indicators correspond with measures of change in individuals, institutions and communities (e.g. Did the project change what it intended to change?).

*Capacity Building*

The evaluation of the PHC Renewal Initiative followed a partnership approach. While external evaluation consultants were used to assist in developing the evaluation plans for the eight team areas, much of the data collection was managed and coordinated by project stakeholders including OPHC, Project Coordinators, and Wellness Facilitators.

With guidance from the evaluation consultants the Project Coordinator and Wellness Facilitator in each team area took the lead role in collecting data related to various process indicators and maintaining a record of project activities in the Administrative Process Record (APR). OPHC took the lead role in managing and coordinating the PHC Team surveys and the client surveys with assistance from the Project Coordinators and guidance from the evaluation consultants.

The emphasis on staff involvement in the evaluation is linked to a desired outcome of the provincial PHC Renewal Initiative to enhance local capacity for project monitoring and evaluation.

*Stakeholder Consultations and Developing the Evaluation Framework*

In developing the evaluation framework for the PHC Renewal Initiative, the evaluation consultants followed an intensive consultation process with OPHC and the eight team areas. The consultation process included the following steps:

1. 1st meeting between the evaluation consultants and OPHC to review the evaluation work plan (September 2003).
2. 1st visit to the PHC team areas. Meetings between the evaluation consultants and local project stakeholders to introduce the evaluation work plan and the concept of the program logic model and evaluation matrix. Focus groups with stakeholders in each of the team areas were also conducted at this time to identify the main features of the local PHC initiatives (November 2003).
3. 2nd visit to the PHC team areas. Key informant interviews with local project stakeholders (Project Coordinator, Physician Lead, Community Advisory Committee chairperson, Regional Health Board representative, PHC Team representatives, etc.) to identify possible performance indicators and measures of success and appropriate methods for data collection (January 2004).

4. 1st meeting between the evaluation consultants, OPHC and Newfoundland and Labrador Centre for Health Information (NLCHI) to discuss the availability of health status indicators (February 2004).
5. 2nd meeting between the evaluation consultants and OPHC to present the draft evaluation plan and survey instruments prepared by the consultants (April 2004).
6. 3rd visit to the PHC team areas. Meetings between the evaluation consultant and the local project stakeholders to introduce the individual evaluation plan for each team area (June 2004).
7. Evaluation consultants present 2-day Results Based Management and Evaluation Workshop to Project Coordinators, Physician Leads, Community Advisory Committee representatives, and Regional Health Board representatives in St. John's (October 2004).

Each of the evaluation plans that were developed for the eight team areas included:

- A description of the project including goals and objectives, budget, profile of the project area and location of services, service provider profile;
- A complete program logic model including narrative summary, performance indicators and assumptions and risks;
- A complete evaluation matrix identifying the key evaluation questions, indicators, sources of data, methods of data collection, responsibility for data collection and timing for data collection;
- A detailed description of the evaluation methods and instruments; and
- Guidelines for preparing evaluation reports.

The evaluation was formally launched in June/July 2004 as Project Coordinators initiated data collection for the Administrative Process Record. The next section of this chapter provides a detailed description of the different data collection instruments that were developed for the evaluation.

## 6.2 Development of Instruments

A variety of data collection instruments were developed for the evaluation of the PHC Renewal Initiative including survey questionnaires, standardized records, key informant interview questionnaires, and focus group guides. Combining different research methods is useful in triangulating results. The concept of triangulation is based on the assumption that any bias inherent in particular data sources, investigator, and method will be neutralized when used in conjunction with other data sources, investigators, and methods. The following sub-sections provide additional details on each of the research instruments that were developed and used in the PHC evaluation.

### 6.2.1 Administrative Process Record (APR)

In order to track and monitor the various PHC project activities and products a standardized recording system known as the Administrative Process Record (APR) was developed by the evaluation consultants. The APR was designed for the Project Coordinators to use for the duration of the evaluation to compile information on the following PHC Project areas:

- PHC Team membership and activity,
- PHC Physician Network and PHC Network membership,
- Community Advisory Committee membership and activity,
- Correspondence/communication between the Project Coordinator and OPHC,
- PHC Promotions, and
- Health and Wellness program initiatives and Scope of Practice initiatives.

Most of the quantitative data was recorded in specially designed spreadsheets while the qualitative data was documented in descriptive reports. The APR schedule was designed to enable each of the Project Coordinators to prepare three semi-annual APR summary reports in December 2004, July/August 2005, and Spring 2006. The Project Coordinators used the summary reports to document the progress of the project implementation and evaluation, identify areas needing improvement, and report any unanticipated positive/negative outcomes resulting from the PHC initiative. Additional details on the various data collection components of the APR are provided below.

*Record of Primary Health Care Team Membership and Activities*

A record of PHC Team membership and participation (e.g. attendance at PHC Team meetings, PHC Team building activities, PHC orientation sessions, professional development/training activities) was maintained by the Project Coordinator using the PHC Team Activity spreadsheet. The Project Coordinators relied on a variety of resources/records to maintain this record (e.g. minutes from meetings, registration records, personal correspondence with PHC Team members, etc).

*Record of Physician Network Membership*

A list of the Physician Network members was maintained by the Project Coordinator using the Physician Network Membership spreadsheet. The Project Coordinator relied on personal correspondence with PHC Team members and Physician Network members to maintain and update this list on a semi-annual basis.

*Record of PHC Network Membership*

A list of the PHC Network members was maintained by the Project Coordinator using the PHC Network Membership spreadsheet. The Project Coordinator relied on personal

correspondence with PHC Team Members and PHC Network members to maintain and update this list on a semi-annual basis.

*Record of Community Advisory Committee Membership and Activities*

A record of PHC Community Advisory Committee (CAC) membership and participation (e.g. attendance at CAC meetings, CAC Team building activities, etc.) was maintained by the Project Coordinator using the CAC Member Activity spreadsheet. The Project Coordinator relied on a variety of resources/records to maintain this record including minutes from meetings, registration records, and personal correspondence with CAC members. The Project Coordinator also maintained copies of any reports/recommendations produced by the CAC in the APR.

*Correspondence/Communication with the Office of Primary Health Care*

A record of communications between the Project Coordinator and the Office of Primary Health Care (OPHC) was maintained by the Project Coordinator using the Communication with OPHC spreadsheet. The Project Coordinator maintained and updated the spreadsheet on an ongoing basis.

*PHC Promotions*

A record of PHC related promotional activities was maintained by the Project Coordinator using the PHC Promotions spreadsheet. The Project Coordinator maintained and updated the spreadsheet on an ongoing basis. The Project Coordinator also archived copies of all PHC promotional materials in the APR.

*Health Promotion/Wellness*

The Newfoundland and Labrador PHC Renewal Initiative used the *'Circle of Health'* Health Promotion Framework to guide strategic health promotion planning. The framework was initially developed in 1996 by the Prince Edward Island Health and Community Services Agency.

The framework provides a picture of the components of health promotion at-a-glance. The framework can be used to develop an inventory of health promotion initiatives in the PHC Project area and can help in identifying gaps or potential partnerships.

In general terms the framework is intended to:

- Promote a common understanding of health promotion;
- Assist people to locate links, relationships and contributions in health promotion work; and
- Provide direction for strategic planning for health promotion.

As part of the PHC Renewal Initiative, OPHC encouraged PHC team areas to adopt and use the Framework at the start of their health promotion initiatives. To facilitate this process OPHC provided a Circle of Health training session in October 2005 to Wellness Facilitators from each of the PHC team areas. The Wellness Facilitators then conducted training and information sessions during October 2005 with PHC Team members and interested CAC members.

In order to document the health promotion/wellness process two report templates were developed for the Wellness Facilitator to report on the various training and implementation activities:

1. The 'Training Report' documented the completion of the Circle of Health Framework training session, attendance at the session, and other contextual details including factors that impacted attendance at the training session, factors that impacted participation at the session, suggestions for improving the training session, etc. (Appendix A).

2. The 'Implementation Report' documented the application of the Framework in developing Health Promotion initiatives (Appendix B). The report was designed to capture information on each individual PHC Health Promotion initiative for the period post training (approximately October 2005 to May 2006).

Wellness Facilitators were responsible for completing the Circle of Health Training and Implementation Reports and communicating results/issues to the Project Coordinator. The Facilitators were responsible for ensuring that copies of the Reports were filed with the PHC Administrative Record as maintained by the Project Coordinator.

*Community Capacity Building*

The Newfoundland and Labrador PHC Renewal Initiative used a Community Capacity Building Tool (CCBT) to assist planning and building community capacity in community based health projects. The CCBT was adapted from a Health Canada instrument by the Department of Health and Community Services Newfoundland and Labrador, Office of Primary Health Care and Wellness Division.

As part of the PHC Renewal Initiative, the OPHC encouraged PHC team areas to adopt and use the CCBT in planning their community based health related initiatives.
To facilitate this process OPHC provided Wellness Facilitators with an instruction session on the use of the CCBT. The Wellness Facilitators then conducted training and information sessions with CAC members (September/October 2005).

The CCBT was used by the Community Advisory Committee to examine community capacity building in the context of the following ten features:

- Participation,
- Leadership,
- Community structures,
- Role of external support (e.g. funding agency),
- Asking why/understanding the issue(s),
- Obtaining resources,
- Skills, knowledge, and learning,
- Linking with others,
- Sense of community, and
- Sharing information.

The CCBT documented the extent to which the CAC and the Wellness Facilitator discussed and "mapped out" the ten features of community capacity building and the progress made along the "route" (e.g. just started, on the road, nearly there, we're there) in relation to the various features.

The baseline CCBT was completed as part of a group training activity (Wellness Facilitator, Community Advisory Committee, etc.). The Wellness Facilitator introduced the CCBT and "walked the group" through the tool as part of the training exercise. In the process the CAC completed the baseline CCBT.

The CCBT features a 'Results Summary Page' at the end of the tool, which serves to alert the CAC to features that are in need of improvement. One of the outputs of the CCBT is an action plan developed by the CAC with the assistance of the Wellness Facilitator. The action plan describes the method the committee will use to strengthen the features.

In order to document the CCBT process three report templates were developed for the Wellness Facilitator to report on the various training and implementation activities.

1. The 'Training Report' documented the completion of the CBBT training session, attendance at the session, and other contextual details including factors that impacted attendance at the training session, factors that impacted participation at the session, suggestions for improving the training session, etc. (Appendix C). The training report was completed in the fall 2005.

2. The 'Baseline Report' documented the completion of the baseline CCBT, level of committee participation in completing the CBBT and the action plan, level of discussion associated with each feature, and usefulness of the CCBT in identifying priority areas (Appendix D). The baseline report was completed in the fall 2005.

3. The 'Follow-up Report' documented the extent to which the action plan was implemented, level of committee participation, extent to which each of the features have been mapped out or completed, and usefulness of the CCBT in developing and

implementing an action plan (Appendix E). The follow-up report was completed in May 2006.

Wellness Facilitators were responsible for completing the CCBT and communicating results/issues to the Project Coordinator. The Facilitators were responsible for ensuring that copies of the Reports were filed with the PHC Administrative Record as maintained by the Project Coordinator.

*Scope of Practice*

OPHC developed a 5-phase process to facilitate the establishment of clear Scope of Practice (SOP) guidelines. A number of different process-related indictors are associated with the phases and are identified below.

As part of the OPHC approach to maximizing scopes of practice, the first step at the provincial level included an assessment of Shared and Separate Roles and Functions in relation to the five PHC domains of disease prevention, health promotion, curative care, rehabilitation, and supportive care.

This task was undertaken by the provincial level Scope of Practice working group. The working group consists of two representatives from each PHC team area (a physician and one other PHC provider) as well as representatives from professional groups and associations and from OPHC. A key result of the working group was an agreement that all PHC providers, regardless of profession, have a role to play in the five domains noted above. The working group also developed several instruments to assist PHC Projects in maximizing scopes of practice roles (skills inventory, SOP gaps and overlaps action plan, SOP decision-making impact window).

Phase 1 of the SOP process involved PHC team members defining community strengths, needs, and identifying gaps. It also involved defining the current resources available to the population.

Phase 2 of the process involved PHC Leads (Coordinators, Facilitators and Physician Leads) working with PHC team members to establish a skills inventory by profession. PHC providers completed a self-administered skills inventory that identifies tasks they complete, tasks they ask others to complete, tasks that they could appropriately do and tasks that wasted and took up a lot of time. The skills inventory were collated by the coordinators and shared with OPHC. OPHC used the inventory for planning facilitated sessions with PHC providers in Phase 3 of the Scope of Practice process.

For the purposes of the APR, the Project Coordinator reported on the total number of skills inventory records completed by all PHC providers and the total completed by the separate professions.

Phase 3 of the SOP process consisted of two parts. Part A involved separate professional groups participating in facilitated discussions (facilitated by OPHC, Coordinator, Facilitator, Physician Lead as appropriate) to review the data collected in Phase 2 and identify overlaps and gaps in scope of practice and corresponding opportunities and challenges. As a way of promoting capacity building at the PHC Project level, the objective of these sessions is to have PHC providers themselves identify gaps and overlaps in scope of practice as well as the corresponding opportunities/challenges.

For the purposes of the APR, the Project Coordinator reported on the total number of facilitated discussions conducted (e.g. conducted by OPHC, Project Coordinator, Facilitator, Physician lead, etc.) with participating professional group(s), and number of action plans developed.

This APR information was captured in the SOP Action Plans as prepared by the Project Coordinator – in Part B of Phase 3. Most of the facilitative discussions occurred during the summer 2005 and PHC team areas prepared preliminary SOP Action Plans during summer/fall 2005.

OPHC facilitated the SOP inter-professional action plans with Collaborative PHC providers as identified to determine how inter-professional cooperation may assist in the elimination of the gaps and overlaps identified where more than one group was involved. Local PHC Project Leads (i.e. Coordinator, Facilitator, Physician Lead, etc.) took the lead role in facilitating additional sessions as required.

A key output associated with this process was the development of Scope of Practice Action Plans for each professional group. Each Action Plan was prepared in a matrix format and identified SOP overlaps and gaps along with corresponding opportunities and challenges. The matrix also identified the action to be taken, assigned responsibility, and identified a timeline for the action. The following table shows the SOP Action Plan template. The template was be used for short-, intermediate- and long-term action plans.

The Coordinator also reported on the number of Action Plans produced as a result of the process. The Action Plans provided an indication of the number and type of overlaps and gaps identified through the process along with the corresponding opportunities and challenges and actions to be taken. A copy of the Action Plans were included as part of the APR.

**Table 8: Scope of Practice Action Plan Template**

| PHC Team Area: | | | | | |
|---|---|---|---|---|---|
| Professional Group: | | | | | |
| SOP Issues [a] | Opportunity | Challenge | Action | Responsibility | Timeline |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

[a] Short-term SOP issues are those that can be addressed fairly readily at the local PHC team level. Intermediate SOP issues will likely take longer to address than short-term issues, may have regional implications and may need discussions with collaborative groups or others at regional levels. Long-term SOP issues may have provincial and/or association level implications and require input/ action at those levels.

Phase 4 and 5 of the process involved continued daily implementation of the changes agreed upon in the facilitated sessions.

SOP evaluation issues related to effectiveness and impact were covered by other research instruments including the PHC Team Effectiveness Tool, and key informant interviews with health care service providers (see section 6.2.2 and 6.2.3 of the report).

*Chronic Disease Management Diabetes Collaborative*

As part of the Primary Health Care Renewal Initiative, PHC team areas captured a number of different process related performance indicators in relation to the Chronic Disease Management Diabetes Collaborative.

Project Coordinators worked with the local Diabetes Team to prepare a written record of the following information:

- A record of Group Sessions for Patients including the number of sessions conducted, the date of sessions, the number of participants and demographic information (e.g. age groups).
- A record of the number of CDM Diabetes Collaborative planning/leadership team meetings between providers including the number and date of meetings and the type of providers who attended the meetings (e.g. MD, Nurse Practitioner, Social Worker, etc.).

- A record of the number of training/education sessions for health care providers as relates to diabetes care (e.g. Fall Learning session – Moving Forward-Supporting Self Management in Persons with Diabetes, Health Care Providers and Communities; Physician/Provider Education Supper; Practical Diabetes Management; Chronic Disease Management; Learning Session #1-Social Inequities and Chronic Disease workshop; other educational sessions initiated through OPHC.

Additional CDM evaluation issues related to effectiveness and impact were covered by other research instruments including the PHC Team Effectiveness Tool (see section 3.2 of this report).

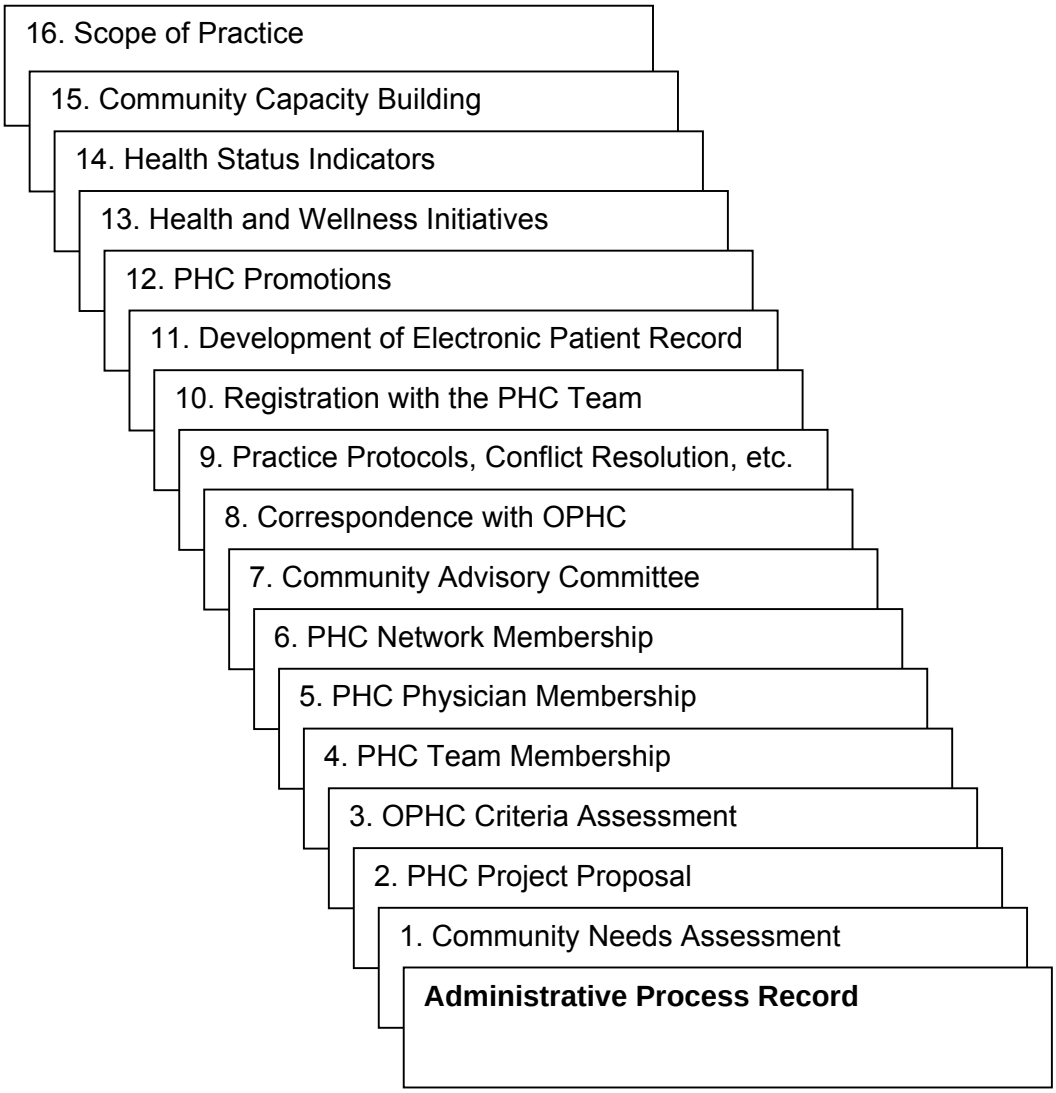
*Additional Information Compiled in the APR*

The Project Coordinator also used the APR for compiling the following information:

- A copy of the Project Proposal.
- A copy of the Criteria Assessment as completed by the Office of Primary Health Care.
- A record of the development of practice protocols, referral processes, conflict resolution processes to be used by the PHC Team. The provincial Scope of Practice Working Group provided this information to the Project Coordinator.
- A record of the number of area residents registered with the PHC Team – updated semi-annually. The Project Coordinator worked with the Regional Health Board(s) in obtaining this information and reporting on the status of the roster as part of the semi-annual progress reports.
- A record of Meditech and CRMS availability across the region – updated semi-annually. The Project Coordinator worked with the Regional Health Board(s), Director of Information Systems, etc. in obtaining this information and reporting on the availability of these systems as part of the semi-annual progress reports.

*APR Recording Format*

The Project Coordinator prepared a filing system (e.g. three ring binders, file folders, etc.) for compiling and organizing the information associated with each of the major PHC activities. An example of a filing system is presented below.



*Challenges in Implementing the APR*

Time constraints did not allow for the APR instruments to be pre-tested. A detailed user manual for the APR was prepared by the evaluation consultants, which explained the type of data to be collected and recorded in the APR. The manual and the instruments were introduced to the Project Coordinators by way of a teleconference, which was hosted/facilitated by the evaluation consultants. The Project Coordinators provided feedback on the APR tools as they were implemented during the progression of the project. Several updates to the APR manual were prepared by the evaluation consultants and teleconferences were conducted by OPHC and the consultants to introduce the changes to the Project Coordinators.

Establishing and maintaining the APR at the initial stages of the project proved to be a time consuming activity for many of the Project Coordinators as they tried to learn their way around the APR while being heavily engaged with a number of PHC start-up activities including establishing the PHC Team, establishing the CAC, developing promotions, participating in training, etc. Complicating this issue was the fact that the Project Coordinators had varying degrees of experience/skills in working with spreadsheet software (Excel), which resulted in additional coaching in some cases.

By the time Project Coordinators completed the second APR report, the evaluation consultants had addressed the initial technical issues and the Project Coordinators had become much more familiar with the instruments and the data entry process. The evaluation consultants fielded far fewer questions in relation to the completion of the 2nd APR report compared to the completion of the 1st APR report.

Had time permitted, the preferred approach for developing the APR would have consisted of advance consultations with OPHC and Project Coordinators, followed by the development of draft instruments, and field testing of the instruments in at least two locations. A formal on-hands computer training session with Project Coordinators would have also been helpful in ensuring that Coordinators were properly trained in using the spreadsheet program to compile the data.

### 6.2.2 Team Effectiveness and Scope of Practice Tool (TET)

The team effectiveness tool (TET) is a questionnaire that was completed by providers and was used to assess their perception and satisfaction with team functions and service delivery in the team context. The starting point for this instrument was the team effectiveness tool that was being developed by the Primary Health Services Branch of Saskatchewan Health (White G, 2002). The Saskatchewan tool was developed based on ideas from *"The Team Building Source Book"* by S Phillips and R Elledge (1989) and *"The Team Character Inventory"* developed by DW Jamieson (1989).

The Saskatchewan instrument consisted of a series of statements with which the provider respondent would indicate his or her level of agreement on a likert scale. These statements were grouped under the following six domains of team functioning:

- *Team Purpose and Vision:* which assesses the clarity of a team's goals and objectives;
- *Roles:* which assesses the clarity of expectations and roles of each team member;
- *Communication:* which assesses the effectiveness of information flow, decision-making, leadership and delegation;
- *Team Support:* which assesses the level of trust, confidence and cohesion within the team;
- *Partnerships:* which assesses the extent to which clients/patients, their families and the community are engaged in the planning and delivery of PHC services;
- *Service Delivery:* which assesses the integration and coordination of care, the continuum of care from prevention to rehabilitation, and the clarity of protocols for care delivery.

Specific statements in this instrument were amended and supplemented following a review of the literature on the effectiveness of interdisciplinary PHC teams. The two most influential articles were by Borrill et al (2001) and Bronstein (2003).

A study by Borrill et al (1) was conducted in the UK between 1998 and 2000. They collected quantitative and qualitative data from approximately 400 teams (primary and secondary health care teams) in the National Health Service. Using a program logic-like model, they collected data on input and output indicators (e.g., resources, team task, organizational context, team composition) as well as short-term outcome indicators (e.g., clarity of objectives, leadership, reflexivity, communication), and longer term outcome indicators (e.g., team effectiveness (self & externally rated), clinical outcomes and cost effectiveness).

Using a "team working questionnaire" of the same structure (i.e., statements to which provider respondents indicated agreement on a likert scale), they found that the clearer the team's objectives the more innovative they were, and the more effective they were across virtually all domains of functioning. The greater the role clarity and the better the peer support, the better the mental health and satisfaction of the providers. Lack of team leadership was associated with low levels of team effectiveness and innovation. Professional diversity on teams increased innovation. Drawing from these observations, statements were added to the TET that would allow assessment of organizational support for the team, reflexivity of the team, and innovation of service delivery.

Laura Bronstein of Binghamton University in New York describes the components of an interdisciplinary collaboration model and presents a psychometrically assessed questionnaire to measure team effectiveness on these components (Bronstein, 2003). Again, the structure of the questionnaire contains statements to which provider

respondents indicate agreement on a likert scale. The components described are as follows:

- *Interdependence:* which means that group members' abilities to carry out their jobs most effectively are dependent on each other;
- *Newly created professional activities:* which refers to collaborative programs that can achieve more than could be achieved by the same professionals acting alone;
- *Flexibility:* which refers to the alteration of roles as professionals respond creatively to what's called for;
- *Collective ownership of goals:* which involves collaborative development and implementation of action plans; and
- *Reflection:* which refers to collaborators' attention to their process of working together.

Some of Bronstein's statements for the assessment of each of these components were added to the TET. The statements added were those that complemented or more clearly worded statements that were already in the TET.

An initial draft of the TET was presented to the OPHC for feedback/input. Three substantial amendments were generated from this review. The first was the inclusion of personal satisfaction statements, which constituted a new domain in the TET. Second, the following statements were added in order to assess changes in the scope of practice of team members over the repeated application of the TET:

- "Each member's abilities, knowledge and experience are fully utilized by the team";
- "Service is being delivered through appropriate providers (i.e., there is a good match between client/patient needs and provider skills)";
- "Other professionals in my practice setting utlilize my professional expertise for a range of tasks"; and
- "My scope of practice is being fully utilized within my practice setting".

The third amendment during this OPHC review was the separation of the "Roles", "Service Delivery" and "Personal Satisfaction" domains into Part B of the TET. Part B contains the scope of practice statements and has therefore been referred to as the "Scope of Practice Tool" (SPT).

The revised survey instrument, including Parts A (TET) and B (SPT), was validated for content in the following manner. The TET was sent to the Project Coordinators for each of the eight team areas in Newfoundland and Labrador as well as to representatives of the OPHC. These individuals were asked to determine whether the domains and statements in the questionnaire measured the important dimensions of PHC team development in their team area. Revisions were made and confirmed through a series of teleconferences.

Construct validation of the TET was also undertaken. Statements were included that should, theoretically, correlate. Following the baseline application of the TET these statements were analyzed and found to be highly correlated. For example, the scope of practice questions listed above had statistically significant correlation coefficients ranging from 0.35 to 0.65. In addition, one statement that appeared in Part A of the TET was repeated in opposite form in Part B. These statements were: "Our team has the support of the regional health board(s) management", and "Our team does not have the support of the regional health board(s) management". The correlation coefficient between these two questions was -0.51.

Finally, before the baseline application, the TET was pilot-tested. Twenty TETs were self-administered by providers in three of the PHC team areas (10 in Grenfell, 5 in Twillingate and 5 in Connaigre). Test respondents were asked to comment on the clarity of meaning, wording, and flow/organization of the statements. The spread of likert scores was also examined. Appropriate revisions were made (e.g., the likert scale was changed to a 7-point scale from a 5-point scale to permit greater spread). The revised TET was tested once again with five providers in Bonne Bay.

The final version of the TET, including Parts A and B, is provided in Appendix F.

The TET instrument was designed to be administered to PHC team members on three different occasions over the course of the Renewal Initiative:

- Baseline: prior to the formal development of the PHC teams (Fall 2004)
- 1st follow-up:1 year post baseline (Fall 2005)
- 2nd follow-up:1.5 year post baseline (Spring 2006)

The follow-up TET included questions related to Chronic Disease Management actions as this was a highlighted part of the PHC Renewal Initiative for all team areas.

St. John's PHC Team Area

The implementation of the TET in St. John's was delayed as the focus of the PHC team moved from the development of an urban PHC Centre to two areas of emphasis: an expansion of the Chronic Disease Management, Diabetes Collaborative model to other physician practices in the urban areas (Zone 1) and development and implementation of Mental Health programs (Zone 2). As a result of these changes data collection associated with the TET was still in process in St. John's at the time this report was completed. A separate report will be prepared for the St. John's TET data.

*Challenges in Implementing the TET*

The TET was distributed to all of the PHC team members based on the lists of team members prepared by the Project Coordinators in each PHC team area. The lists were submitted to OPHC, which took responsibility for mailing the survey questionnaires to team members. As a way of ensuring confidentiality, respondents were directed to complete the survey and mail it directly to the evaluation consultants.[14] Given that the teams were at a very early phase of development at the time of the baseline survey, it was decided to provide each respondent with a list of members for the local PHC team as part of the survey package. Respondents were asked to review the team list when responding to team based questions.

Once the survey questionnaires were distributed, the evaluation consultants monitored responses and asked the Project Coordinators to issue several notices to remind team members to complete and submit the survey questionnaire. The overall response rate for the TET baseline survey was 32% while the response rate for the second and third survey was 33% and 22% respectively.[15] Additional details on the TET response rates are presented in section 7.1.1.

Although participation in the TET survey was voluntary, a much higher response rate was expected considering that the survey was directed at a select group of participants who were strongly encouraged to participate as part of the Renewal Initiative. It appears that several factors contributed to the low response rate including limited advance communication about the project to team members, uncertainty of the team composition, uncertainty of individual role on the team, and limited preparedness of some of the local coordinating bodies to initiate the baseline survey. The timing of the PHC initiative also coincided with the provincial restructuring of the Regional Health Boards. As noted by a number of respondents, Board restructuring served to distract attention from the PHC initiative.

### 6.2.3 Scope of Practice Key Informant Interviews

Key informant interviews were conducted by phone with health service providers in each team area. They were conducted to determine the extent to which the actions taken in the scope of practice process had had an impact on their scope of practice. The collection of this qualitative/quantitative data was used to provide a more complete understanding of the statistical associations (or lack of them) identified in the quantitative data from the TET and APR.

[14] Respondents were provided with a self-addressed, stamped envelope for returning the survey.
[15] The deadline for submitting the TET survey was extended several times in order to achieve a higher response rate, which ultimately reached 32%. As a result, the collection of baseline data lasted over a period of four months for some team areas. The two follow-up TET surveys were conducted over a 6-8 week period.

The key informant interviews involved a small sample of the PHC team members (3-4 team members) in each team area randomly selected from a list of health service providers as provided by the Project Coordinator. Participants selected for a telephone interview were contacted by the OPHC and were asked whether they have participated in the SOP process. This step ensured that participants scheduled for an interview had experience with the process and thus could provide valuable inputs. Each interview took approximately one hour to complete.

The key informant interviews were conducted from June to the end of July 2006. The questions were formulated around the SOP processes such as," Have you, in the past, completed a self-administered skills inventory checklist?" The questionnaire guide was developed by the evaluation consultants with inputs and feedbacks from OPHC. The questionnaire was pilot-tested with five randomly selected interviewees from across the eight Team areas. The questionnaire interview guide is presented in Appendix H.

A total of 27 key informant interviews were conducted in the month of June and July, 2006. All interviews were phone interviews conducted by either an OPHC staff or the evaluation consultant with the exception of two participants where the questionnaire was self-administered.

*Challenges in Implementing the SOP Key Informant Interviews*

The Scope of Practice interviews were conducted over the summer months and also towards the end of the PHC Initiative, therefore booking interviews for service providers in the team areas was difficult. Additionally, the team areas experienced staff turnovers and the list of SOP providers was not updated to reflect these changes. OPHC coordinated the interviews using randomly selected providers as selected by the evaluation consultant. Challenges were experienced in contacting some providers and new candidates had to be selected for interviews. Providers were contacted a minimum three times before a new candidate was selected.

### 6.2.4 Client/Patient Satisfaction Tool (CPST)

The goal was to develop a telephone-based interviewer-administered instrument that measured the following in a random sample of the general population in each team area in Newfoundland and Labrador:

- Use of (or attempt to use) health and/or social services in past year;
- Access (and barriers to access) to those services;
- Satisfaction with services used;
- Provider types used;
- Level of involvement in own health care; and
- Respondent characteristics.

To develop this client/patient satisfaction tool, the evaluation consultants reviewed questionnaires being used in Newfoundland and Labrador. These included a patient satisfaction survey in Grenfell (Grenfell Regional Health Services, 2002) and a needs assessment survey in St. John's (Health Care Corporation of St. John's, Health and Community Services, and Memorial University Faculty of Medicine, 2004).

Published literature was also reviewed to assess the options for measuring client/patient satisfaction (Ware et al., 1983) and access to PHC (Guendelman et al., 2002; Damiano et al., 2003;Ortega et al., 2000; Ledlow et al., 2000; Battleman et al., 2001; Murray and Tantau, 1999; Luck et al., 2002; Harley et al., 2002; Rosenheck, 2000; Conviser and Pounds, 2002; Sherer et al, 2002; Murray et al., 2003 and Garrett et al, 2003). The questionnaire was drafted, reviewed and validated in the same fashion as the TET. The satisfaction tool was pilot-tested with 20 randomly selected members of the general population in St. John's (10) and Connaigre (10).

The client/patient survey was designed to be administered to community residents on two different occasions over the course of the Renewal Initiative:

- Baseline: prior to the formal development of the PHC teams (Spring 2005)
- Follow-up: 1 year post baseline (Spring 2006)

The final version of the client/patient satisfaction tool as used by seven of the PHC team areas (Bonavista, Bonne Bay, Connaigre, Grenfell, Labrador East, Placentia, and Twillingate/New World Island) is provided in Appendix G.

*Challenges in Implementing the CPST*

Survey participants were selected at random from local phone directories. OPHC and a team of trained surveyors with the Newfoundland and Labrador Centre for Health Information (NLCHI) conducted the surveys by telephone. A sufficient number of baseline surveys were conducted in each team area to provide a 95% level of confidence in the results. Over 2,500 client/patient surveys were completed for the baseline and the same number for the follow-up surveys by NLHCI and OPHC. In both time periods the surveys were completed over the course of about eight weeks. Additional details on the response rates are provided in section 7.3.1.

A challenge for the survey team was obtaining an even balance of male and female respondents. As a result, female respondents were overrepresented (70%+) in both the baseline and follow-up survey.

St. John's PHC Team Area

The St. John's team area decided to use a separate survey instrument in relation to its plans to develop an urban PHC Centre.[16] The St. John's client survey instrument was developed in conjunction with Memorial University. In addition to identifying client lifestyle characteristics and common health/community problems, the St. John's instrument included a number of similar questions from the client/patient instrument that was used by the other seven PHC team areas. A notable difference between the two instruments is that many of the St. John's questions asked the respondent to comment on the experience of all household members while the survey questions used by the other seven PHC team areas focused on the experience of the individual respondent. Thus, while the questions asked for similar types of information, the data collected from St. John's data and the data collected from the other seven team areas was not directly comparable.

A further complication for using the St. John's client/patient data in the evaluation was the decision to revise the focus of the PHC team from the development of an urban PHC Centre to two areas of emphasis: an expansion of the Chronic Disease Management, Diabetes Collaborative model to other physician practices in the urban areas (Zone 1) and development and implementation of Mental Health programs (Zone 2). As a result of these changes the catchment area also changed and the data collected for the baseline survey was no longer appropriate for the new Zones. For the above reasons it was decided not to proceed with a follow-up client survey for the St. John's group and the baseline client survey results for this team area were not included in the overall evaluation.

Labrador East PHC Team Area

The client/patient survey methodology and questionnaire was modified for several coastal communities in the Labrador East PHC team area to encourage and facilitate the participation of Labrador's aboriginal communities. In February 2005, the Labrador East Project Coordinator met with the evaluation consultants and representatives from OPHC to discuss limitations of the client/patient survey tool and develop an alternative methodology. One of the issues to be addressed was language. The first language of the Innu of Sheshatshiu and Natuashish is Innuaemun (there are two distinct dialects in these communities). There are also five Inuit communities (Nain, Hopedale, Rigolet, Makkovik, and Postville) where many people's first language is Inuktitut. Another

[16] The original St. John's Primary Health Care Project included two concurrent components for the renewal of PHC services: 1) the establishment of an innovative, interprofessional, integrated urban PHC Center based on identified needs within prescribed population parameters; and 2) a strategy to increase access to sustainable PHC services throughout the region through the implementation of selected key components of PHC services; in partnership with existing stakeholders who have demonstrated an interest and involvement in PHC renewal.

challenge in reaching residents in these communities was the disproportionate number of households that do not have telephones.

As a first step in developing an appropriate methodology, the Project Coordinator contacted representatives of partnering health care organizations in the aboriginal communities to discuss the possibility of conducting face-to-face interviews using local residents and health agency staff to translate and conduct the survey. Representatives of each health organization (Labrador Inuit Health Commission, Sheshatshiu Innu Health Commission, and Mushuau Innu Health Commission) all agreed to this methodology.

One local bilingual interviewer from each community was recruited to conduct the interviews. All seven interviewers and the Project Coordinator attended an interview training session offered by OPHC. The session introduced the questionnaire, the face-to-face interview process, the sampling process, and issues related to confidentiality.

Sampling in the communities was done by random selection of houses (e.g., every $n^{th}$ house was selected after randomly selecting a starting household.). The interviewers were provided with a target number of surveys in each community. The targets were weighted to reflect the local proportion of the total population for the Labrador East PHC team area.

The completed surveys were translated into English and forwarded to OPHC for data entry. The database was then forwarded to the evaluation consultant for analysis. A total of 67 coastal community residents completed the baseline survey while only 14 residents completed the follow-up survey. Given the low response rate for the follow-up group the researchers decided not to include the coastal community survey data in the Labrador East team area analysis.

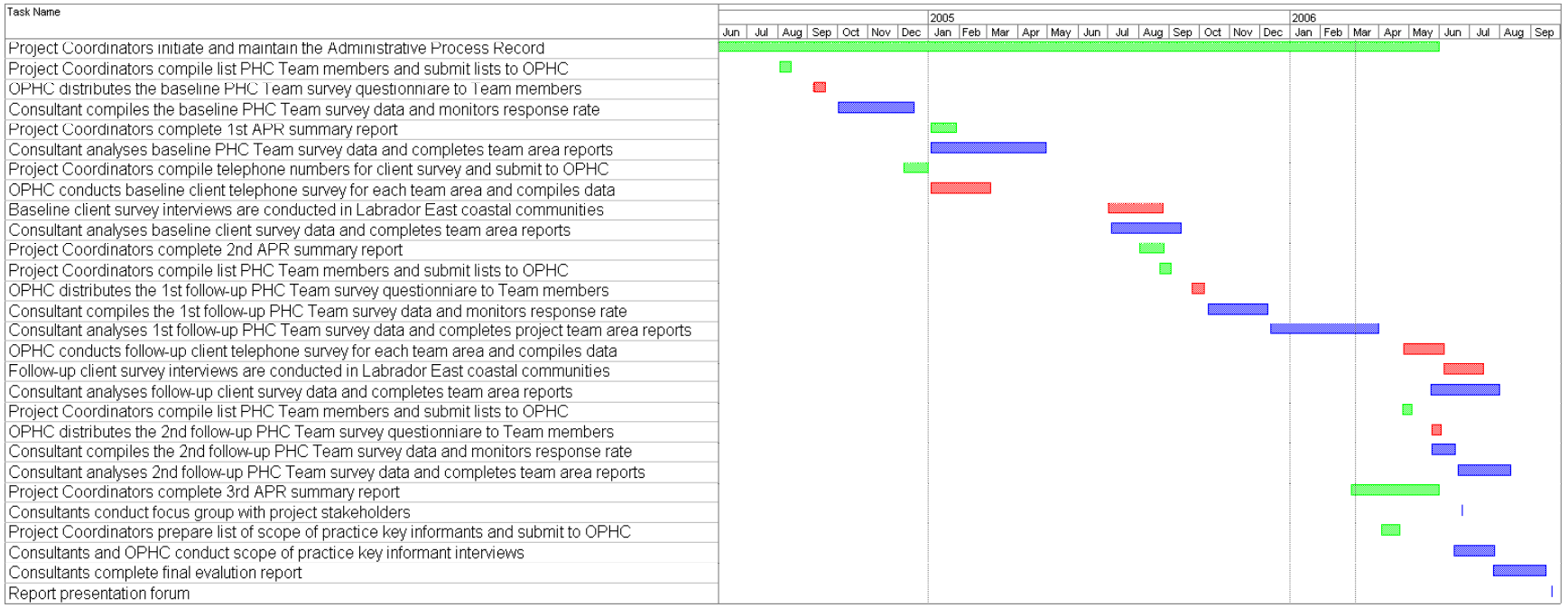
### 6.2.5 Stakeholder Focus Group

A focus group with PHC team area stakeholders was conducted in St. John's on June 23rd, 2006. The focus group was organized and coordinated by the Office of Primary Health care with assistance from the different Project Coordinators and facilitated by external consultants (Harry Cummings and Associates and Med-Emerg International).

Each Project Coordinator took responsibility for inviting 3 or 4 key project stakeholders (e.g. Project Coordinator, Project Facilitator, Physician Lead, Regional Health Board representative, Community Advisory Committee representative, etc.) to the focus group. The purpose of the focus group was to review the progress of the PHC team areas, and to learn/share PHC related successes, challenges, unexpected results, etc. The focus group session lasted approximately seven hours. The full agenda for the focus group is presented in Appendix I.

## 6.3 Evaluation Time Frame

The following Gantt chart illustrates the timing of the different evaluation activities associated with the Newfoundland and Labrador Primary Health Care Renewal Initiative.




Responsibility:

- PHC Project Coordinator
- Evaluation Consultant
- Office of Primary Health Care

## 6.4 Ethical Reviews

Any researcher has an obligation to respect the rights, needs, values, and desires of the informant(s). During an evaluation, sensitive information is frequently requested from informants or revealed in the process of investigation. A number of safeguards were employed during the evaluation to ensure that the information provided by informants (e.g. PHC Team survey, client/patient survey) remained confidential.

Where surveys, key informant interviews and focus groups were used to collect information, the research objectives and a description of how the data will be used was articulated in a written and/or verbal form that could be clearly understood by the informants. For example, the preamble for the PHC Team Effectiveness Tool contains the following information:

- A statement identifying the purpose of the survey;
- A statement identifying the study group;
- A statement indicating that participation in the survey is voluntary;
- A statement indicating how the information provided by the respondent will be used; and
- A statement indicating that the information provided will remain confidential and that data from the survey will be aggregated and used in a nameless, summarized form.

The Office of Primary Health Care submitted an ethics application to the Memorial University Human Investigation Committee. The application included an example of one of the eight evaluation plans (St. John's Region) and the data collection instruments that were designed to monitor and evaluate the project (e.g. Team Effectiveness Tool, Client/Patient Satisfaction Tool, Administrative Process Record, Stakeholder Focus Group, etc.).

The Project Coordinator in each PHC team area was also encouraged to share the evaluation plan with a local ethics committee (e.g. Hospital Board ethics committee) to ensure that the proposed methodology and survey instruments met with its approval.

# 7.0 RESULTS

## 7.1 Team Effectiveness

Results from the TET survey were used to assess team effectiveness in relation to several team attributes including team purpose and vision, communication, and support. Team members were asked to indicate their level of agreement in relation to a series of corresponding opinion statements using a 7 point scale where 1 = 'Strongly Disagree' and 7 = 'Strongly Agree'. Mean scale scores for each time period were calculated as well as the ratio of means comparing Time 1 results to Time 2 and Time 3 results. A two-tailed independent t-test was also calculated for the TET survey results.

### 7.1.1 TET Survey Response Rate and Profile of Respondents

*TET Survey Response Rate*

The average response rate for the TET baseline (Time 1: Sept.-Dec. 2004) survey across all team areas was 33% while the response rates for the 1st follow-up (Time 2: Sept.-Nov. 2005) and 2nd follow-up (Time 3: May-June 2006) surveys were 33% and 22% respectively. Smaller teams (e.g. less than 100 members) such as Bonne Bay and Connaigre typically reported higher response rates than larger teams such as Grenfell and Labrador East (Table 9). While the low response rate limited the degree of analysis at the individual team area level there was a sufficient number of responses at the composite level to run more sophisticated statistical analysis.

**Table 9: TET Survey Response Rates by Team Area**

| Team Area | Total # of team members | | | Total number of responses | | | Response rate | | |
|---|---|---|---|---|---|---|---|---|---|
| | Time 1 (T1) | Time 2 (T2) | Time 3 (T3) | Time 1 (T1) | Time 2 (T2) | Time 3 (T3) | Time 1 (T1) | Time 2 (T2) | Time 3 (T3) |
| Bonavista | 111 | 155 | 121 | 36 | 38 | 27 | 32% | 25% | 22% |
| Bonne Bay | 42 | 21 | 19 | 19 | 12 | 14 | 45% | 57% | 74% |
| Connaigre | 62 | 76 | 74 | 39 | 58 | 28 | 63% | 76% | 38% |
| Lab East | 215 | 326 | 359 | 50 | 67 | 41 | 23% | 21% | 11% |
| Placentia | 150 | 154 | 150 | 52 | 34 | 37 | 35% | 22% | 25% |
| Twillingate | 123 | 130 | 134 | 33 | 65 | 37 | 27% | 50% | 28% |
| Grenfell | 204 | 227 | 247 | 34 | 83 | 64 | 17% | 37% | 26% |
| St. John's | | | | | | | | | |
| *Zone 1* | 12 | NA | NA | 9 | NA | NA | 75% | NA | NA |
| *Zone 2* | 58 | NA | NA | 41 | NA | NA | 71% | NA | NA |
| TOTAL | 977 | 1089 | 1104 | 313 | 357 | 248 | 32% | 33% | 22% |

The data analysis for the TET survey focused on all 263 respondents who completed the baseline survey and those respondents from the two follow-up surveys who completed a previous survey. As shown in Table 10, a total of 199 respondents from the 1st follow-survey completed the baseline survey while a total of 194 respondents from the 2nd follow-up survey completed the baseline and/or 1st follow-up survey.

**Table 10: Distribution of Time 1 (Baseline) TET Respondents by Team Area and Time 2 and Time 3 Respondents Who Completed a Previous TET Survey**

| Team Area | T1 | | T2 | | T3 | |
|---|---|---|---|---|---|---|
| | Number of respondents | % | Number of respondents | % | Number of respondents | % |
| Bonavista | 36 | 13.7% | 22 | 11.1% | 23 | 11.9% |
| Bonne Bay | 19 | 7.2% | 10 | 5.0% | 10 | 5.2% |
| Connaigre | 39 | 14.8% | 37 | 18.6% | 26 | 13.4% |
| Placentia | 52 | 19.8% | 25 | 12.6% | 27 | 13.9% |
| Lab East | 50 | 19.0% | 30 | 15.1% | 34 | 17.5% |
| Twillingate | 33 | 12.5% | 33 | 16.6% | 30 | 15.5% |
| Grenfell | 34 | 12.9% | 42 | 21.1% | 44 | 22.7% |
| TOTAL | 263 | 100.0% | 199 | 100.0% | 194 | 100.0% |

*Profile of TET Survey Respondents by Team Role*

Health care providers were asked to self-identify their role in their PHC team area. Full time, part time, and casual professionals who provided PHC service for the population of the region were defined as core members of the Primary Health Care Team. Health board and private professionals who provided service to the regional population on an intermittent basis were defined as part of the Primary Health Care Network. Family Practice Physicians providing medical services to the service population of the region were defined as the Physician Network. All three groups contributed to the make-up of the PHC Team in their team areas.

At the composite level, core PHC team members accounted for over 65% of the team profile at baseline and this increased to 74% by the end of the evaluation. During the same period the percentage of service providers who were unsure of their role on the team declined from 21% to 12.5%. Additional details are provided in Table 11.

**Table 11: Profile of TET Survey Respondents by Role by Team Area**

| Role by Time Period | | Team Area | | | | | | | All Team Areas |
|---|---|---|---|---|---|---|---|---|---|
| | | Bonavista | Bonne Bay | Connaigre | Placentia | Lab East | Twillingate | Grenfell | |
| **Time 1** | | | | | | | | | |
| PHC Team Member [a] | Count | 21 | 9 | 30 | 36 | 37 | 21 | 18 | 172 |
| | % | 58.3 | 50.0 | 76.9 | 67.9 | 74.0 | 63.6 | 52.9 | 65.4 |
| Physician Network [b] | Count | 3 | 0 | 0 | 1 | 0 | 2 | 1 | 7 |
| | % | 8.3 | 0.0 | 0.0 | 1.9 | 0.0 | 6.1 | 2.9 | 2.7 |
| PHC Network [c] | Count | 5 | 8 | 2 | 2 | 2 | 6 | 2 | 27 |
| | % | 13.9 | 44.4 | 5.1 | 3.8 | 4.0 | 18.2 | 5.9 | 10.3 |
| Don't know | Count | 7 | 1 | 7 | 14 | 11 | 4 | 13 | 57 |
| | % | 19.4 | 5.6 | 17.9 | 26.4 | 22.0 | 12.1 | 38.2 | 21.7 |
| Total | Count | 36 | 18 | 39 | 53 | 50 | 33 | 34 | 263 |
| | % | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| **Time 2** | | | | | | | | | |
| PHC Team Member | Count | 15 | 6 | 21 | 18 | 24 | 27 | 27 | 138 |
| | % | 68.2 | 60.0 | 65.6 | 72.0 | 80.0 | 81.8 | 64.3 | 71.1 |
| Physician Network | Count | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 3 |
| | % | 4.5 | 0.0 | 3.1 | 0.0 | 0.0 | 0.0 | 2.4 | 1.5 |
| PHC Network | Count | 3 | 4 | 6 | 5 | 1 | 4 | 5 | 28 |
| | % | 13.6 | 40.0 | 18.8 | 20.0 | 3.3 | 12.1 | 11.9 | 14.4 |
| Don't know | Count | 3 | 0 | 4 | 2 | 5 | 2 | 9 | 25 |
| | % | 13.6 | 0.0 | 12.5 | 8.0 | 16.7 | 6.1 | 21.4 | 12.9 |
| Total | Count | 22 | 10 | 32 | 25 | 30 | 33 | 42 | 194 |
| | % | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| **Time 3** | | | | | | | | | |
| PHC Team Member | Count | 20 | 6 | 22 | 17 | 25 | 23 | 29 | 142 |
| | % | 87.0 | 60.0 | 84.6 | 63.0 | 75.8 | 76.7 | 67.4 | 74.0 |
| Physician Network | Count | 0 | 0 | 1 | 0 | 0 | 1 | 2 | 4 |
| | % | 0.0 | 0.0 | 3.8 | 0.0 | 0.0 | 3.3 | 4.7 | 2.1 |
| PHC Network | Count | 1 | 4 | 2 | 7 | 0 | 2 | 6 | 22 |
| | % | 4.3 | 40.0 | 7.7 | 25.9 | 0.0 | 6.7 | 14.0 | 11.5 |
| Don't know | Count | 2 | 0 | 1 | 3 | 8 | 4 | 6 | 24 |
| | % | 8.7 | 0.0 | 3.8 | 11.1 | 24.2 | 13.3 | 14.0 | 12.5 |
| Total | Count | 23 | 10 | 26 | 27 | 33 | 30 | 43 | 192 |
| | % | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

[a] Primary Health Care Team: Full Time, Part Time, and Casual professionals who provide service for the population of the region.
[b] Primary Health Care Network: All health board and private professionals who provide service to the population in the region on an intermittent bases.
[c] Physician Network: Family Practice Physicians providing medical services to the service population in the region.

*Profile of TET Survey Respondents by Profession*

Approximately 50% of all TET baseline survey respondents were represented by four professional groups: family doctors, nurse practitioners (NP), registered nurses (RN) and licensed practical nurses (LPN). These four professional groups accounted for 55% of all respondents in the 1st follow-up survey and 58% in the 2nd follow-up survey.

Results from the baseline survey revealed that NPs accounted 23% of all respondents while LPNs represented 14%, RNs 9% and family doctors close to 4%. Results from the 2nd follow-up survey revealed that NPs accounted 2% of all respondents while LPNs represented 19%, RNs 35% and family doctors close to 4%.

A wide variety of professional groups represented the balance of the survey respondents including social workers, public health nurses, personal care attendants, paramedics, physiotherapists, dietitians, speech language specialists, pharmacists, dentists, and lab technicians.

Additional details are provided in Table 12.

**Table 12: Profile of TET Survey Respondents by Professional Group by Team Area**

| Professional Group by Time Period | | Team Area | | | | | | | All Team Areas |
|---|---|---|---|---|---|---|---|---|---|
| | | Bonavista | Bonne Bay | Connaigre | Placentia | Lab East | Twillingate | Grenfell | |
| **Time 1** | | | | | | | | | |
| Family Doctor | Count | 3 | 0 | 0 | 2 | 0 | 2 | 2 | 9 |
| | % | 8.6 | 0.0 | 0.0 | 4.0 | 0.0 | 6.9 | 6.5 | 3.7 |
| NP | Count | 9 | 4 | 10 | 5 | 14 | 10 | 5 | 57 |
| | % | 25.7 | 25.0 | 26.3 | 10.0 | 30.4 | 34.5 | 16.1 | 23.3 |
| RN | Count | 2 | 0 | 4 | 6 | 5 | 2 | 2 | 21 |
| | % | 5.7 | 0.0 | 10.5 | 12.0 | 10.9 | 6.9 | 6.5 | 8.6 |
| LPN | Count | 7 | 0 | 6 | 13 | 4 | 3 | 2 | 35 |
| | % | 20.0 | 0.0 | 15.8 | 26.0 | 8.7 | 10.3 | 6.5 | 14.3 |
| Other | Count | 14 | 12 | 18 | 24 | 23 | 12 | 20 | 123 |
| | % | 40.0 | 75.0 | 47.4 | 48.0 | 50.0 | 41.4 | 64.5 | 50.2 |
| Total | Count | 35 | 16 | 38 | 50 | 46 | 29 | 31 | 245 |
| | % | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| **Time 2** | | | | | | | | | |
| Family Doctor | Count | 2 | 0 | 1 | 0 | 0 | 1 | 0 | 4 |
| | % | 9.5 | 0.0 | 2.9 | 0.0 | 0.0 | 3.2 | 0.0 | 2.2 |
| NP | Count | 1 | 0 | 1 | 0 | 1 | 0 | 4 | 7 |
| | % | 4.8 | 0.0 | 2.9 | 0.0 | 3.8 | 0.0 | 10.5 | 3.8 |
| RN | Count | 4 | 1 | 9 | 7 | 10 | 16 | 8 | 55 |
| | % | 19.0 | 11.1 | 26.5 | 29.2 | 38.5 | 51.6 | 21.1 | 30.1 |
| LPN | Count | 3 | 0 | 7 | 10 | 2 | 8 | 4 | 34 |
| | % | 14.3 | 0.0 | 20.6 | 41.7 | 7.7 | 25.8 | 10.5 | 18.6 |
| Other | Count | 11 | 8 | 16 | 7 | 13 | 6 | 22 | 83 |
| | % | 52.4 | 88.9 | 47.1 | 29.2 | 50.0 | 19.4 | 57.9 | 45.4 |
| Total | Count | 21 | 9 | 34 | 24 | 26 | 31 | 38 | 183 |
| | % | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| **Time 3** | | | | | | | | | |
| Family Doctor | Count | 2 | 0 | 1 | 0 | 1 | 2 | 0 | 6 |
| | % | 9.5 | 0.0 | 4.2 | 0.0 | 3.7 | 7.1 | 0.0 | 3.5 |
| NP | Count | 1 | 0 | 0 | 0 | 0 | 2 | 1 | 4 |
| | % | 4.8 | 0.0 | 0.0 | 0.0 | 0.0 | 7.1 | 2.5 | 2.3 |
| RN | Count | 4 | 3 | 11 | 5 | 10 | 10 | 15 | 58 |
| | % | 19.0 | 37.5 | 45.8 | 20.0 | 37.0 | 35.7 | 37.5 | 33.5 |
| LPN | Count | 6 | 0 | 6 | 7 | 0 | 5 | 9 | 33 |
| | % | 28.6 | 0.0 | 25.0 | 28.0 | 0.0 | 17.9 | 22.5 | 19.1 |
| Other | Count | 8 | 5 | 6 | 13 | 16 | 9 | 15 | 72 |
| | % | 38.1 | 62.5 | 25.0 | 52.0 | 59.3 | 32.1 | 37.5 | 41.6 |
| Total | Count | 21 | 8 | 24 | 25 | 27 | 28 | 40 | 173 |
| | % | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

### 7.1.2 Team Effectiveness in Relation to Team Purpose, Vision and Roles

Table 13 Part 1 and 2 reports the mean scale scores for each of the three time periods in relation to a series of opinion statements related to team purpose, vision and roles. Table 13 also presents the resulting ratio of means and p-values.

The ratio of means scores for all 12 of the team purpose/vision/roles opinion statements indicated a higher level of agreement (improvement) in team effectiveness between the baseline and follow-up surveys. .

In comparing Time 1 and Time 2 results, the Time 2 group had statistically significantly higher scores ($p \leq 0.05$) on eight of the 12 opinion statements related to team purpose/vision/roles of which one statement was significant at $p \leq 0.001$.

With respect to the Time 3 results, the Time 3 group had statistically significantly higher scores ($p \leq 0.05$) than the Time 1 group on 10 of the 12 opinion statements of which one statement was significant at $p \leq 0.001$

Additional details are provided in Table 13 Part 1 and 2.

**Table 13: Team Effectiveness Results – Team Purpose, Vision and Roles Part 1**

| Theme | Opinion Statement | Time | Number of Respondents | Mean | Ratio of Means | | T1 vs T2 | | | T1 vs T3 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | T2 / T1 | T3 / T1 | t - value | df | p-value (2 tailed) | t - value | df | p-value (2 tailed) |
| Team purpose, vision and roles | Our purpose is clearly understood by all members. | 1 | 236 | 4.02 | 1.13 | 1.16 | -3.102 | 426 | 0.002 | -4.076 | 424 | 0.000 |
| | | 2 | 194 | 4.53 | | | | | | | | |
| | | 3 | 190 | 4.67 | | | | | | | | |
| | We meet regularly for planning. | 1 | 220 | 3.37 | 1.26 | 1.14 | -4.482 | 395 | 0.000 | -2.423 | 402 | 0.016 |
| | | 2 | 177 | 4.26 | | | | | | | | |
| | | 3 | 186 | 3.83 | | | | | | | | |
| | Our goals and objectives are ***not*** set based on assessment of clients'/ patients'/communities' need. | 1 | 222 | 3.19 | 0.97 | 0.87 | 0.526 | 403 | 0.599 | 2.397 | 402 | 0.017 |
| | | 2 | 183 | 3.09 | | | | | | | | |
| | | 3 | 182 | 2.77 | | | | | | | | |
| | We do ***not*** have shared common agreement about our strategies to achieve our goals and objectives. | 1 | 227 | 3.40 | 0.95 | 0.87 | 0.882 | 410 | 0.378 | 2.513 | 409 | 0.012 |
| | | 2 | 185 | 3.24 | | | | | | | | |
| | | 3 | 185 | 2.97 | | | | | | | | |
| | Our goals and objectives are clear. | 1 | 228 | 4.26 | 1.12 | 1.09 | -2.913 | 416 | 0.004 | -2.238 | 412 | 0.026 |
| | | 2 | 190 | 4.76 | | | | | | | | |
| | | 3 | 188 | 4.63 | | | | | | | | |

T1 = Time 1: Baseline survey results; T2 = Time 2: 1st follow-up survey results; T3 = Time 3: 2nd follow-up survey results; Mean score is based on a 7 point scale where 1 = 'Strongly Disagree' and 7 = 'Strongly Agree'; df = degrees freedom.

**Table 13: Team Effectiveness Results – Team Purpose, Vision and Roles Part 2**

| Theme | Opinion Statement | Time | Number of Respondents | Mean | Ratio of Means | | T1 vs T2 | | | T1 vs T3 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | T2 / T1 | T3 / T1 | t - value | df | p-value (2 tailed) | t - value | df | p-value (2 tailed) |
| Team purpose, vision and roles | Our goals and objectives are measurable. | 1 | 222 | 4.06 | 1.13 | 1.10 | -3.128 | 404 | 0.002 | -2.408 | 403 | 0.017 |
| | | 2 | 184 | 4.60 | | | | | | | | |
| | | 3 | 183 | 4.45 | | | | | | | | |
| | Our goals and objectives are realistic. | 1 | 216 | 4.49 | 1.07 | 1.05 | -1.941 | 395 | 0.053 | -1.565 | 389 | 0.118 |
| | | 2 | 181 | 4.81 | | | | | | | | |
| | | 3 | 182 | 4.73 | | | | | | | | |
| | Our team reviews its current effectiveness. | 1 | 210 | 3.70 | 1.16 | 1.11 | -3.375 | 383 | 0.001 | -2.439 | 393 | 0.015 |
| | | 2 | 175 | 4.30 | | | | | | | | |
| | | 3 | 185 | 4.11 | | | | | | | | |
| | We measure progress against specified goals and objectives. | 1 | 209 | 3.82 | 1.13 | 1.12 | -2.795 | 381 | 0.005 | -2.803 | 391 | 0.005 |
| | | 2 | 174 | 4.32 | | | | | | | | |
| | | 3 | 184 | 4.30 | | | | | | | | |
| | Overall, there is a clearly understood purpose and vision. | 1 | 222 | 4.07 | 1.09 | 1.11 | -2.056 | 405 | 0.040 | -2.521 | 409 | 0.012 |
| | | 2 | 185 | 4.43 | | | | | | | | |
| | | 3 | 189 | 4.50 | | | | | | | | |
| | Members of our team understand their role within the team. | 1 | 218 | 4.27 | 1.05 | 1.09 | -1.076 | 398 | 0.283 | -2.130 | 405 | 0.034 |
| | | 2 | 182 | 4.47 | | | | | | | | |
| | | 3 | 189 | 4.65 | | | | | | | | |
| | Team-based functions are shared across professional boundaries. | 1 | 213 | 4.21 | 1.08 | 1.10 | -2.078 | 388 | 0.038 | -2.751 | 392 | 0.006 |
| | | 2 | 177 | 4.55 | | | | | | | | |
| | | 3 | 181 | 4.64 | | | | | | | | |

T1 = Time 1: Baseline survey results; T2 = Time 2: 1st follow-up survey results; T3 = Time 3: 2nd follow-up survey results; Mean score is based on a 7 point scale where 1 = 'Strongly Disagree' and 7 = 'Strongly Agree'; df = degrees freedom.

### 7.1.3 Team Effectiveness in Relation to Team Communication

Table 14 Part 1 and 2 reports the mean scale scores for each of the three time periods in relation to a series of opinion statements related to team communication. Table 14 also presents the resulting ratio of means and p-values.

The ratio of means scores for all 13 of the team communication opinion statements indicated a higher level of agreement (improvement) in team effectiveness between the baseline and follow-up surveys. .

In comparing Time 1 and Time 2 results, the Time 2 group had statistically significantly higher scores ($p \leq 0.05$) on eight of the 13 opinion statements related to communication of which two statements were significant at $p \leq 0.001$.

With respect to the Time 3 results, the Time 3 group had statistically significantly higher scores ($p \leq 0.05$) than the Time 1 group on 11 of the 13 opinion statements of which two statements were significant at $p \leq 0.001$.

Additional details are provided in Table 14 Part 1 and 2.

**Table 14: Team Effectiveness Results – Communication Part 1**

| Theme | Opinion Statement | Time | Number of Respondents | Mean | Ratio of Means | | T1 vs T2 | | | T1 vs T3 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | T2 / T1 | T3 / T1 | t - value | df | p-value (2 tailed) | t - value | df | p-value (2 tailed) |
| Communication | Communication during our meetings is effective. | 1 | 193 | 4.58 | 1.06 | 1.09 | -1.589 | 361 | 0.113 | -2.419 | 362 | 0.016 |
| | | 2 | 170 | 4.85 | | | | | | | | |
| | | 3 | 171 | 4.99 | | | | | | | | |
| | Communication between scheduled meetings is effective. | 1 | 196 | 4.16 | 1.09 | 1.14 | -2.069 | 367 | 0.039 | -3.363 | 365 | 0.001 |
| | | 2 | 174 | 4.52 | | | | | | | | |
| | | 3 | 172 | 4.74 | | | | | | | | |
| | Relevant information is exchanged among team members. | 1 | 217 | 4.35 | 1.05 | 1.10 | -1.361 | 394 | 0.174 | -2.678 | 397 | 0.008 |
| | | 2 | 181 | 4.58 | | | | | | | | |
| | | 3 | 182 | 4.80 | | | | | | | | |
| | Relevant information is exchanged in a timely fashion. | 1 | 214 | 4.10 | 1.07 | 1.13 | -1.666 | 391 | 0.096 | -3.310 | 394 | 0.001 |
| | | 2 | 179 | 4.39 | | | | | | | | |
| | | 3 | 182 | 4.65 | | | | | | | | |
| | There is limited duplication of communication within our team. | 1 | 208 | 4.13 | 1.07 | 1.10 | -2.005 | 381 | 0.046 | -2.630 | 382 | 0.009 |
| | | 2 | 175 | 4.43 | | | | | | | | |
| | | 3 | 176 | 4.52 | | | | | | | | |
| | We effectively use technology to maximize team communications. | 1 | 211 | 4.20 | 1.20 | 1.16 | -4.982 | 389 | 0.000 | -4.133 | 392 | 0.000 |
| | | 2 | 180 | 5.04 | | | | | | | | |
| | | 3 | 183 | 4.89 | | | | | | | | |
| | Our team does ***not*** have an evidence based decision-making process. | 1 | 199 | 3.68 | 0.96 | 0.95 | 0.841 | 364 | 0.401 | 0.987 | 379 | 0.324 |
| | | 2 | 167 | 3.52 | | | | | | | | |
| | | 3 | 182 | 3.51 | | | | | | | | |

T1 = Time 1: Baseline survey results; T2 = Time 2: 1st follow-up survey results; T3 = Time 3: 2nd follow-up survey results; Mean score is based on a 7 point scale where 1 = 'Strongly Disagree' and 7 = 'Strongly Agree'; df = degrees freedom.

**Table 14: Team Effectiveness Results – Communication Part 2**

| Theme | Opinion Statement | Time | Number of Respondents | Mean | Ratio of Means | | T1 vs T2 | | | T1 vs T3 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | T2 / T1 | T3 / T1 | t - value | df | p-value (2 tailed) | t - value | df | p-value (2 tailed) |
| Communication cont. | Decisions are ***not*** followed through to implementation. | 1 | 201 | 3.54 | 0.92 | 0.91 | 1.628 | 372 | 0.104 | 1.995 | 380 | 0.047 |
| | | 2 | 173 | 3.25 | | | | | | | | |
| | | 3 | 181 | 3.21 | | | | | | | | |
| | Leadership is shared and effectively delegated in line with areas of competence. | 1 | 207 | 4.22 | 1.10 | 1.10 | -2.571 | 384 | 0.011 | -2.631 | 388 | 0.009 |
| | | 2 | 179 | 4.66 | | | | | | | | |
| | | 3 | 183 | 4.66 | | | | | | | | |
| | Our team members are open and honest when communicating. | 1 | 212 | 4.82 | 1.09 | 1.04 | -2.665 | 391 | 0.008 | -1.251 | 394 | 0.212 |
| | | 2 | 181 | 5.26 | | | | | | | | |
| | | 3 | 184 | 5.03 | | | | | | | | |
| | When differences occur, they are dealt with effectively. | 1 | 203 | 4.11 | 1.12 | 1.09 | -2.966 | 373 | 0.003 | -2.153 | 383 | 0.032 |
| | | 2 | 172 | 4.62 | | | | | | | | |
| | | 3 | 182 | 4.47 | | | | | | | | |
| | Overall, I would say I "know" my Primary Health Care Team. | 1 | 227 | 4.05 | 1.18 | 1.18 | -3.705 | 413 | 0.000 | -3.954 | 415 | 0.000 |
| | | 2 | 189 | 4.76 | | | | | | | | |
| | | 3 | 190 | 4.79 | | | | | | | | |
| | Overall, I am satisfied with Primary Health Care Team related communications. | 1 | 220 | 3.90 | 1.13 | 1.15 | -2.957 | 407 | 0.003 | -3.362 | 408 | 0.001 |
| | | 2 | 189 | 4.42 | | | | | | | | |
| | | 3 | 190 | 4.48 | | | | | | | | |

T1 = Time 1: Baseline survey results; T2 = Time 2: 1st follow-up survey results; T3 = Time 3: 2nd follow-up survey results; Mean score is based on a 7 point scale where 1 = 'Strongly Disagree' and 7 = 'Strongly Agree'; df = degrees freedom.

### 7.1.4 Team Effectiveness in Relation to Team Support

Table 15 Part 1 and 2 reports the mean scale scores for each of the three time periods in relation to a series of opinion statements related to team support. Table 15 also presents the resulting ratio of means and p-values.

The ratio of means scores for all 12 of the team support opinion statements indicated a higher level of agreement (improvement) in team effectiveness between the baseline and follow-up surveys.

In comparing Time 1 and Time 2 results, the Time 2 group had statistically significantly higher scores ($p \leq 0.05$) on eight of the 12 opinion statements related to team support of which two statements were significant at $p \leq 0.001$.

With respect to the Time 3 results, the Time 3 group had statistically significantly higher scores ($p \leq 0.05$) than the Time 1 group on eight of the 12 opinion statements of which one statement was significant at $p \leq 0.001$.

Additional details are provided in Table 15 Part 1 and 2.

**Table 15: Team Effectiveness Results – Team Support Part 1**

| Theme | Opinion Statement | Time | Number of Respondents | Mean | Ratio of Means | | T1 vs T2 | | | T1 vs T3 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | T2 / T1 | T3 / T1 | t - value | df | p-value (2 tailed) | t - value | df | p-value (2 tailed) |
| Team support | There is a high level of trust and confidence amongst our team members. | 1 | 215 | 4.29 | 1.11 | 1.08 | -2.718 | 394 | 0.007 | -2.054 | 398 | 0.041 |
| | | 2 | 182 | 4.76 | | | | | | | | |
| | | 3 | 185 | 4.64 | | | | | | | | |
| | Our team works as a cohesive group. | 1 | 215 | 4.31 | 1.09 | 1.07 | -2.247 | 396 | 0.025 | -1.784 | 399 | 0.075 |
| | | 2 | 183 | 4.70 | | | | | | | | |
| | | 3 | 186 | 4.61 | | | | | | | | |
| | Our team provides support to individual members through difficult situations. | 1 | 198 | 4.58 | 1.04 | 1.04 | -0.998 | 373 | 0.319 | -1.009 | 377 | 0.314 |
| | | 2 | 177 | 4.76 | | | | | | | | |
| | | 3 | 181 | 4.75 | | | | | | | | |
| | We feel comfortable providing feedback to each other when expectations are met. | 1 | 208 | 4.63 | 1.08 | 1.07 | -2.339 | 386 | 0.020 | -2.099 | 391 | 0.036 |
| | | 2 | 180 | 5.01 | | | | | | | | |
| | | 3 | 185 | 4.95 | | | | | | | | |
| | We feel comfortable providing feedback to each other when expectations are not met. | 1 | 203 | 4.32 | 1.06 | 1.06 | -1.447 | 379 | 0.149 | -1.544 | 386 | 0.123 |
| | | 2 | 178 | 4.56 | | | | | | | | |
| | | 3 | 185 | 4.57 | | | | | | | | |
| | Our team members do ***not*** have the opportunity to develop their skills within the team. | 1 | 210 | 3.93 | 0.85 | 0.88 | 3.194 | 384 | 0.002 | 2.616 | 393 | 0.009 |
| | | 2 | 176 | 3.36 | | | | | | | | |
| | | 3 | 185 | 3.48 | | | | | | | | |

T1 = Time 1: Baseline survey results; T2 = Time 2: 1st follow-up survey results; T3 = Time 3: 2nd follow-up survey results; Mean score is based on a 7 point scale where 1 = 'Strongly Disagree' and 7 = 'Strongly Agree'; df = degrees freedom.

**Table 15: Team Effectiveness Results – Team Support Part 2**

| Theme | Opinion Statement | Time | Number of Respondents | Mean | Ratio of Means | | T1 vs T2 | | | T1 vs T3 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | T2 / T1 | T3 / T1 | t - value | df | p-value (2 tailed) | t - value | df | p-value (2 tailed) |
| Team support cont. | Strategies are ***not*** in place to support team development. | 1 | 216 | 4.21 | 0.82 | 0.84 | 3.987 | 390 | 0.000 | 3.747 | 398 | 0.000 |
| | | 2 | 176 | 3.47 | | | | | | | | |
| | | 3 | 184 | 3.54 | | | | | | | | |
| | We are individually accountable for our team's performance. | 1 | 207 | 4.26 | 1.17 | 1.10 | -4.084 | 379 | 0.000 | -2.301 | 386 | 0.022 |
| | | 2 | 174 | 4.98 | | | | | | | | |
| | | 3 | 181 | 4.69 | | | | | | | | |
| | We are jointly accountable for our team's performance. | 1 | 209 | 4.94 | 1.05 | 1.05 | -1.650 | 383 | 0.100 | -1.582 | 389 | 0.115 |
| | | 2 | 176 | 5.20 | | | | | | | | |
| | | 3 | 182 | 5.18 | | | | | | | | |
| | Our team has the support of the regional health board(s) management. | 1 | 213 | 4.45 | 1.12 | 1.10 | -2.995 | 388 | 0.003 | -2.780 | 394 | 0.006 |
| | | 2 | 177 | 4.97 | | | | | | | | |
| | | 3 | 183 | 4.91 | | | | | | | | |
| | Overall, I am satisfied with the support that team members provide. | 1 | 216 | 4.44 | 1.09 | 1.09 | -2.306 | 396 | 0.022 | -2.454 | 399 | 0.015 |
| | | 2 | 182 | 4.81 | | | | | | | | |
| | | 3 | 185 | 4.82 | | | | | | | | |
| | Our team does ***not*** have the support of the regional health board(s) management. | 1 | 206 | 3.06 | 0.93 | 0.89 | 1.300 | 379 | 0.194 | 2.125 | 381 | 0.034 |
| | | 2 | 175 | 2.83 | | | | | | | | |
| | | 3 | 179 | 2.72 | | | | | | | | |

T1 = Time 1: Baseline survey results; T2 = Time 2: 1st follow-up survey results; T3 = Time 3: 2nd follow-up survey results; Mean score is based on a 7 point scale where 1 = 'Strongly Disagree' and 7 = 'Strongly Agree'; df = degrees freedom.

### 7.1.5 Team Effectiveness in Relation to Service Delivery

Table 16 Part 1 and 2 reports the mean scale scores for each of the three time periods in relation to a series of opinion statements related to service delivery. Table 16 also presents the resulting ratio of means and p-values.

The ratio of means scores for all 15 of the service delivery opinion statements indicated a higher level of agreement (improvement) in team effectiveness between the baseline and follow-up surveys. .

In comparing Time 1 and Time 2 results, the Time 2 group had statistically significantly higher scores ($p \leq 0.05$) on eight of the 15 opinion statements related to service delivery of which one statement was significant at $p \leq 0.001$.

With respect to the Time 3 results, the Time 3 group had statistically significantly higher scores ($p \leq 0.05$) than the Time 1 group on nine of the 15 opinion statements of which six statements were significant at $p \leq 0.001$.

Additional details are provided in Table 16 Part 1 and 2.

**Table 16: Team Effectiveness Results – Service Delivery Part 1**

| Theme | Opinion Statement | Time | Number of Respondents | Mean | Ratio of Means | | T1 vs T2 | | | T1 vs T3 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | T2 / T1 | T3 / T1 | t - value | df | p-value (2 tailed) | t - value | df | p-value (2 tailed) |
| Service Delivery | Our team covers the continuum of services from prevention to rehabilitation. | 1 | 207 | 4.65 | 1.03 | 1.04 | -0.858 | 388 | 0.392 | -1.251 | 386 | 0.212 |
| | | 2 | 183 | 4.79 | | | | | | | | |
| | | 3 | 181 | 4.86 | | | | | | | | |
| | Our team spends an appropriate amount of time planning and delivering preventative programs. | 1 | 199 | 3.62 | 1.16 | 1.21 | -3.161 | 376 | 0.002 | -4.325 | 376 | 0.000 |
| | | 2 | 179 | 4.20 | | | | | | | | |
| | | 3 | 179 | 4.39 | | | | | | | | |
| | Our team does ***not*** do community outreach. | 1 | 192 | 3.64 | 0.80 | 0.72 | 3.628 | 363 | 0.000 | 5.726 | 352 | 0.000 |
| | | 2 | 173 | 2.92 | | | | | | | | |
| | | 3 | 179 | 2.60 | | | | | | | | |
| | Our team has membership from all relevant groups or professions needed to maximize our ability to function effectively. | 1 | 215 | 4.45 | 1.09 | 1.06 | -2.397 | 395 | 0.017 | -1.573 | 395 | 0.116 |
| | | 2 | 182 | 4.85 | | | | | | | | |
| | | 3 | 183 | 4.71 | | | | | | | | |
| | Our team is innovative in its service delivery approach. | 1 | 196 | 4.30 | 1.05 | 1.08 | -1.451 | 370 | 0.148 | -2.253 | 369 | 0.025 |
| | | 2 | 176 | 4.53 | | | | | | | | |
| | | 3 | 176 | 4.64 | | | | | | | | |
| | Our team is clear on how it provides its services. | 1 | 208 | 4.35 | 1.07 | 1.11 | -1.670 | 388 | 0.096 | -2.857 | 383 | 0.005 |
| | | 2 | 182 | 4.64 | | | | | | | | |
| | | 3 | 179 | 4.82 | | | | | | | | |
| | Practice protocols are in place for key conditions (e.g., diabetes, child development), mapping client/patient flow, provider tasks, information capture and check points. | 1 | 199 | 4.22 | 1.13 | 1.15 | -3.041 | 367 | 0.003 | -3.757 | 357 | 0.000 |
| | | 2 | 171 | 4.77 | | | | | | | | |
| | | 3 | 176 | 4.86 | | | | | | | | |
| | We use common client/patient records/charts where possible. | 1 | 204 | 4.71 | 1.06 | 1.04 | -1.500 | 369 | 0.135 | -0.905 | 375 | 0.366 |
| | | 2 | 167 | 4.99 | | | | | | | | |
| | | 3 | 173 | 4.88 | | | | | | | | |

**Table 16: Team Effectiveness Results – Service Delivery Part 2**

| Theme | Opinion Statement | Time | Number of Respondents | Mean | Ratio of Means | | T1 vs T2 | | | T1 vs T3 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | T2 / T1 | T3 / T1 | t - value | df | p-value (2 tailed) | t - value | df | p-value (2 tailed) |
| Service Delivery cont. | We efficiently screen/triage clients/patients at the point of entry to service. | 1 | 198 | 4.51 | 1.00 | 1.03 | -0.069 | 354 | 0.945 | -0.674 | 362 | 0.501 |
| | | 2 | 158 | 4.52 | | | | | | | | |
| | | 3 | 167 | 4.63 | | | | | | | | |
| | Practice information is ***not*** reviewed at our team meetings to improve indicators of service quality. | 1 | 175 | 4.04 | 0.89 | 0.84 | 2.262 | 322 | 0.024 | 3.411 | 328 | 0.001 |
| | | 2 | 149 | 3.60 | | | | | | | | |
| | | 3 | 155 | 3.38 | | | | | | | | |
| | Working as a team has resulted in service delivery being more integrated and co-ordinated. | 1 | 195 | 4.56 | 1.04 | 1.07 | -1.090 | 363 | 0.276 | -2.116 | 372 | 0.035 |
| | | 2 | 170 | 4.74 | | | | | | | | |
| | | 3 | 181 | 4.90 | | | | | | | | |
| | Distinct new programs emerge from the collective work of colleagues from different disciplines. | 1 | 185 | 4.14 | 1.09 | 1.15 | -2.141 | 351 | 0.033 | -3.796 | 356 | 0.000 |
| | | 2 | 168 | 4.49 | | | | | | | | |
| | | 3 | 173 | 4.76 | | | | | | | | |
| | Working with colleagues from other disciplines leads to outcomes that we could not achieve alone. | 1 | 205 | 5.35 | 1.03 | 1.02 | -1.295 | 387 | 0.196 | -0.622 | 384 | 0.534 |
| | | 2 | 184 | 5.53 | | | | | | | | |
| | | 3 | 181 | 5.44 | | | | | | | | |
| | Organizational protocols reflect the existence of cooperation between professionals from different disciplines. | 1 | 198 | 4.62 | 1.08 | 1.05 | -2.416 | 365 | 0.016 | -1.597 | 373 | 0.111 |
| | | 2 | 170 | 4.99 | | | | | | | | |
| | | 3 | 177 | 4.86 | | | | | | | | |
| | Overall, I am satisfied with the level of co-ordination between team members and network service providers. | 1 | 218 | 4.13 | 1.12 | 1.14 | -2.994 | 394 | 0.003 | -3.657 | 400 | 0.000 |
| | | 2 | 178 | 4.63 | | | | | | | | |
| | | 3 | 184 | 4.72 | | | | | | | | |

T1 = Time 1: Baseline survey results; T2 = Time 2: 1st follow-up survey results; T3 = Time 3: 2nd follow-up survey results; Mean score is based on a 7 point scale where 1 = 'Strongly Disagree' and 7 = 'Strongly Agree'; df = degrees freedom.

### 7.1.6 Team Effectiveness in Relation to Team Member Personal Satisfaction

Table 17 reports the mean scale scores for each of the three time periods in relation to a series of opinion statements related to team member personal satisfaction. Table 17 also presents the resulting ratio of means and p-values.

The ratio of means scores for five of the six personal satisfaction opinion statements indicated a higher level of agreement (improvement) in team effectiveness between the baseline and follow-up surveys. .

In comparing Time 1 and Time 2 results, the Time 2 group had a statistically significantly higher score ($p \leq 0.05$) on one of the six opinion statements related to personal satisfaction. With respect to the Time 3 results, the Time 3 group had statistically significantly higher scores ($p \leq 0.05$) than the Time 1 group on four of the six opinion statements. Additional details are provided in Table 17.

**Table 17: Team Effectiveness Results – Personal Satisfaction**

| Theme | Opinion Statement | Time | Number of Respondents | Mean | Ratio of Means | | T1 vs T2 | | | T1 vs T3 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | T2 / T1 | T3 / T1 | t - value | df | p-value (2 tailed) | t - value | df | p-value (2 tailed) |
| Personal Satisfaction | Team meetings contribute to my ability to meet client/patient needs. | 1 | 190 | 4.17 | 1.03 | 1.13 | -0.562 | 359 | 0.574 | -2.925 | 354 | 0.004 |
| | | 2 | 171 | 4.27 | | | | | | | | |
| | | 3 | 169 | 4.69 | | | | | | | | |
| | I would encourage other health care service providers to work in this practice setting. | 1 | 210 | 4.88 | 1.02 | 1.06 | -0.662 | 389 | 0.509 | -1.979 | 390 | 0.049 |
| | | 2 | 181 | 4.98 | | | | | | | | |
| | | 3 | 182 | 5.18 | | | | | | | | |
| | Overall, I'm satisfied with the functioning of my Primary Health Care Team. | 1 | 210 | 4.22 | 1.08 | 1.11 | -2.022 | 397 | 0.044 | -2.623 | 395 | 0.009 |
| | | 2 | 189 | 4.58 | | | | | | | | |
| | | 3 | 187 | 4.67 | | | | | | | | |
| | Other professionals in my practice setting utilize my professional expertise for a range of tasks. | 1 | 227 | 4.59 | 1.04 | 1.06 | -1.164 | 412 | 0.245 | -1.817 | 400 | 0.070 |
| | | 2 | 187 | 4.78 | | | | | | | | |
| | | 3 | 178 | 4.87 | | | | | | | | |
| | My colleagues from other disciplines believe that they could not do their jobs as well without my assistance. | 1 | 224 | 4.01 | 1.07 | 1.08 | -1.761 | 400 | 0.079 | -2.061 | 398 | 0.040 |
| | | 2 | 178 | 4.30 | | | | | | | | |
| | | 3 | 176 | 4.34 | | | | | | | | |
| | Incorporating the views of treatment held by my colleagues from other disciplines improves my ability to meet client/patient needs. | 1 | 222 | 5.29 | 0.98 | 1.00 | 0.859 | 401 | 0.391 | 0.135 | 398 | 0.892 |
| | | 2 | 181 | 5.17 | | | | | | | | |
| | | 3 | 178 | 5.27 | | | | | | | | |

T1 = Time 1: Baseline survey results; T2 = Time 2: 1st follow-up survey results; T3 = Time 3: 2nd follow-up survey results; Mean score is based on a 7 point scale where 1 = 'Strongly Disagree' and 7 = 'Strongly Agree'; df = degrees freedom.

### 7.1.7 Team Effectiveness in Relation to Team Development Activity (TDA)

The Project Coordinators in each of the team areas documented the number of team development related activities over the entire course of the Renewal Initiative. This included team meetings, team management meetings, and team development/training activities. The total number of team development activities was calculated in each of the team areas to provide a Team Development Activity (TDA) score for each. A TDA score was not calculated for the St. John's team area as the focus of the team shifted midway through the Renewal Initiative. The total number of team development activities across the other seven team areas ranged from 8 to 50 based on reported data (Table 18).

**Table 18: Team Development Activity by Team Area**

| Team Area | Team Development Activity | | | | |
|---|---|---|---|---|---|
| | Period 1 June-Dec.2004 | Period 2 Jan.-June 2005 | Period 3 July-Dec. 2005 | Period 4 Jan.-April 2006 | Total |
| Bonne Bay | 6 | 6 | 26 | 8 | 46 |
| Bonavista | 6 | 11 | 17 | 9 | 43 |
| Twillingate | 13 | 15 | 21 | 1 | 50 |
| Grenfell | 5 | 6 | 6 | 0 | 17 |
| Placentia | 2 | 5 | 14 | 0 | 21 |
| Lab East | 1 | 1 | 0 | 6 | 8 |
| Connaigre | 10 | 10 | 12 | 2 | 34 |

Regression analysis was used to examine the relationship between changes in team effectiveness between Time 1 and Time 3 and total team development activity.

Figures 11 through 18 present the scatter plot and least squares regression line displaying the association between TDA and the change in TET scores for opinion statements with association p values of less than 0.2. These included the following:

- Our goals and objectives are measurable;
- Our goals and objectives are realistic;
- Communication during meetings is effective;
- Relevant information is exchanged in a timely fashion;
- Leadership is shared and effectively delegated in line with areas of competence;
- There is a high level of trust and confidence amongst our team members;
- Overall, I am satisfied with the support that team members provide; and
- Overall, I'm satisfied with the functioning of my Primary Health Care Team.

The diamonds in these figures represent the team areas. The results reveal a trend in that team areas that conducted more team development activities were likely to

experience a more positive change in team effectiveness as reflected by these statements.

*Team Purpose and Vision*

**Figure 11: Team Member Agreement that Goals and Objectives are Measurable by Team Development Activity**

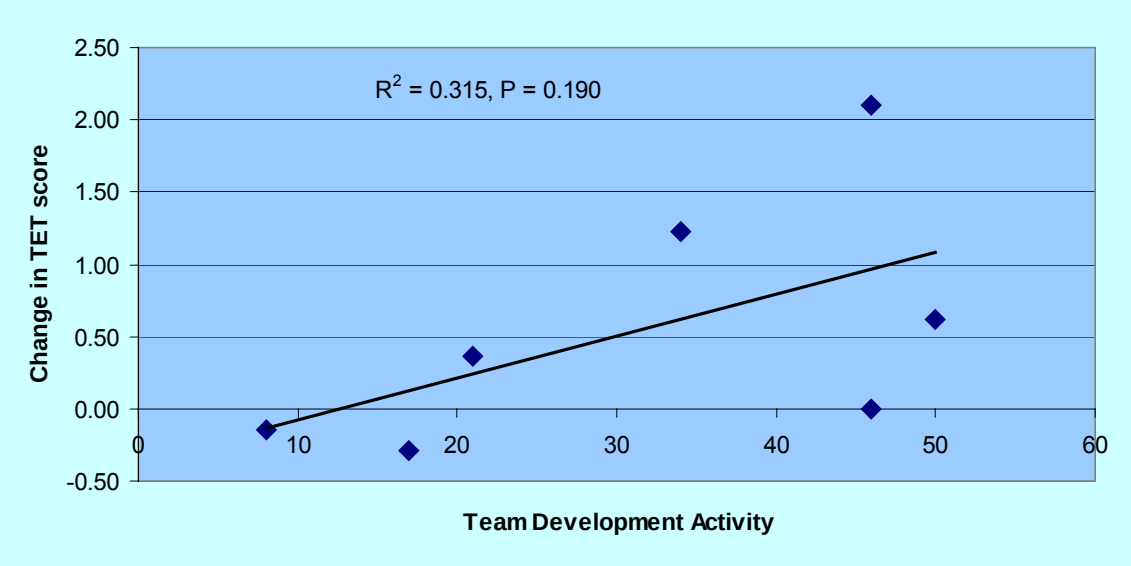
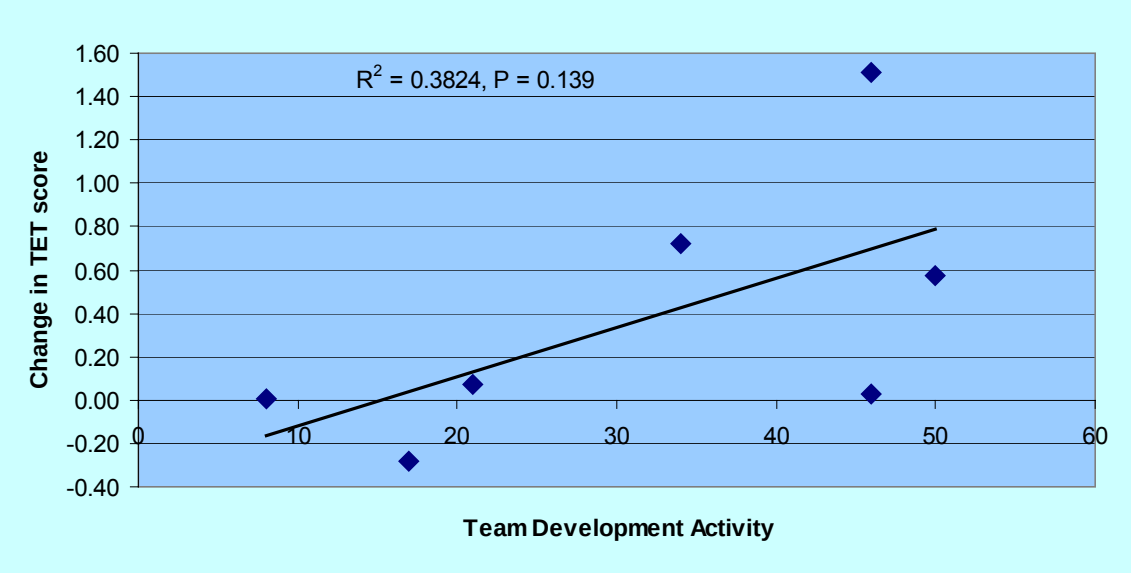



**Figure 12: Team Member Agreement that Goals and Objectives are Realistic by Team Development Activity**



*Team Communication*

**Figure 13: Team Member Agreement that Communication During Meetings is Effective by Team Development Activity**

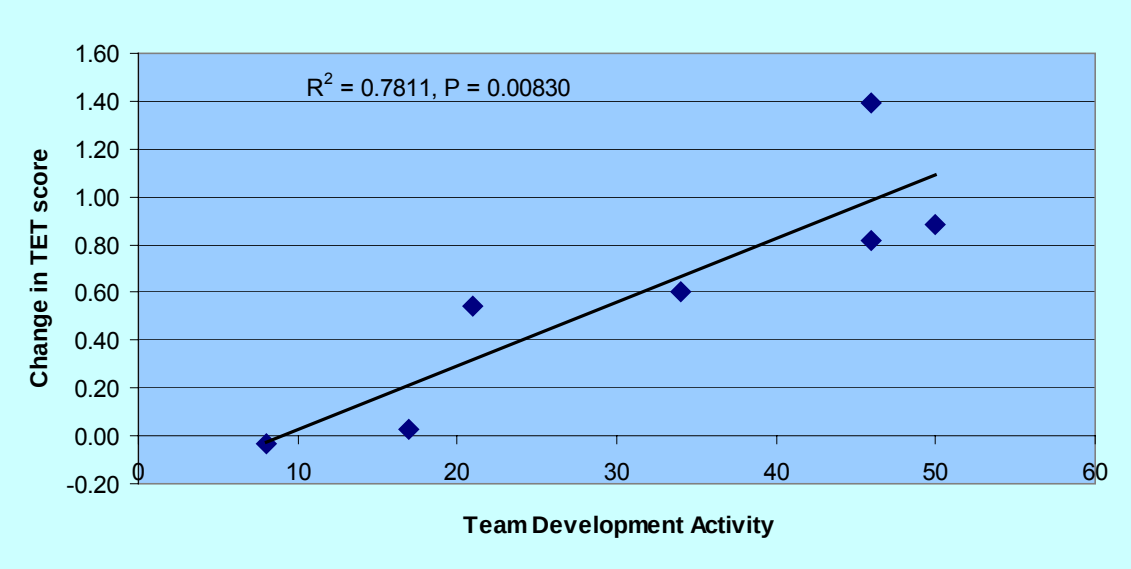



**Figure 14: Team Member Agreement that Information is Exchanged in a Timely Fashion by Team Development Activity**

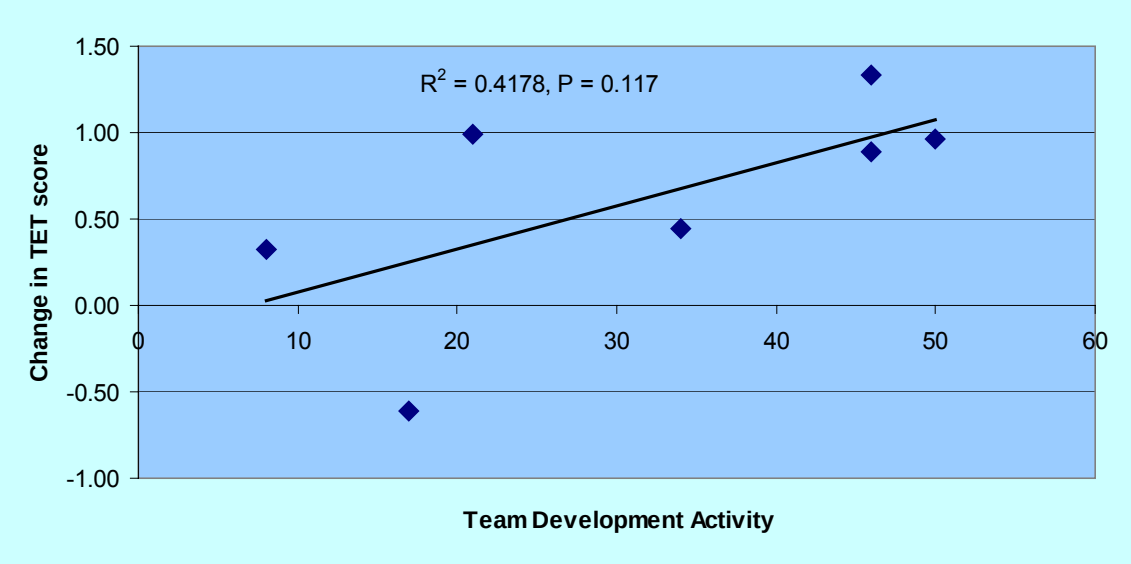
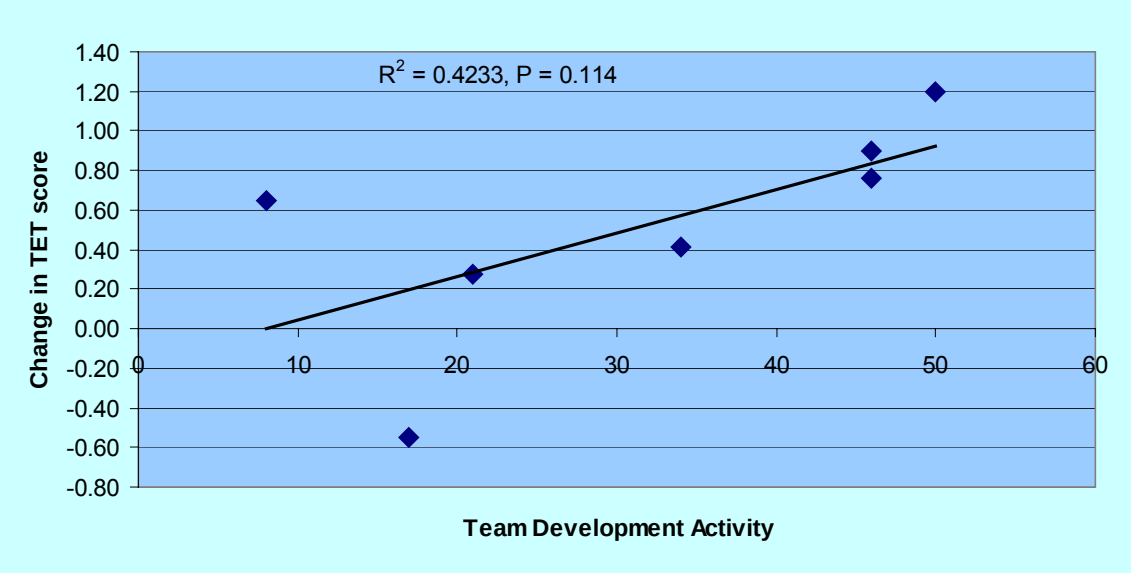


**Figure 15: Team Member Agreement that Leadership is Shared by Team Development Activity**




*Team Support*

**Figure 16: Team Member Agreement that there is a High Level of Trust and Confidence Amongst Team Members by Team Development Activity, NL, 2004-2006**

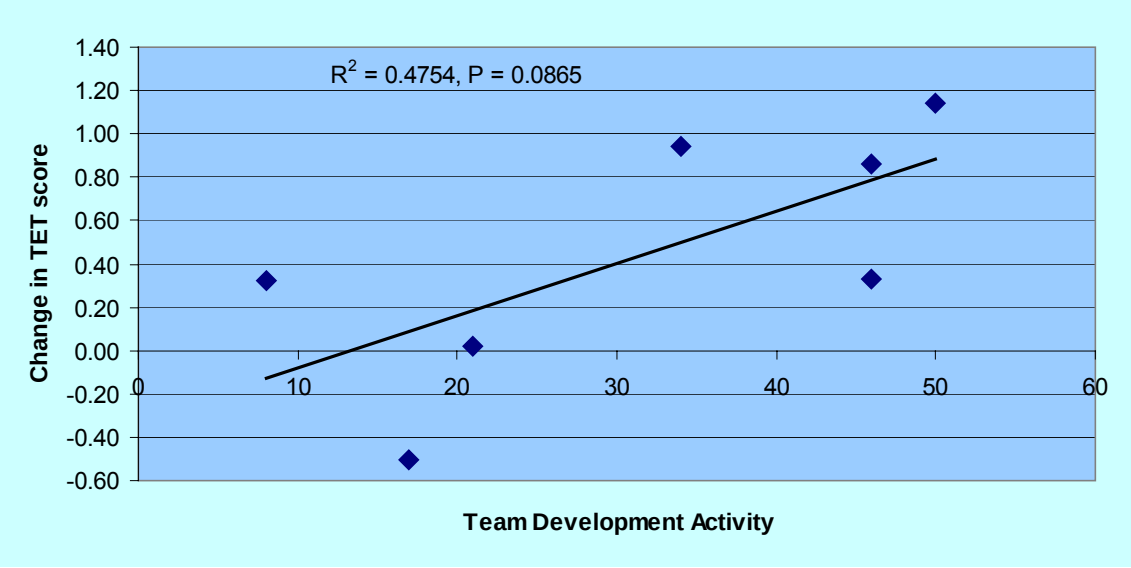


**Figure 17: Team Member Agreement with Overall Satisfaction with Team Support by Team Development Activity**

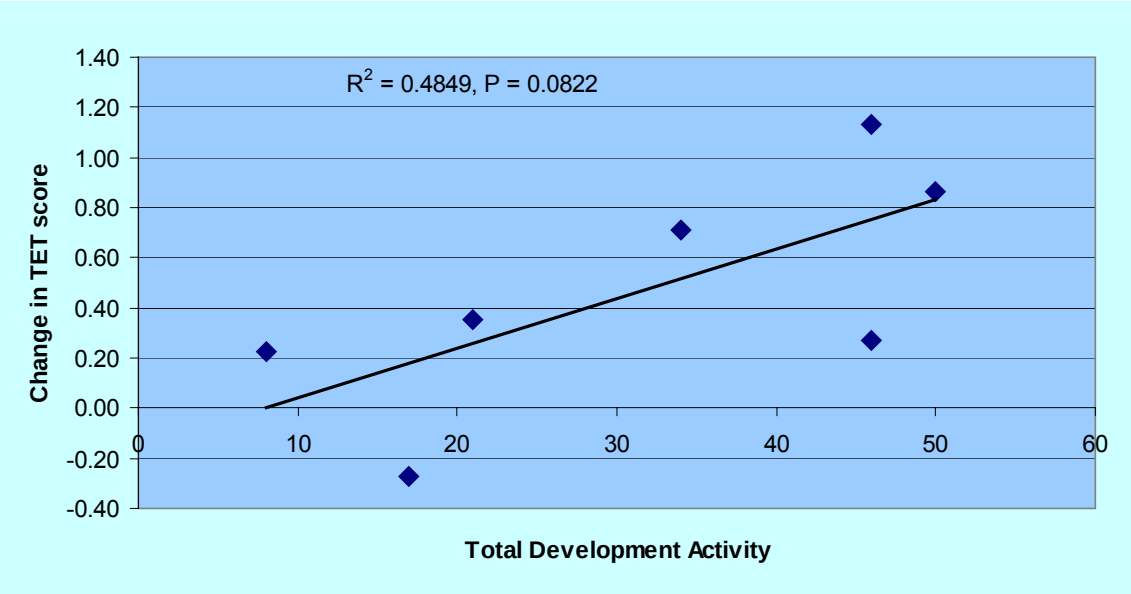
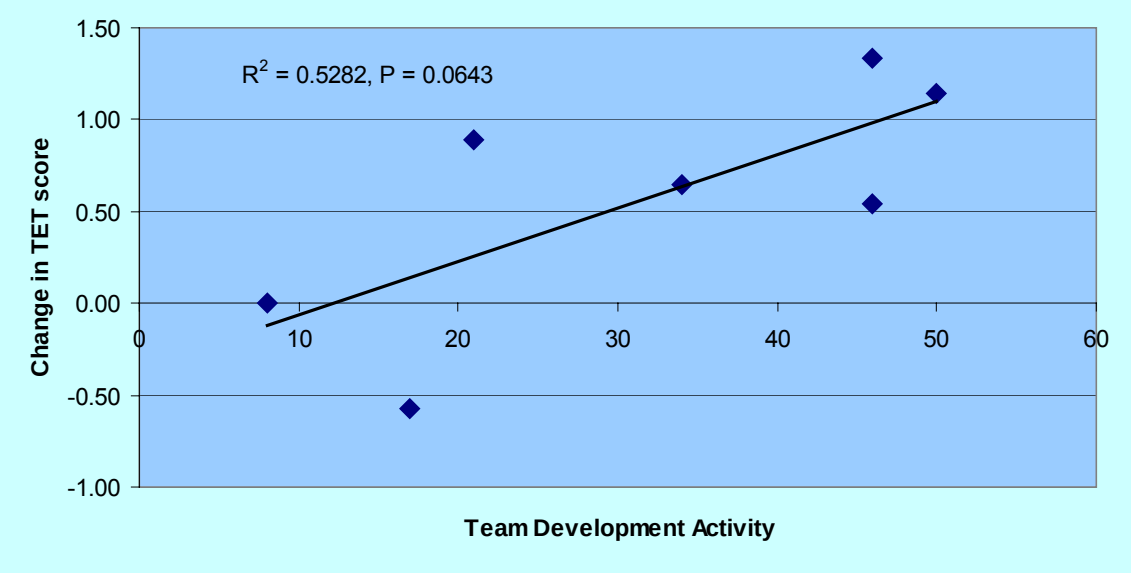



**Figure 18: Team Member Agreement with Overall Satisfaction of Team Functioning by Team Development Activity**



### 7.1.8 Total Improved Team Effectiveness (TITE) by Team Area and Relation to TDA

The TET features a total of 71 opinion statements that address team effectiveness and scope of practice. Section 7.1 of this report provided an overview of the results of the 58 opinion statements that relate to team effectiveness while section 7.2.1 provides an overview of the five opinion statements that relate to scope of practice. A further 8 opinion statements relate to team effectiveness and partnership development and are presented in section 7.5.3.

A new team effectiveness variable was created from the 71 TET opinion statements by calculating the total number of TET statements that changed positively between Time 1 and Time 3. The Total Improved Team Effectiveness (TITE) variable could range from 0-71 and represents the total number of statements that changed positively (T3/TI $\geq$ 1.1). The variable was calculated for each team area except St. John's where the follow-up TET data was still being collected at the time this report was being prepared.

As shown in Table 19, the TITE scores between Time 1 and Time 3 ranged from 8 in Grenfell Region to 62 in Bonne Bay.

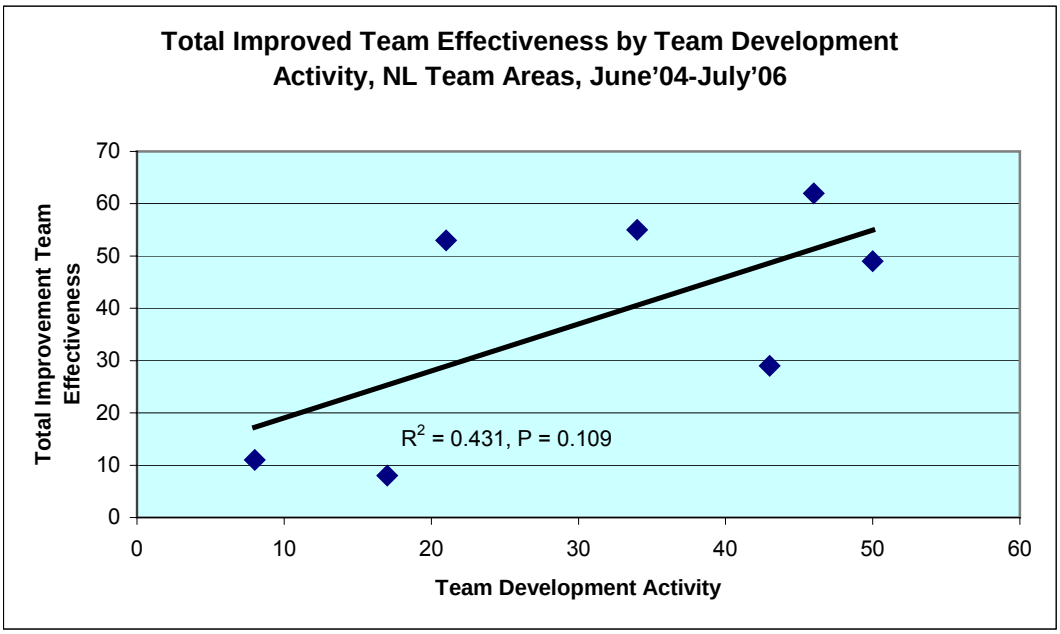
**Table 19: Total Improved Team Effectiveness (TITE) by Team Area**

| Team Area | Total Positive Scores Between Time 1 and Time 3 [a] |
|---|---|
| Bonavista | 29 |
| Bonne Bay | 62 |
| Connaigre | 55 |
| Grenfell | 8 |
| Labrodaor East | 11 |
| Placentia | 53 |
| Twillingate | 49 |

[a] Positive TET scores: the total number of TET statements that changed positively (T3/TI ≥ 1.1; or ≤ 0.9 if the opinion statement worded as a negative statement)

Regression analysis was used to examine the association between TITE and TDA between Time 1 and Time 3. As shown in Figure 19, the results reveal that team areas that conducted more team development activities were likely to experience a higher TITE score representing greater overall team effectiveness.

**Figure 19: Total Improved Team Effectiveness by Total Team Development Activity**




### 7.1.9 Focus Group Observations

*Introduction and Profile of the Focus Group Participants*

The purpose of the focus group was to bring together various project stakeholders (e.g. coordinator, facilitator, physician lead, community representative, regional health board, etc.) from each of the team areas and review/discuss their impressions of the PHC Initiative and its various components (PHC Team, PHC Network, Coordinator/Facilitator Community Advisory Committee, Evaluation) in terms of successes/strengths over time, challenges/weaknesses over time, unexpected results, and suggestions for improvements.

A total of 30 project stakeholders participated in the focus group. All of the eight Primary Health Care Team Areas were represented in the survey including four representatives each from Bonavista, Labrador East, and St. John's and three representatives each from Connaigre, Placentia, and Twillingate/New World Island. There were two representatives from Grenfell and one representative from Bonne Bay.

The participants represented a variety of roles with six PHC Project Coordinators, six PHC Team Facilitators and six PHC Community Advisory Committee Members. There were also four Regional Health Board representatives at the session, three PHC Team

Physician Leads, one PHC Team Member and two people identified 'other' roles. Most of the participants have been involved in their PHC Team Area for two years or more.

*Challenges Associated with the Primary Health Care Renewal Initiative*

Participants were asked to reflect on the greatest challenges and obstacles faced by the PHC Renewal Initiative in their team area. They were also asked to discuss any action that was taken in response to the challenges and what the results of those actions were.

The issue of sustainability of the Project was raised by a number of respondents as a major challenge that they faced. Comments included:

> "We worked so diligently and creatively towards meeting our goals as espoused by PHC and the community. Yet we knew an end date would arrive and our momentum would be stalled as the team said "not another pilot project!" and
>
> "[It] was viewed as a project that would have limited life, thus difficult to get buy-in"

Other focus group participants discussed how the limited timelines for the initiative were a challenge and how the initiative seemed to move slowly due to "red tape". Several respondents mentioned that a major provincial restructuring of the health boards occurred at the same time as the project, which put further strain on the timelines.

Another obstacle that affected the sustainability of the project was getting buy-in from physicians, and other healthcare service providers. According to a number of the participants, the project struggled to get physicians involved, to have them understand the concept of primary health care, and to have them apply the model to their regular healthcare delivery.

Getting team members to 'buy-in' to the Primary Health Care Team concept was another difficulty. Several respondents did not view themselves as part of a "team". The development of the team was made more difficult by some members being spread out over large geographic regions and also from a lack of understanding of each other's roles. In order to address this issue a variety of team building actions were taken including: presentations, focus group discussions, team social gatherings, Building Better Tomorrow Initiative (BBTI) modules, professional development opportunities, ongoing work on an inventory of service providers and the formation of working groups. Some of the participants noted that the team building activities were poorly attended and that there were still some team members who could not understand the purpose despite these actions.

Another issue was ensuring representativeness of service providers and community representatives from across the team area, particularly in those areas serving a large geographic region. Solutions have been to use teleconferencing to involve some individuals. In another case, community meetings were held in different parts of the region in order to increase awareness.

A lack of leadership within the project was noted as a challenge by a few of the focus group participants. One person said that there was limited leadership at the Executive level during the initial stages of the project. Another person commented:

> "We only had a part time coordinator, as our coordinator had other responsibilities. There was a lack of leadership from our VP leads and other senior managers. [A] contributing factor to this was likely the joining together of health care boards, as this led to a changeover in some of the key leaders".

*Important Achievements of the Primary Health Care Renewal Initiative*

Respondents were asked for their perspectives on what the single most important achievement of the PHC Renewal Initiative was in their team area.

Many of the respondents noted that the level of awareness of primary health care, as well as determinants of health and well being, have increased among healthcare service providers and the community in general. Comments included:

> "We have developed an awareness of varying factors that impact a person's well being. Mobilized community partners to work on these issues. The model we have developed is presently being used throughout the board",

> "Primary Health Care is enshrined as the 'way we do business'. i.e. the Team and mechanisms to govern/support will not disappear at the end of the project money", and

> "I think the achievements made in providers' understanding of a broader perspective of health, [including]: what determines health, increased team development, increased knowledge of health promotion and prevention, and focus on community has been greatly enhanced".

Some of the focus group participants discussed how it is not just an increase in the level of awareness of healthcare, but also an increase in activities and initiatives to support wellness in their communities. A wide variety of different initiatives that have been developed to enhance primary health care were mentioned including:

- Teams to work on needs identified from a community assessment, including issue of low cervical screening;
- Fetal Alcohol Spectrum Disorder (FASD) teams and ongoing clinics;
- Diabetes Collaborative model designed to fit local needs;
- 50+ Club;
- Partnership with Newfoundland Drive Family Practice;
- Caregiver project;
- Outreach projects such as walking journals and apple project;
- Traditional medicine symposium;
- Enhanced Emergency Medical Services (EMS);
- Families and schools together;
- Moving for Health;
- Heart Smart Restaurant Program;
- Steady As You Go initiative; and
- Smoking cessation.

*Satisfaction with PHC Renewal Initiative*

Survey participants were asked to rate their level of satisfaction in relation to their degree of involvement with the PHC Initiative in their team area using a scale of 1-5 where 1 = *very dissatisfied* and 5 = *very satisfied.*

A total of 26 people responded to this question and the average rating was 4 (satisfied). A total of 46% of the respondents provided a rating of 4, indicating that they were satisfied and another 35% provided a rating of 5, indicating that they were very satisfied with their level of involvement. Just two respondents reported that they were dissatisfied and one respondent was very dissatisfied. A further two respondents were neutral.

A number of the people who were satisfied or very satisfied with their level of involvement stated that the PHC project and their role in the project provided them with a great opportunity. Comments included:

> "PHC facilitation has been such a great opportunity for me to do what I love most, community development in the context of a progressive view of health";
>
> "This provided me with some great opportunities to make contacts and participate in provincial work"; and

> "We are a cohesive group who bring many areas of expertise to our meetings. I have a lot of input and feel that my time is well spent."

Others said they were satisfied because the project had a high level of interest, support and involvement from the community. Some people noted that there have been challenges and there is room for improvement, but they are satisfied overall. One person noted that they were satisfied with their own level of involvement, but were concerned with some of the involvement at the senior managerial level.

Some of those who said that they were dissatisfied or very dissatisfied elaborated on their ratings as well. One person said, *"Everything works too slowly – 1 step forward, 2 steps back"*. Along the same lines, there were others who felt that there were too many meetings, which required a substantial time commitment relative to what was accomplished.

*Use of Personal Skills/Knowledge/Experience in Moving Primary Health Care Forward*

Survey participants were asked to rate the extent to which they felt their skills, knowledge and experience were used to help move PHC Initiative forward in their team area using a scale of 1-5 where 1 = *not at all* and 5 = *a very great extent.*

A total of 26 people responded to this question and the average rating was 4 (a great extent). A total of 35% of the respondents provided a rating of 4, indicating that they had used their skills to a great extent while another 27% provided a rating of 5, indicating that they had used their skills, knowledge and experience to move the project forward to a very great extent. There were 27% of people who provided a rating of 3 indicating a moderate extent. Just three of the respondents felt that their skills were used to a limited extent or not at all.

Many of the respondents who said that their skills, knowledge and experience had been used to a great extent or a very great extent in helping the PHC Initiative move forward elaborated on their particular characteristics that allowed them to do so. Some of the useful skills, knowledge and experience possessed by respondents included:

- A long history of PHC in the area,
- Key contacts with senior management at Regional Health Boards,
- Nursing background,
- Management background,
- Community development background,
- Facilitation skills,
- Graduate level studies,
- Coordination and Evaluation skills,
- Knowledge of children and youth,
- Understanding the need for PHC renewal,

- Health education provider,
- Strategic social planning, and
- Ability to identify issues of health and well being.

Some of the respondents indicted that although they had already possessed certain skills, knowledge and experience, the PHC Initiative assisted in enhancing and developing their skills. One person noted that while they had used their own skills to a great extent, they felt they were expected to push PHC forward in their area with little support.

Of those who said that they used their skills to a limited or very limited extent, one person noted that this was because they were in more of a supportive role and another person noted that most of the work was completed by the facilitator and the coordinator. Some of the respondents who were neutral noted certain areas of skills, knowledge and experience that they felt were lacking in helping the PHC Project move forward, including:

- Assertiveness,
- Appreciation of the continuation of Primary Health Care by Medical Doctors,
- Understanding of barriers to team work that arise from the traditional family medicine model, and
- Cohesiveness between team members personal goals and the goals of the PHC Initiative.

*Effect of the Primary Health Care Team in Moving Primary Health Care Forward*

Survey participants were asked to rate the extent to which they felt the efforts of their PHC Team helped to move PHC forward in their team area using a 5 point scale where 1=not at all and 5=a very great extent.

A total of 26 people responded to this question and the average rating was 3 (a moderate extent). Approximately 38% of the respondents provided a rating of 4, indicating that they believe the efforts of the PHC Team helped to a great extent and another 12% felt that the effort of the PHC Team helped to a very great extent. About 35% of respondents provided a rating of 3 indicated that the PHC Team effort helped to a moderate extent. There were 15% of respondents who provided a rating of 2, indicating that the PHC Team effort had a limited effect in moving Primary Health Care forward. None of the respondents provided a rating of 1.

Some of those who provided ratings of 4 and 5 elaborated that they felt the Primary Health Care Team worked very hard to move Primary Health Care forward and overcome challenges. One person commented,

> "The PHC team has been, in many ways, the heart and soul of PHC moving forward".

However, a number of people noted that the efforts of the Primary Health Care Team came mostly from a few of the members, namely the coordinator and the facilitator, and that there was not complete buy-in from the entire team. Comments included:

> *"[*The] facilitator and coordinator have worked tirelessly in their efforts to establish the project",
>
> "Only certain team members were 'involved'. The main thrust has come from the coordinator [and] facilitator (i.e. paid PHC staff)", and
>
> "A few members on the team contributed greatly, but overall as a team sat back and waited for others to move things forward".

One respondent felt that greater team development and engagement did start happening in the last few months.

One of the greatest accomplishments of the project as commented on by some of the respondents was that it raised awareness among staff and communities in general about the purpose of the PHC Team and of what Primary Health Care is. Conversely, another person said they *"doubt if most of the general public know what is supposed to be going on"* and one respondent noted that while some of the basic objectives have been met, it is only a start.

*Suggestions for Improving Primary Health Care*

Respondents were asked to reflect on actions that could be taken to help move Primary Health Care forward in their team area. The most common opinion among respondents would be to increase the timelines for implementation of the Primary Health Care Renewal Initiative.

Other suggested actions that would help move Primary Health Care forward include:

- Increasing public awareness of PHC;
- Improving communication with key PHC stakeholders and the general public;
- Increasing sustainable funding and human resource commitment from the government;
- Finding ways to involve representatives from remote and Innu communities;
- Effective, long-term leadership; and
- Greater recognition of the differences and unique challenges of team areas.

Another respondent felt that some of the meetings that were organized by the province and attended by representatives from all team areas could have been conducted in sites outside St. John's.

*Communication, Consultation and Collaboration between PHC Project Team Area Stakeholders*

The focus group participants were asked to rate the quality and effectiveness of communication, consultation and collaboration between PHC Project Team Area stakeholders using a scale of 1- 5, where 1=very poor, 2=poor, 3=fair, 4=good and 5=very good.

A total of 27 respondents rated the communication between PHC Project Team Area stakeholders. The average rating was 4 (good). A total of 56% of respondents provided a rating of 4 (good) while another 26% provided a rating of 5 (very good), and 11% provided a rating of 3 (fair). None of the respondents rated the communication between PHC Project team Area stakeholders as poor or very poor while two of the respondents were unsure.

A total of 25 respondents rated the consultation between PHC Project Team Area stakeholders. The average rating was 4 (good). A total of 48% of respondents provided a rating of 4 (good) while 24% provided a rating of 3 (fair) and 16% provided a rating of 5 (very good). Only one respondent provided a rating of 2 (poor) while two respondents were unsure.

A total of 26 survey participants rated the collaboration between PHC Project Team Area stakeholders. The average rating was 4 (good). A total of 54% of respondents provided a rating of 4 (good) while 19% provided a rating of 3 (fair) and 12% provided a rating of 5 (very good). Only two of the respondents provided a rating of 2 (poor) and two respondents were unsure.

### 7.1.10 Team Effectiveness Summary and Conclusions

The Team Effectiveness Tool was administered to health service providers in seven team areas on three occasions over the course of the Renewal Initiative. The results were analyzed to determine changes in effectiveness in relation to provider awareness and understanding of team purpose/vision/roles, team communication, team support, service delivery, and personal satisfaction. While the low response rates limited the degree of analysis at the individual team area level there was a sufficient number of responses at the composite level to identify some trends.

Improvements were observed in team member awareness and understanding of team purpose and vision where the results showed statistically significantly higher scores

(p≤0.05) on 83% (10 of 12) of the indicator statements between the baseline and final TET survey.

Improvements were also observed in:

- Team communication, where the results showed statistically significantly higher scores (p≤0.05) on 85% (11 of 13) of the indicator statements.
- Team support, where the results showed statistically significantly higher scores (p≤0.05) on 67% (8 of 12) of the indicator statements.
- Service delivery, where the results showed statistically significantly higher scores (p≤0.05) on 60% (9 of 15) of the indicator statements.
- Personal satisfaction, where the results showed statistically significantly higher scores (p≤0.05) on 67% (4 of 6) of the indicator statements.

Overall, the results showed statistically significantly higher scores (p≤0.05) on 72% of the team effectiveness indicator statements of which 24% were significant at p≤0.001.

There is some evidence to attribute the improvements in team effectiveness to the level of team development activity (i.e. number of team meetings, team management meetings, team development/training activities). The total number of team development activities was calculated for each team area to provide a Team Development Activity (TDA) score. The total number of team development activities across the team areas ranged from 8 to 50. Regression analysis was used to examine the relationship between changes in team effectiveness between Time 1 and Time 3 and total team development activity. The results indicate that team areas that conducted more team development activities are likely to experience a more positive change in team effectiveness (although not at the conventional level of statistical significance (p≤0.05).

A new team effectiveness variable was created for each team area by calculating the total number of team effectiveness indicator statements that changed positively by 10% or more between the baseline TET survey and the final TET survey. The Total Improved Team Effectiveness (TITE) variable ranges from 0 to 71. The analysis revealed that TITE scores between the baseline and final survey actually ranged from 8 to 62 across the team areas and regression analysis revealed that team areas that conducted more team development activities were likely to experience a higher TITE score representing greater overall team effectiveness (although not at the conventional level of statistical significance).

A focus group was conducted at the end of the evaluation with 30 stakeholders (e.g. coordinator, facilitator, physician lead, community representatives, regional health board, etc.) from each of the team areas. The focus group discussion examined the PHC Renewal Initiative in terms of successes and challenges, unexpected results, and areas for improvements.

With respect to challenges it was noted that several factors impacted PHC timelines and activities including:

- The restructuring of the regional health boards which occurred concurrently with the implementation of the PHC Initiative;
- Limited support from physicians in some team areas;
- Staff turnover and lack of leadership in some team areas; and
- Uncertainty about the sustainability of the initiative.

With respect to successes, many of the focus group participants identified the team building and development activities as an important achievement in bringing different professional groups together. It was also noted that the PHC Initiative increased the level of awareness of primary health care, as well as determinants of health and wellbeing. The establishment of the community advisory committees was identified as important achievement of the Initiative as they facilitated public participation and community ownership. Stakeholders also emphasized how the PHC Initiative resulted in the development and delivery of a variety of client/patient focused activities to enhance primary health care.

Over 80% of the focus group participants reported that they were satisfied with the PHC Renewal Initiative process in general while over 85% reported that their skills and experience had been used effectively to help move the PHC Initiative forward. Approximately 65% of the stakeholders believe that the community advisory committee helped move the Initiative forward. A number of the stakeholders suggested that the advisory committees are still in the early stages of development. Approximately 82% of the stakeholders reported that the communication between PHC team area stakeholders was good or very good.

Stakeholders provided a number of suggestions for helping to move Primary Health Care forward including:

- Extending timelines to allow for further team building/development activities,
- Increasing public awareness of PHC,
- Increasing sustainable funding and human resource commitment from the government,
- Finding ways to involve representatives from remote and Innu communities
- Effective, long-term leadership, and
- Greater recognition of the differences and unique challenges of team areas.

## 7.2 Scope of Practice

Scope of Practice was assessed through the TET survey, key informant interviews with service providers, and a review of SOP Action Plans that were drafted and implemented in each of the team areas.

### 7.2.1 Scope of Practice Related Results from the TET Survey

Results from the TET survey were used to assess scope of practice. Team members were asked to indicate their level of agreement in relation to a series of corresponding opinion statements using a 7 point scale where 1 = 'Strongly Disagree' and 7 = 'Strongly Agree'. Mean scale scores for each time period were calculated as well as the ratio of means comparing Time 1 results to Time 2 and Time 3 results. A two-tailed independent t-test was also calculated for the TET survey results.

Table 20 reports the mean scale scores for each of the three time periods in relation to a series of opinion statements related to scope of practice. Table 20 also presents the resulting ratio of means and p-values.

The ratio of means scores for all five of the team roles opinion statements indicated about a 10% higher level of agreement (improvement) in team effectiveness between the baseline and Time 3, up slightly from Time 2.

In comparing Time 1 and Time 2 results, the Time 2 group had statistically significantly higher scores ($p \leq 0.05$) on two of the five opinion statements related to scope of practice. With respect to the Time 3 results, the Time 3 group had statistically significantly higher scores ($p \leq 0.05$) than the Time 1 group on all 5 of the opinion statements. Additional details are provided in Table 20.

**Table 20: Scope of Practice Results**

| Theme | Opinion Statement | Time | Number of Respondents | Mean | Ratio of Means | | T1 vs T2 | | | T1 vs T3 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | T2 / T1 | T3 / T1 | t - value | df | p-value (2 tailed) | t - value | df | p-value (2 tailed) |
| Scope of Practice | Members of our team are clear on what is expected of them. | 1 | 217 | 4.14 | 1.08 | 1.12 | -1.736 | 401 | 0.083 | -2.677 | 400 | 0.008 |
| | | 2 | 186 | 4.47 | | | | | | | | |
| | | 3 | 186 | 4.62 | | | | | | | | |
| | Each member of our team respects the insights, knowledge and perspectives brought by members of professions other than his/her own. | 1 | 221 | 4.57 | 1.07 | 1.07 | -1.844 | 403 | 0.066 | -2.048 | 402 | 0.041 |
| | | 2 | 184 | 4.89 | | | | | | | | |
| | | 3 | 183 | 4.90 | | | | | | | | |
| | Each member's abilities, knowledge and experience are fully utilized by the team. | 1 | 215 | 3.98 | 1.09 | 1.10 | -2.055 | 399 | 0.041 | -2.406 | 399 | 0.017 |
| | | 2 | 186 | 4.35 | | | | | | | | |
| | | 3 | 186 | 4.40 | | | | | | | | |
| | Service is being delivered through the appropriate providers (i.e. there is a good match between client/patient needs and provider skills). | 1 | 208 | 4.35 | 1.08 | 1.10 | -2.292 | 384 | 0.022 | -2.769 | 389 | 0.006 |
| | | 2 | 178 | 4.72 | | | | | | | | |
| | | 3 | 185 | 4.78 | | | | | | | | |
| | My scope of practice is being fully utilized within my practice setting. | 1 | 234 | 4.08 | 1.07 | 1.09 | -1.453 | 419 | 0.147 | -2.002 | 415 | 0.046 |
| | | 2 | 187 | 4.36 | | | | | | | | |
| | | 3 | 185 | 4.44 | | | | | | | | |

T1 = Time 1: Baseline survey results; T2 = Time 2: 1st follow-up survey results; T3 = Time 3: 2nd follow-up survey results; Mean score is based on a 7 point scale where 1 = 'Strongly Disagree' and 7 = 'Strongly Agree'; df = degrees freedom.

### 7.2.2 Scope of Practice in Relation to Team Development Activity (TDA)

Regression analysis was used to examine the association between changes in team effectiveness/scope of practice between Time 1 and Time 3 and TDA. Figures 20 and 21 present the scatter plot and least squares regression line displaying the relationship between TDA and the change in TET scores for scope of practice opinion statements with an association p value of less than 0.2. These include the following:

- Members of our team understand their role within the team.
- Team-based functions are shared across professional boundaries

The results reveal that team areas (the diamonds) that conducted more team development activities were likely (albeit at only an 80-85% confidence level) to experience a more positive change in understanding of roles within the team and sharing of responsibilities across professions..

**Figure 20: Team Member Agreement that Team Members Understand Their Role Within the Team by Team Development Activity**

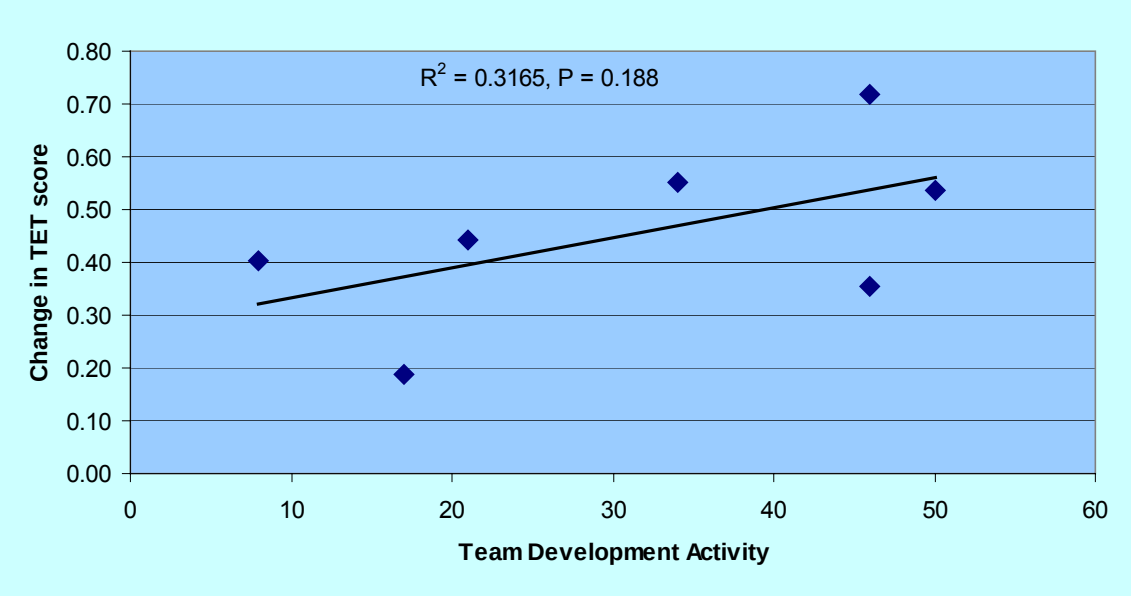
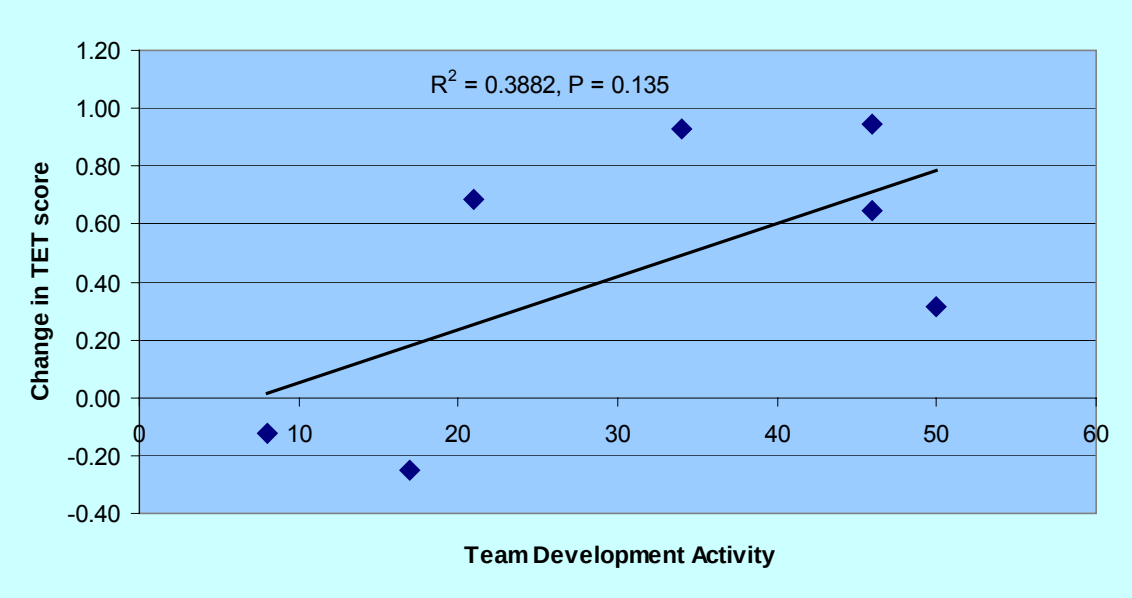


**Figure 21: Team Member Agreement that Team-based Functions are Shared Across Professional Boundaries by Team Development Activity**




### 7.2.3 Action Plan Results

In May/June 2006 the Project Coordinators in each Team Area were asked to provide an assessment of the progress made in implementing their Scope of Practice Action Plans. Project Coordinators were asked to assess the progress made on each individual issue in their Plan using a six point scale where 1 = 'not at all' and 6 = 'completed'.[17] Six of the eight Team Areas provided a progress report on their SOP activities: Bonne Bay, Connaigre, Labrador East, Placentia, St. John's, and Twillingate.[18] The Action Plans were categorized as short, intermediate and long term.[19]

[17] The complete 6 point progress scale is as follows: 1 = no progress; 2 = limited progress; 3 = moderate progress; 4 = great progress; 5 = very great progress; 6 = action completed.
[18] Staffing changes in the other two Team Areas prevented the progress reports from being completed in time for the analysis.
[19] Short-term SOP issues were defined as issues that could be addressed fairly readily at the local PHC team level. Intermediate-term SOP issues were defined as issues that would likely take longer to address than short-term issues, may have regional implications and may need discussions with collaborative groups or others at regional levels. Long-term SOP issues were defined as issues that may have provincial and/or association level implications and require input/action at those levels.

*Short-Term SOP Issues*

With respect to short-term SOP issues the total number of issues identified in each Team Area ranged from five in Labrador East to nine in Twillingate. The types of professional groups identified in the Short-Term Action Plans included nurse practitioners, registered nurses, social workers, occupational therapists, physiotherapists, lab/x-ray technicians, clerical, and mental health and addictions counselors.

In terms of Short-Term SOP progress, the average score across the six Team Areas was 2.9 which represents a moderate level of progress. Average SOP progress at the individual Team Area level ranged from 1.5 (limited progress) in Bonne Bay to 4.4 (great progress) in Connaigre. Many of the Team Areas noted that challenges were experienced in relation to educating staff and management about maximizing scope of practice. Momentum was also impacted by conflicting priorities of staff and management, loss/turnover of staff and management, and the Health Board restructuring process.

**Table 21: Short-Term Scope of Practice Action Plan Results**

| **Short Term SOP Action Plan Progress** (1=no progress; 2=limited progress; 3=moderate progress: 4=great progress; 5=very great progress; 6= action completed) | | | | | |
|---|---|---|---|---|---|
| Bonne Bay | Connaigre | Placenta | St. John's | Twillingate | Labrador East |
| 1.5 | 4.4 | 3.3 | 2.7 | 2.8 | 2.4 |

*Intermediate-Term SOP Issues*

With respect to Intermediate-Term SOP issues the total number of issues identified in each Team Area ranged from four in Bonne Bay to 11 in Placentia. The types of professional groups identified in the Intermediate-Term Action Plans included nurse practitioners, registered nurses, licensed practical nurses, regional nurses, public health nurses, continuing care nurses, home care workers, social workers, speech language therapists, occupational therapists, lab/x-ray technicians, clerical, and mental health counselors.

In terms of Intermediate-Term SOP progress, the average score across the five Team Areas was 1.8 which represents a limited level of progress.[20] Average SOP progress at the individual Team Area level ranged from 1.0 (no progress) in Bonne Bay to 2.4 (limited progress) in St. John's. While some of the Team Areas achieved limited or moderate progress on some issues, it was reported that most Intermediate-Term issues

[20] Assessment data for the Labrador East SOP Action Plan was only available for the Short Term issues.

had regional Health Board implications and required the involvement of the broader organization to act on and carry out strategies addressing SOP. It was suggested that this would require further time for reviewing and determining the feasibility, responsibility and potential impacts of the change process. The Health Board restructuring process was also cited as a factor which has slowed progress as regional managers/directors are still adjusting to the new board structure with limited time to devote to SOP issues. At least one of the Team Areas noted that the lack of electronic records was limiting the ability of health service providers to share relevant information.

**Table 22: Intermediate-Term Scope of Practice Action Plan Results**

| **Intermediate Term SOP Action Plan Progress** (1=no progress; 2=limited progress; 3=moderate progress: 4=great progress; 5=very great progress; 6= action completed) | | | | | |
|---|---|---|---|---|---|
| Bonne Bay | Connaigre | Placenta | St. John's | Twillingate | Labrador East |
| 1.0 | 1.9 | 1.8 | 2.4 | 1.7 | NA |

*Long-Term SOP Issues*

With respect to Long-Term SOP issues the total number of issues identified in each Team Area ranged from two in Bonne Bay to eight in Connaigre. The types of professional groups identified in the Long-Term Action Plans included nurse practitioners, licensed practical nurses, pharmacists, social workers, physiotherapists, occupational therapists, audiology technicians, speech language pathologists, dietitians, and primary care paramedics.

In terms of Long-Term SOP progress, the average score across the five Team Areas was 1.8 which represents a limited level of progress.[21] Average SOP progress at the individual Team Area level ranged from 1.0 (no progress) in Bonne Bay to 2.3 (limited progress) in St. John's. Most of the Long-Term SOP issues/challenges were identified as being beyond the control of the local primary health care team and required the attention/actions of regional and/or provincial organizations. It was noted that these issues were identified in a separate Action Plan for the provincial level.

**Table 23: Long-Term Scope of Practice Action Plan Results**

| **Long Term SOP Action Plan Progress** (1=no progress; 2=limited progress; 3=moderate progress: 4=great progress; 5=very great progress; 6= action completed) | | | | | |
|---|---|---|---|---|---|
| Bonne Bay | Connaigre | Placenta | St. John's | Twillingate | Labrador East |
| 1.0 | 1.7 | 1.8 | 2.3 | 1.9 | NA |

[21] Assessment data for the Labrador East SOP Action Plan was only available for the Short Term issues.

### 7.2.4 SOP Key Informant Interview Results

Scope of Practice (SOP) key informant interviews were conducted with Primary Health Care providers at all of the Primary Health Care team areas. The information was used to assist in determining the extent to which the actions taken to maximize scopes of practice impacted actual service provider practices. The collection of these qualitative data provides a more complete understanding of the statistical associations (or lack of them) identified in quantitative data from the Team Effectiveness Tool and the Administrative Process Record.

A total of 24 key informant interviews were conducted in the month of June and July 2006. All of the interviews with the exception of two were conducted by phone by either OPHC staff or an evaluation consultant. The two remaining surveys were self-administered and returned to the evaluation consultant.

The interviews were conducted over the summer months and also towards the end of the PHC transition fund period. These factors made it a challenge to book interviews with service providers. Additionally, there were some turn over in team members and not all of the SOP providers' lists were updated. A minimum of three randomly selected service providers from each team area were interviewed.

*SOP Service Provider Profile*

The survey respondents represented a variety of disciplines including social workers, public health nurses, licensed practical nurses, and occupational therapists. Additional details are presented in Table 24.

**Table 24: SOP Key Informant Interview Participants by Profession**

| Professions | Number of Participants |
|---|---|
| Continuing Care Nurse | 1 |
| Physiotherapy Support Worker | 2 |
| Public Health Nurse | 2 |
| Social Worker | 5 |
| Occupational Therapist | 2 |
| Registered Nurse | 1 |
| Licensed Practical Nurse | 2 |
| Lab Assistant | 1 |
| Manager (Social Worker) | 1 |
| Nurse Practitioner | 1 |
| Dietitian | 1 |
| Child Management Specialist | 1 |
| Diabetic Nurse Educator | 1 |
| Lab/X-ray Tech. | 1 |

Just over half of the providers listed in Table 24 have worked in their current position for an extensive period of time, ranging from 10 – 29 years (13 individuals) while the balance of providers have worked in their current position for at least 2 years, and one individual has worked in their current position for less than one year.

Just over half of the providers completed a Bachelor's degree (e.g. B.A., B.Sc., B.S.W.) while seven of the providers completed a non-university trades certificate or diploma and two providers completed a partial non-university trades certificate.

*Skills Inventory Checklist*

A total of 19 providers reported that they participated in completing the self-administered skills inventory. The providers were asked to rate the ease of completing the skills inventory checklist using a 5 point scale where 1 = very difficult and 5 = very easy. A total of seven providers (37%) found the skills inventory easy or very easy to use while 10 providers (52%) were neutral and two providers (11%) found the skills inventory somewhat difficult to use.

Many of the providers suggested that there was not enough time allotted to complete the skills inventory (i.e. participants were given 3 days to complete and submit the self-administered skills inventory checklist). Others found the questions too broad and that it was difficult to itemize all the job tasks that they perform.

*Follow-Up Discussions*

A total of 18 providers reported that they participated in the follow-up discussions to review the data collected for the skills inventory. The providers were asked to rate how useful the follow-up discussions were using a 5 point scale where 1 = not at all useful and 5 = very useful. A total of seven providers (39%) found the discussions to very or somewhat useful while six providers (33%) were neutral and five providers (28%) found the discussions to be of limited use.

In general, individuals who found the follow-up discussions to be useful reported that the meetings provided a good opportunity for providers to provide more insights on how their work time could have been better utilized. It also provided them the opportunity to discuss their roles and duties with their supervisors. However, several providers remain skeptical about the value of the process as they have yet to see results (improvements or changes) in shifting scopes of practice.

*Scope of Practice Action Plan*

The providers were asked whether they reviewed the Scope of Practice Action Plan for their team area while it was being drafted and if they provided input. Only eight of the

providers reported that they saw the Action Plan while a further 10 providers were unsure if they saw the Plan. Of the eight providers who saw the Plan, seven had an opportunity to review the Plan and provide comments. Using a 5 point scale where 1 = not at all accurate and 5 = very accurate, these seven participants were asked to rate how accurately the Action Plan reflected the comments and ideas that came out of the facilitated discussions. The responses varied. Two participants provided a rating of 4 and two others provided a rating of 5. These respondents reported that the Action Plan accurately reflected the comments and ideas that came out of the facilitated discussions. The remaining three respondents provided ratings of 2, 3 and 3.5 and identified concerns such as the Plan being too broad and some issues that needed to be dealt with at the management level. It was also suggested that some issues were being addressed anyway regardless of the Scope of Practice procedure.

*Collaboration*

Providers were asked whether they or anyone in their provider group met with a member(s) of another provider group to collaborate/discuss which provider group would be most appropriate to perform particular functions. A total of 14 providers reported that that they did not meet with other provider groups while four providers indicated that they attended collaborative sessions. Using a 5 point scale where 1 = not at all useful and 5 = very useful, these four providers were asked to rate how useful the collaborative group meetings were. Three of the respondents rated the collaborative sessions as 4 or 5 while the fourth rated the session as 3 noting the meetings were good, but they produced limited results. Only one of these four respondents reported using the Decision-Making Impact Window tool and noted that the tool provided a good visual idea, but it only provided a snap shot in time.

Participants were asked if they thought the collaborative group discussions (to identify the most appropriate provider to perform a function) were valuable. Twenty of the 24 providers indicated that they believe the discussions were valuable. Many of the participants were enthusiastic about the discussion groups and hopeful that the process would help to identify practice overlaps and gaps and clarify roles. One concern raised was that a decision-making body needed to participate in the process.

*Level of Satisfaction with the Scope of Practice Process*

Providers were asked to rate how satisfied they were they with the process used to assist in maximizing scope of practice roles using a 5 point scale where 1 = very dissatisfied and 5 = very satisfied. The process includes the development of the skills inventory, the follow-up discussions, and the creation of the Action Plan.

A total of eight providers reported that they were somewhat or very satisfied with the process while seven other providers were undecided and six providers indicated that

they were dissatisfied with the process. Some of the providers expressed that the process had not been fully completed in their team area. It was also suggested that although discussions had occurred, there appeared to be little action to change the scope of practice. Additionally, one respondent commented that the beginning of the process was fine, however, there were problems relating to following-up. Providers who were satisfied with the process noted that it provided the opportunity for people to think about what they do and to communicate and help each other understand different roles.

The respondents provided several suggestions for improving the process including offering more support to providers to help them understand the purpose and the seriousness of their inputs as it relates to changing their scope of practice. This relates to the outcomes of the process, or some assurance that the information they provide will actually be used to help change their scope of practice. As stated by one participant:

> "If we knew what would become of our skills inventory, then we would be more willing to participate. Right now, I'm not sure of the usefulness of the information that I've provided."

Participants also expressed interest in having more follow-up meetings and face-to-face discussions with other team members and/or other provider groups. Another suggestion was for both providers and managers to be involved and follow through on suggestions/discussions.

*Changes in Scope of Practice*

Participants were asked to rate the extent to which their scope of practice changed over the last 12 months using a 7 point scale where 1 = greatly reduced, 4 = no change and 7 = greatly expanded.

A total of 12 providers reported that there has been no change to their scope of practice while two of the participants reported that their scopes had been minimally expanded. One of these providers noted that it was too early in the process to expect a notable change.

A total of seven providers reported that their scope of practice has been slightly-moderately expanded. Roles associated with these seven providers were expanded due to either increased clerical support or because of the Diabetes Clinics. The Diabetes Clinics allowed them to provide more continuity of care and education to their patients. One participant stated that more patients are being diagnosed and observed that patients are not being admitted to hospital and there is more intensive management of diabetes. Another participant noted that they had increased caseloads and also autonomy.

Two participants reported that their scope of practice has changed significantly. One of the respondents has been able to do medication and wound care whenever required while the other individual stated that new equipment has enabled more testing.

Participants were asked whether they had experienced any challenges in relation to maximizing their scope of practice. A total of seven respondents reported that they did not experience any challenges while 14 providers expressed that they encountered some challenges in trying to maximize their scope of practice. The main challenge was related to the lack of human resources such as support staff to take on the administrative and paper work. The other main challenge relates to the lack of education around scope of practice (i.e. people are not as informed about other providers' competency level and their roles in the team). Those who had faced challenges in maximizing their scope of practice suggested the following strategies:

- Establish/increase collaborative meetings to discuss roles and to become familiar with other providers roles;
- Team building sessions such as the BBT sessions;
- Increase the number of staff, especially in the area of clerical support;
- Increase training to maximize scope of practice; and
- Get managers involved.

*Other Training*

Participants were asked, whether they had received any other type of training over the last 12 months that was directed at enhancing their scope of practice. The following table provides a summary of the type of training that the participants received and the average rating on the helpfulness of the training activity using a 5 point scale where 1 = not at all helpful and 5 = very helpful. While most participants received more than one type of training, four of the participants did not receive any additional training.

**Table 25: Participation by Type of Training**

| Type of Training [a] | Number of Participants | Average Rating [b] | Rating Ranges |
|---|---|---|---|
| BBT – Understanding Primary Health Care | 15 | 3.9 | 1 to 5 |
| BBT – Team Building | 14 | 4.1 | 2 to 5 |
| BBT – Conflict Resolution | 11 | 4.0 | 3 to 5 |
| BBT – Building Community Relationships | 11 | 4.0 | 3 to 5 |
| Chronic Disease Management Learning Sessions | 7 | 4.0 | 3 to 5 |
| Other | 4 | 3.8 | 2 to 5 |
| Did not receive additional training | 4 | | |

[a] BBT = Building Better Tomorrow Initiative
[b] Based on 5 point scale where 1=not at all helpful and 5= very helpful.

Participants were also asked to rate how their relations with other health providers changed since the Scope of Practice Action Plan was implemented using a 5 point scale where 1 = deteriorated greatly, 3 = no change and 5 = improved greatly.

A total of nine participants reported that their relationships with other health providers had not changed while eight participants reported that their relations with other providers had improved somewhat and two participants indicated that relations had improved greatly. As noted by one of the providers who experienced an improvement in relations:

> "The regular meetings that PHC Initiatives provided allowed me to connect with other managers within the institutions of the region. I gained more understanding of the organization and how it is run. I am also able to dialogue with these managers."

### 7.2.5 Scope of Practice Summary and Conclusions

The Team Effectiveness Tool included five scope of practice indicator statements. The results were analyzed to determine changes in scope of practice. Improvements were observed with statistically significantly higher scores (≈10%, $p \leq 0.05$) on all five of the indicator statements between the baseline and final TET survey.

There is some evidence to attribute the improvements in scope of practice to the level of team development activity TDA (i.e. number of team meetings, team management meetings, team development/training activities). Regression analysis was used to examine the relationship between changes in scope of practice between Time 1 and Time 3 and TDA. The results reveal that team areas that conducted more team development activities were likely to experience a more positive change in understanding of role and responsibilities (although not at the conventional level of statistical significance).

Results from the SOP Action Plan survey revealed that most of the team areas have achieved a moderate degree of progress in implementing their short-term action plans while a limited degree of progress has been achieved in relation to intermediate- and long-term action plans. Project Coordinators identified a number of challenges in implementing their action plans including:

- Educating staff and management about maximizing scope of practice;
- Loss of momentum due to conflicting priorities of staff and management, loss/turnover of staff and management, and the regional health board restructuring process;
- Limited ability of health service providers to share relevant information due to lack of electronic records; and

- Many of the long-term SOP issues were identified as being beyond the control/influence of the local PHC team and required the attention/actions of regional and/or provincial organizations.

Scope of Practice key informant interviews were conducted with a total of 24 health care service providers representing all of the team areas. The providers provided insights on their satisfaction with the SOP process and the extent to which the actions taken to maximize scopes of practice impacted actual service provider practices. Approximately 38% of the respondents reported that they were somewhat or very satisfied with the process while a further 33% were undecided and 28% were dissatisfied. While the respondents recognized the importance of the SOP process in providing service providers with the opportunity to think about what they do and to communicate with other professional groups, a number of suggestions were provided for improving the process including:

- Establish/increase collaborative meetings to discuss roles and become more familiar with other providers roles;
- Increase the number of team building sessions;
- Offer more support to providers to help them understand the purpose and the importance of their inputs as it relates to changing their scope of practice;
- Increase the number of staff, especially in the area of clerical support;
- Increase training to maximize scope of practice; and
- Get managers more involved in the process.

Approximately 30% of the respondents reported that their scope of practice has been slightly-moderately expanded. However, many of the respondents suggested that the SOP Action Plans are still in the early stages of being implemented.

## 7.3 Delivery of Accessible Services

The delivery of accessible services was assessed through the client/patient survey and a review of client/patient health service usage patterns in relation to total improved team effectiveness.

### 7.3.1 Client/Patient Survey Response Rate and Profile of Respondents

*CPST Survey Response Rate*

The baseline client/patient survey was carried out by the Research and Development Division of the Newfoundland and Labrador Centre for Health Information (NLCHI) between January 10 and March 5, 2005. As shown in Table 26, NLCHI completed a total of 2,580 baseline surveys across seven team areas. A sufficient number of randomly selected respondents were interviewed in each of the team areas to provide a 95% level of confidence in the results at the team area level. The overall response rate was approximately 33%. Additional details on the number of baseline survey completed and response rates by team area are provided in Table 26.

**Table 26: Baseline Survey Response Rates for the PHC Client/Patient Satisfaction Survey**

| PHC Team Area | Total number of phone numbers in the directory | Total number of phone numbers called | Total Number of surveys completed | Total number of surveys required for 95% level of confidence in the results | Response Rate |
|---|---|---|---|---|---|
| Twillingate | 1,217 | 1,147 | 389 | 359 | 33.9% |
| Connaigre | 826 | 826 | 354 | 352 | 42.9% |
| Bonavista | 1,019 | 1,004 | 365 | 365 | 36.4% |
| Bonne Bay | 1,205 | 1,201 | 364 | 350 | 29.1% |
| Grenfell | 1,441 | 1,347 | 374 | 373 | 27.8% |
| Labrador East | 1,503 | 1,364 | 375 | 367 | 27.5% |
| Placentia | 1,061 | 1,061 | 359 | 360 | 33.9% |
| TOTAL | 8,272 | 7,950 | 2,580 | 2526 | 32.5% |

The follow-up client/patient survey was also carried out by the NLCHI; this was done between May 23 and June 30, 2006. As shown in Table 27, NLCHI completed a total of 2,548 follow-up surveys across seven team areas. A sufficient number of randomly selected respondents were interviewed in each of the team areas to provide a 95% level of confidence in the results at the team area level. The overall response rate was approximately 34%. Additional details on the number of baseline survey completed and response rates by team area are provided in Table 27. The researchers did not collect paired results for the baseline and follow-up survey participants.

**Table 27: Follow-up Survey Response Rates for the PHC Client/Patient Satisfaction Survey**

| PHC Team Area | Total number of phone numbers in the directory | Total number of phone numbers called | Total Number of surveys completed | Total number of surveys required for 95% level of confidence in the results | Response Rate |
|---|---|---|---|---|---|
| Twillingate | 1,035 | 1,035 | 359 | 359 | 34.7% |
| Connaigre | 1,065 | 1,000 | 352 | 352 | 35.2% |
| Bonavista | 1,125 | 1,072 | 366 | 365 | 34.1% |
| Bonne Bay | 963 | 952 | 351 | 350 | 36.9% |
| Grenfell | 1,257 | 1,210 | 393 | 373 | 32.5% |
| Labrador East | 1,284 | 1,284 | 367 | 367 | 28.6% |
| Placentia | 1,230 | 1,033 | 360 | 360 | 34.5% |
| TOTAL | 7,959 | 7,586 | 2548 | 2526 | 33.6% |

*Profile of CPST Survey Respondents by Age*

The average age of survey respondents was approximately 52 years at both the baseline and follow-up survey. At the individual team area, the lowest average age was 46 years (Labrador East) while the highest was 56 years (Twillingate). Additional details are provided in Table 28.

**Table 28: Average Age of Client/Patient Survey Respondents by Team Area**

| Time period | Bonavista | | Bonne Bay | | Connaigre | | Twillingate | | Lab East | | Grenfell | | Placentia | | All Team Areas | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of respondents | Average Age (yrs) | Number of respondents | Average Age (yrs) | Number of respondents | Average Age (yrs) | Number of respondents | Average Age (yrs) | Number of respondents | Average Age (yrs) | Number of respondents | Average Age (yrs) | Number of respondents | Average Age (yrs) | Number of respondents | Average Age (yrs) |
| 1 | 363 | 51.8 | 298 | 54.1 | 346 | 49.7 | 388 | 54.0 | 331 | 46.8 | 369 | 50.1 | 357 | 53.8 | 2452 | 51.5 |
| 2 | 359 | 53.5 | 347 | 54.8 | 349 | 51.5 | 342 | 56.1 | 360 | 46.0 | 389 | 52.6 | 352 | 54.4 | 2498 | 52.7 |

*Profile of CPST Survey Respondents by Gender*

The large majority of survey respondents were women (73%+) for both the baseline and follow-up survey. This pattern was fairly consistent across all of the team areas. Additional details are provided in Table 29.

**Table 29: Gender Distribution of Client/Patient Survey Respondents by Team Area**

| | | Bonavista | Bonne Bay | Connaigre | Twillingate | Lab East | Grenfell | Placentia | All Team Areas |
|---|---|---|---|---|---|---|---|---|---|
| **Time 1** | | | | | | | | | |
| Male | Count | 88 | 76 | 82 | 99 | 116 | 85 | 106 | 652 |
| | % | 24.3 | 25.6 | 23.2 | 25.5 | 34.8 | 22.8 | 29.6 | 26.5 |
| Female | Count | 274 | 221 | 272 | 289 | 217 | 288 | 252 | 1813 |
| | % | 75.7 | 74.4 | 76.8 | 74.5 | 65.2 | 77.2 | 70.4 | 73.5 |
| Total | Count | 362 | 297 | 354 | 388 | 333 | 373 | 358 | 2465 |
| | % | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| **Time 2** | | 3 | 4 | 2 | 1 | 6 | 5 | 7 | |
| Male | Count | 77 | 75 | 82 | 100 | 108 | 90 | 80 | 612 |
| | % | 21.0 | 21.4 | 23.3 | 27.9 | 29.4 | 22.9 | 22.2 | 24.0 |
| Female | Count | 289 | 275 | 270 | 259 | 259 | 303 | 280 | 1935 |
| | % | 79.0 | 78.6 | 76.7 | 72.1 | 70.6 | 77.1 | 77.8 | 76.0 |
| Total | Count | 366 | 350 | 352 | 359 | 367 | 393 | 360 | 2547 |
| | % | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

*Profile of CPST Survey Respondents by Highest Level of Education*

Table 30 presents a profile of the distribution of client/patient survey respondents by their highest level of education. At the composite level close to 40% of the respondents reported that they had not completed high school while about 27% reported that they had graduated from high school. Approximately 9% of the respondents completed a Bachelor's degree or higher. Relative to the composite profile, Labrador East had a notably lower percentage of respondents who did not complete high school (15-22%) and a higher percentage of respondents who completed a trades certificate/diploma (23-26%) or Bachelor's degree or higher (16-17%). Additional details are provided in Table 30.

**Table 30: Client/Patient Survey Respondents by Highest Level of Education by Team Area**

| | | Bonavista | Bonne Bay | Connaigre | Twillingate | Lab East | Grenfell | Placentia | All Team Areas |
|---|---|---|---|---|---|---|---|---|---|
| **Time 1** | | | | | | | | | |
| Less than high school | Count | 150 | 134 | 180 | 180 | 74 | 144 | 115 | 977 |
| | % | 41.6 | 44.8 | 51.1 | 46.4 | 22.4 | 38.9 | 32.4 | 39.8 |
| High school graduation | Count | 100 | 75 | 88 | 116 | 69 | 120 | 97 | 665 |
| | % | 27.7 | 25.1 | 25.0 | 29.9 | 20.9 | 32.4 | 27.3 | 27.1 |
| Some trades certificate / diploma | Count | 22 | 13 | 14 | 14 | 26 | 16 | 22 | 127 |
| | % | 6.1 | 4.3 | 4.0 | 3.6 | 7.9 | 4.3 | 6.2 | 5.2 |
| Completed trades certificate / diploma | Count | 50 | 34 | 34 | 38 | 86 | 53 | 75 | 370 |
| | % | 13.9 | 11.4 | 9.7 | 9.8 | 26.1 | 14.3 | 21.1 | 15.1 |
| Some university | Count | 20 | 12 | 7 | 11 | 21 | 15 | 16 | 102 |
| | % | 5.5 | 4.0 | 2.0 | 2.8 | 6.4 | 4.1 | 4.5 | 4.2 |
| Completed Bachelor's degree | Count | 11 | 23 | 27 | 26 | 44 | 21 | 26 | 178 |
| | % | 3.0 | 7.7 | 7.7 | 6.7 | 13.3 | 5.7 | 7.3 | 7.3 |
| Completed Master's or Doctoral degree | Count | 8 | 8 | 2 | 3 | 10 | 1 | 4 | 36 |
| | % | 2.2 | 2.7 | 0.6 | 0.8 | 3.0 | 0.3 | 1.1 | 1.5 |
| Total | Count | 361 | 299 | 352 | 388 | 330 | 370 | 355 | 2455 |
| | % | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| **Time 2** | | | | | | | | | |
| Less than high school | Count | 144 | 163 | 175 | 172 | 55 | 152 | 90 | 951 |
| | % | 39.7 | 46.7 | 50.3 | 49.0 | 15.2 | 39.1 | 25.4 | 37.8 |
| High school graduation | Count | 109 | 76 | 103 | 76 | 107 | 116 | 109 | 696 |
| | % | 30.0 | 21.8 | 29.6 | 21.7 | 29.5 | 29.8 | 30.8 | 27.7 |
| Some trades certificate / diploma | Count | 29 | 26 | 14 | 32 | 25 | 12 | 38 | 176 |
| | % | 8.0 | 7.4 | 4.0 | 9.1 | 6.9 | 3.1 | 10.7 | 7.0 |
| Completed trades certificate / diploma | Count | 44 | 41 | 22 | 36 | 85 | 65 | 57 | 350 |
| | % | 12.1 | 11.7 | 6.3 | 10.3 | 23.4 | 16.7 | 16.1 | 13.9 |
| Some university | Count | 12 | 14 | 10 | 8 | 30 | 14 | 20 | 108 |
| | % | 3.3 | 4.0 | 2.9 | 2.3 | 8.3 | 3.6 | 5.6 | 4.3 |
| Completed Bachelor's degree | Count | 23 | 25 | 20 | 24 | 50 | 27 | 37 | 206 |
| | % | 6.3 | 7.2 | 5.7 | 6.8 | 13.8 | 6.9 | 10.5 | 8.2 |
| Completed Master's or Doctoral degree | Count | 2 | 4 | 4 | 3 | 11 | 3 | 3 | 30 |
| | % | 0.6 | 1.1 | 1.1 | 0.9 | 3.0 | 0.8 | 0.8 | 1.2 |
| Total | Count | 363 | 349 | 348 | 351 | 363 | 389 | 354 | 2517 |
| | % | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

*Profile of CPST Survey Respondents by Total Household Income*

The client/patient survey respondents represented a wide variety of income groups. At the composite level approximately 22-25% of the respondents reported less than $20,000 in total household income while 18-22% reported $60,000 or more in total household income. Additional details at the team area level are provided in Table 31 Time 1 and 2.

**Table 31: Client/Patient Survey Respondents by Household Income by Team Area – Time 1**

| | | Bonavista | Bonne Bay | Connaigre | Twillingate | Lab East | Grenfell | Placentia | All Team Areas |
|---|---|---|---|---|---|---|---|---|---|
| **Time 1** | | | | | | | | | |
| Less than $10,000 | Count | 15 | 11 | 12 | 22 | 2 | 9 | 13 | 84 |
| | % | 6.0 | 5.0 | 4.7 | 7.6 | 0.7 | 3.2 | 4.9 | 4.6 |
| $10,000 to $19,999 | Count | 62 | 52 | 52 | 60 | 19 | 34 | 50 | 329 |
| | % | 24.8 | 23.6 | 20.4 | 20.6 | 7.0 | 12.0 | 18.8 | 17.9 |
| $20,000 to $29,999 | Count | 52 | 59 | 57 | 68 | 36 | 54 | 52 | 378 |
| | % | 20.8 | 26.8 | 22.4 | 23.4 | 13.3 | 19.1 | 19.5 | 20.6 |
| $30,000 to $39,999 | Count | 32 | 33 | 44 | 51 | 27 | 60 | 34 | 281 |
| | % | 12.8 | 15.0 | 17.3 | 17.5 | 10.0 | 21.2 | 12.8 | 15.3 |
| $40,000 to $49,999 | Count | 32 | 25 | 40 | 34 | 32 | 44 | 42 | 249 |
| | % | 12.8 | 11.4 | 15.7 | 11.7 | 11.8 | 15.5 | 15.8 | 13.6 |
| $50,000 to $59,999 | Count | 18 | 11 | 19 | 26 | 36 | 31 | 30 | 171 |
| | % | 7.2 | 5.0 | 7.5 | 8.9 | 13.3 | 11.0 | 11.3 | 9.3 |
| $60,000 to $69,999 | Count | 14 | 11 | 13 | 10 | 22 | 18 | 17 | 105 |
| | % | 5.6 | 5.0 | 5.1 | 3.4 | 8.1 | 6.4 | 6.4 | 5.7 |
| $70,000 to $79,999 | Count | 9 | 4 | 5 | 9 | 18 | 10 | 6 | 61 |
| | % | 3.6 | 1.8 | 2.0 | 3.1 | 6.6 | 3.5 | 2.3 | 3.3 |
| $80,000 to $89,999 | Count | 8 | 5 | 3 | 4 | 22 | 9 | 8 | 59 |
| | % | 3.2 | 2.3 | 1.2 | 1.4 | 8.1 | 3.2 | 3.0 | 3.2 |
| $90,000 to $99,999 | Count | 5 | 1 | 2 | 3 | 12 | 6 | 4 | 33 |
| | % | 2.0 | 0.5 | 0.8 | 1.0 | 4.4 | 2.1 | 1.5 | 1.8 |
| $100,000 or more | Count | 3 | 8 | 8 | 4 | 45 | 8 | 10 | 86 |
| | % | 1.2 | 3.6 | 3.1 | 1.4 | 16.6 | 2.8 | 3.8 | 4.7 |
| Total | Count | 250 | 220 | 255 | 291 | 271 | 283 | 266 | 1836 |
| | % | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

**Table 31: Client/Patient Survey Respondents by Household Income by Team Area – Time 2**

| | | Bonavista | Bonne Bay | Connaigre | Twillingate | Lab East | Grenfell | Placentia | All Team Areas |
|---|---|---|---|---|---|---|---|---|---|
| **Time 2** | | | | | | | | | |
| Less than $10,000 | Count | 13 | 24 | 10 | 7 | 3 | 10 | 15 | 82 |
| | % | 5.4 | 9.9 | 4.3 | 3.4 | 1.4 | 4.1 | 6.6 | 5.1 |
| $10,000 to $19,999 | Count | 55 | 61 | 59 | 47 | 14 | 34 | 45 | 315 |
| | % | 22.9 | 25.1 | 25.4 | 22.9 | 6.7 | 13.9 | 19.7 | 19.7 |
| $20,000 to $29,999 | Count | 59 | 54 | 57 | 52 | 17 | 55 | 41 | 335 |
| | % | 24.6 | 22.2 | 24.6 | 25.4 | 8.1 | 22.5 | 17.9 | 20.9 |
| $30,000 to $39,999 | Count | 37 | 45 | 36 | 37 | 27 | 37 | 31 | 250 |
| | % | 15.4 | 18.5 | 15.5 | 18.0 | 12.9 | 15.2 | 13.5 | 15.6 |
| $40,000 to $49,999 | Count | 35 | 17 | 25 | 21 | 15 | 28 | 24 | 165 |
| | % | 14.6 | 7.0 | 10.8 | 10.2 | 7.2 | 11.5 | 10.5 | 10.3 |
| $50,000 to $59,999 | Count | 13 | 12 | 14 | 10 | 15 | 19 | 18 | 101 |
| | % | 5.4 | 4.9 | 6.0 | 4.9 | 7.2 | 7.8 | 7.9 | 6.3 |
| $60,000 to $69,999 | Count | 10 | 9 | 8 | 8 | 24 | 24 | 8 | 91 |
| | % | 4.2 | 3.7 | 3.4 | 3.9 | 11.5 | 9.8 | 3.5 | 5.7 |
| $70,000 to $79,999 | Count | 5 | 6 | 7 | 9 | 14 | 11 | 16 | 68 |
| | % | 2.1 | 2.5 | 3.0 | 4.4 | 6.7 | 4.5 | 7.0 | 4.2 |
| $80,000 to $89,999 | Count | 8 | 6 | 8 | 7 | 21 | 10 | 10 | 70 |
| | % | 3.3 | 2.5 | 3.4 | 3.4 | 10.0 | 4.1 | 4.4 | 4.4 |
| $90,000 to $99,999 | Count | 1 | 1 | 2 | 1 | 14 | 5 | 5 | 29 |
| | % | 0.4 | 0.4 | 0.9 | 0.5 | 6.7 | 2.0 | 2.2 | 1.8 |
| $100,000 or more | Count | 4 | 8 | 6 | 6 | 45 | 11 | 16 | 96 |
| | % | 1.7 | 3.3 | 2.6 | 2.9 | 21.5 | 4.5 | 7.0 | 6.0 |
| Total | Count | 240 | 243 | 232 | 205 | 209 | 244 | 229 | 1602 |
| | % | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

*Profile of CPST Survey Respondents by Access to a Family Doctor*

Approximately 70% of the baseline and follow-up client/patient survey respondents reported that they have a family doctor while 30% reported that they did not have a family doctor. Bonne Bay reported the largest percentage of respondents that have a family doctor (over 80%) while Grenfell Region reported the largest percentage of respondents without a family doctor (over 65%).

Additional details at the team area level are provided in Table 32.

**Table 32: Client/Patient Survey Respondents and Access to a Family Doctor by Team Area**

| Access to a Family Doctor | | Bonavista | Bonne Bay | Connaigre | Twillingate | Lab East | Grenfell | Placentia | All Team Areas |
|---|---|---|---|---|---|---|---|---|---|
| **Time 1** | | | | | | | | | |
| Yes | Count | 305 | 263 | 287 | 273 | 234 | 115 | 294 | 1771 |
| | % | 83.6 | 87.4 | 81.1 | 70.2 | 70.3 | 30.7 | 82.1 | 71.6 |
| No | Count | 60 | 38 | 67 | 116 | 99 | 259 | 64 | 703 |
| | % | 16.4 | 12.6 | 18.9 | 29.8 | 29.7 | 69.3 | 17.9 | 28.4 |
| Total | Count | 365 | 301 | 354 | 389 | 333 | 374 | 358 | 2474 |
| | % | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| **Time 2** | | | | | | | | | |
| Yes | Count | 283 | 292 | 280 | 269 | 246 | 129 | 286 | 1785 |
| | % | 77.3 | 83.2 | 79.5 | 74.9 | 67.0 | 32.8 | 79.4 | 70.1 |
| No | Count | 83 | 59 | 72 | 90 | 121 | 264 | 74 | 763 |
| | % | 22.7 | 16.8 | 20.5 | 25.1 | 33.0 | 67.2 | 20.6 | 29.9 |
| Total | Count | 366 | 351 | 352 | 359 | 367 | 393 | 360 | 2548 |
| | % | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

*Barriers to Accessing Health Services*

Clients/patients were asked to identify the types of barriers they experienced when trying to access health services. The most common barrier identified is wait times for appointments as reported by 6-8% of the respondents at the baseline and follow-up survey. The next most common barrier is the lack of health professionals as reported by 3.5%-7% of the respondents. Additional details are provided in Table 33.

**Table 33: Types of Barriers Encountered by Clients/Patients (All Team Areas) when Accessing Health Services**

| Type of Barrier | | Time Period | |
|---|---|---|---|
| | | 1 | 2 |
| Cost | Count | 17 | 29 |
| | % | 0.7% | 1.1% |
| Lack of health insurance | Count | 12 | 9 |
| | % | 0.5% | 0.4% |
| Too long for appointments | Count | 151 | 210 |
| | % | 6.1% | 8.2% |
| Weather | Count | 81 | 68 |
| | % | 3.3% | 2.7% |
| Lack of health professionals | Count | 87 | 176 |
| | % | 3.5% | 6.9% |
| Lack of transportation | Count | 27 | 25 |
| | % | 1.1% | 1.0% |
| Location of office | Count | 15 | 24 |
| | % | 0.6% | 0.9% |
| Too long in waiting room | Count | 44 | 42 |
| | % | 1.8% | 1.6% |
| Lack of personal time available | Count | 7 | 15 |
| | % | 0.3% | 0.6% |
| Other barriers | Count | 117 | 100 |
| | % | 4.7% | 3.9% |
| Total Respondents | | 2475 | 2548 |

### 7.3.2 Service Delivery in Relation to Team Effectiveness

Regression analysis was used to examine the relationship between changes in total improved team effectiveness (TITE) and changes in client/patient service delivery between baseline and follow-up. Figures 22 through 24 present the scatter plot and regression line displaying the relationship between the TITE scores and several different aspects of service delivery including:

- Client/patient wait times to get an appointment with health service providers,
- Number of client/patient visits to the emergency department, and
- Client/patient's perceived ease of access to health services.

The results reveal that in team areas (diamonds in the figures) that experienced more improvement in team effectiveness the clients tended to experience lower wait times (p=0.038), fewer visits to emergency departments (p=0.025), and higher perceived ease of access to primary health care services (p=0.061).

**Figure 22: Change in Client/Patient Wait Times for an Appointment to See a Health Service Provider by Total Improved Team Effectiveness**

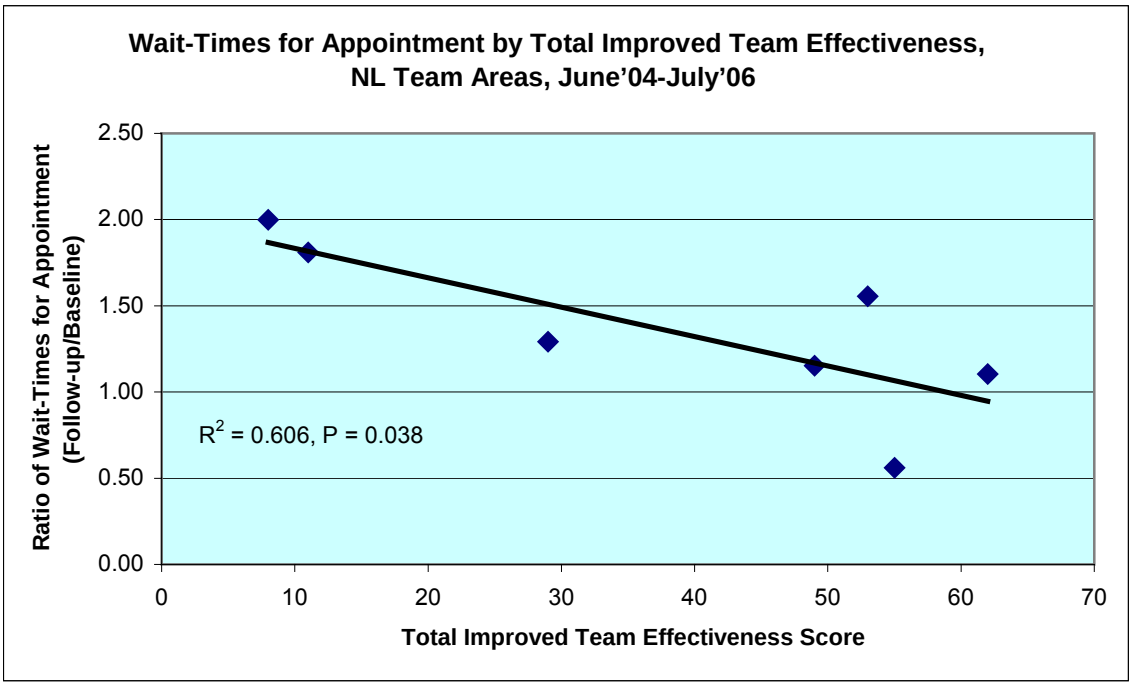


**Figure 23: Change in Average Number of Client/Patient Visits to the Emergency Department by Total Improved Team Effectiveness**

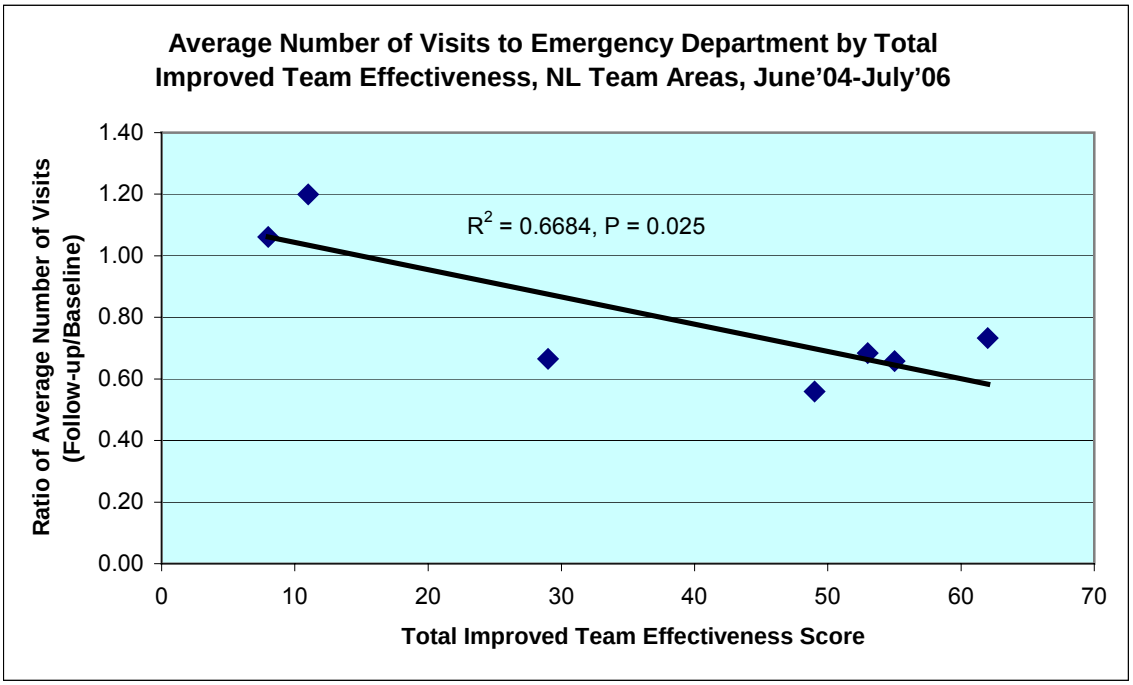
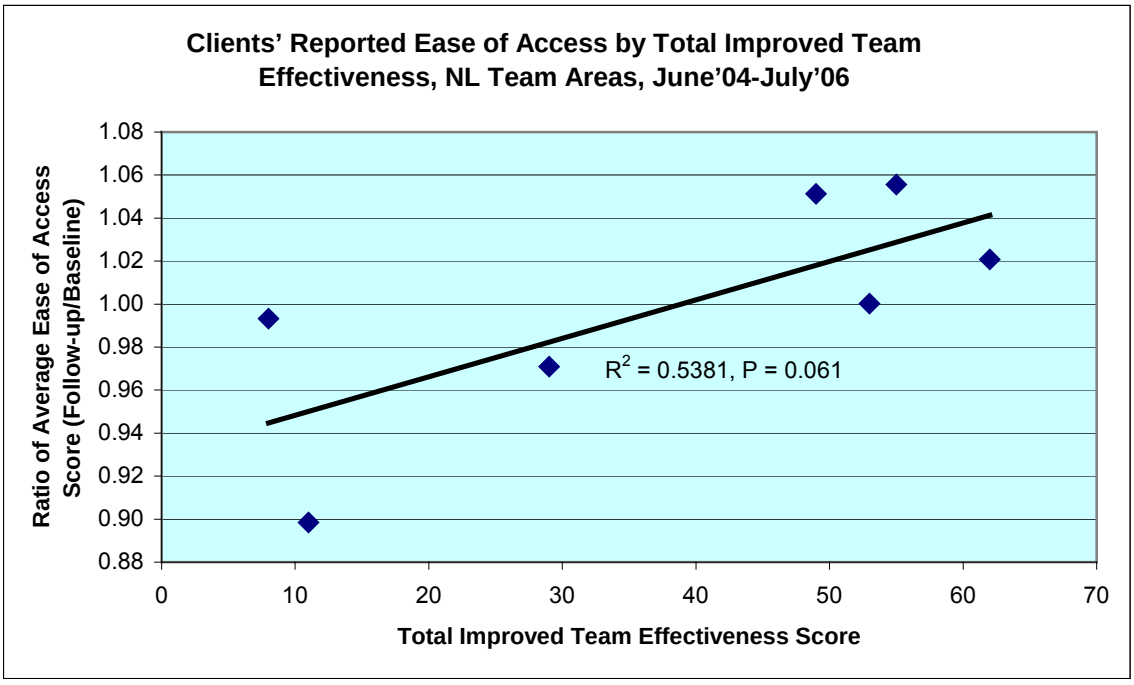
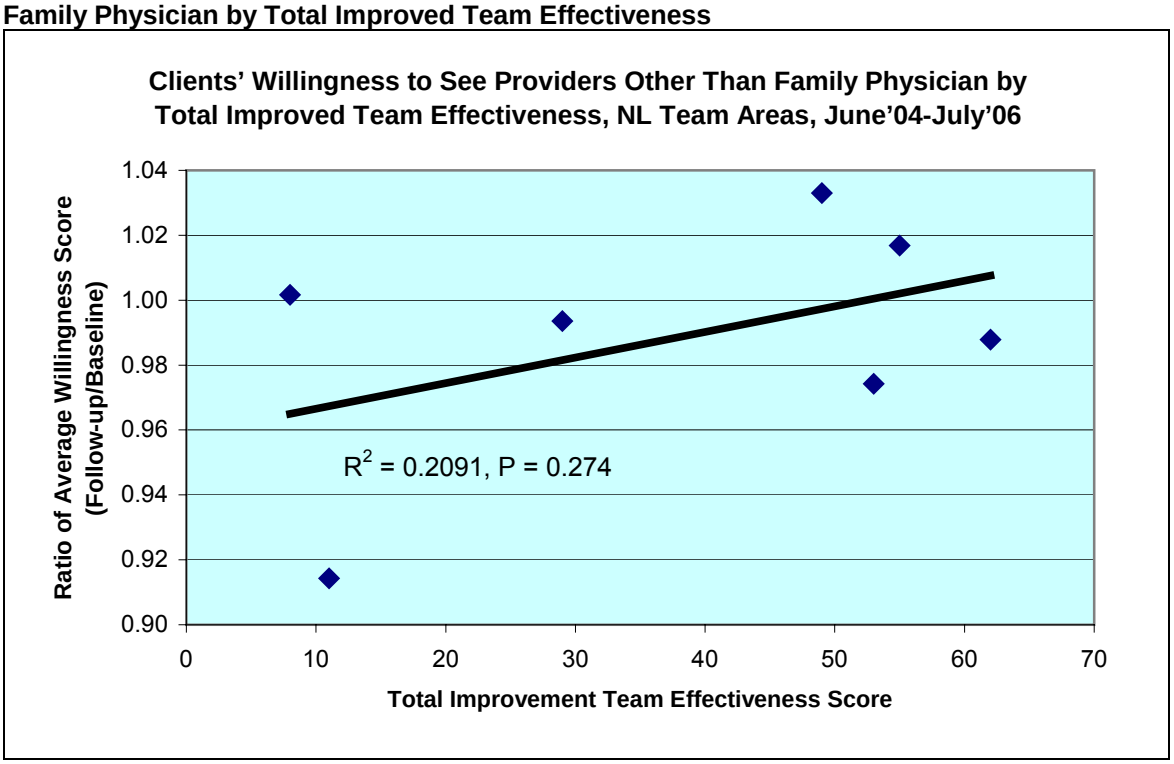



**Figure 24: Change in Clients' Reported Ease of Access to Primary Health Care Services by Total Improved Team Effectiveness**



Regression analysis was used to examine the relationship between total improved team effectiveness and changes in client/patient willingness to see service providers other than a family physician. Figure 25 presents the scatter plot and regression line displaying the relationship between the TITE scores and client/patient attitude toward seeing service providers other than a family physician. The results reveal that clients in team areas that experienced more improvement in team effectiveness tended to reflect a greater willingness to visit providers other than a family physician in their area if providing similar services as a family physician.

**Figure 25: Change in Clients' Willingness to See Health Care Service Providers Other than Their Family Physician by Total Improved Team Effectiveness**



The same analysis was used to examine the relationship between improvement in team effectiveness and changes in frequency of visits to various types of primary health care service providers. Figures 26 through 30 present the scatter plot and regression line displaying the relationship between improvement in team effectiveness and frequency of visits to the family physician, specialist physician, nurse practitioner, registered nurse, public health nurse.

The results reveal that clients in team areas that experienced more improvement in team effectiveness tended to make fewer visits to family physicians and specialists and more visits to registered nurses and public health nurses. While the p values in Figures 26 to 30 are not at the conventional level of statistical significance ($p \leq 0.05$), a pattern is evident in these data that is consistent with the objective in primary health care to increase the clients' willingness to see PHC providers other than the family physician.

**Figure 26: Change in Client/Patient Frequency of Visits to See a Family Physician by Total Improved Team Effectiveness**

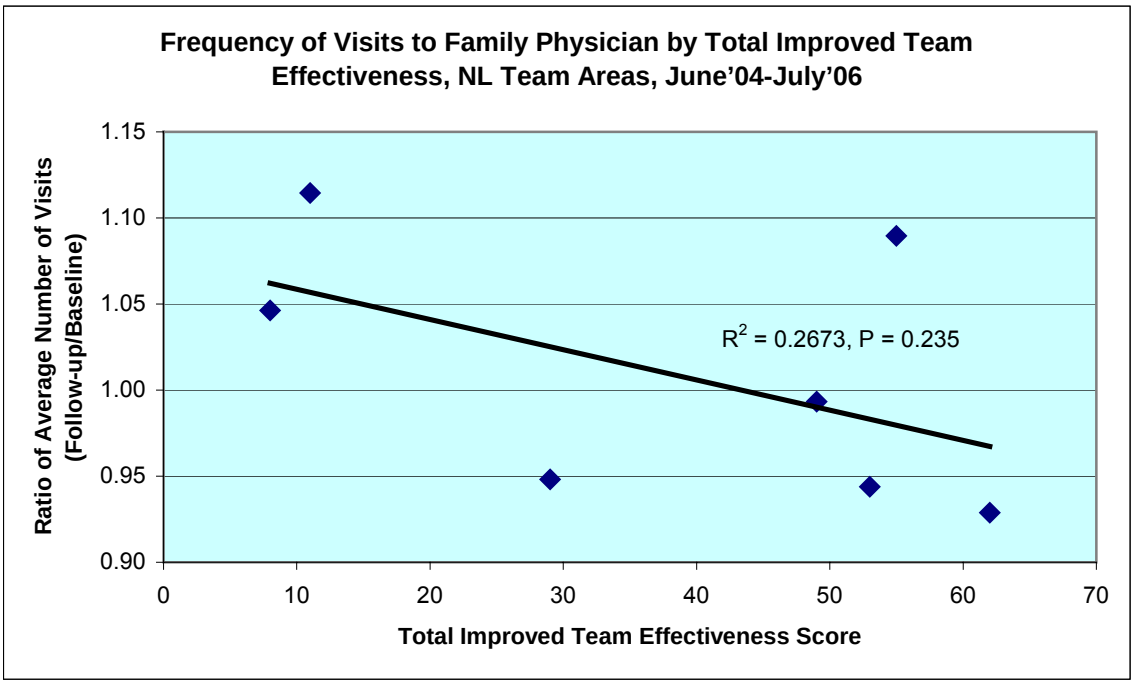


**Figure 27: Change in Client/Patient Frequency of Visits to See a Specialist by Total Improved Team Effectiveness**

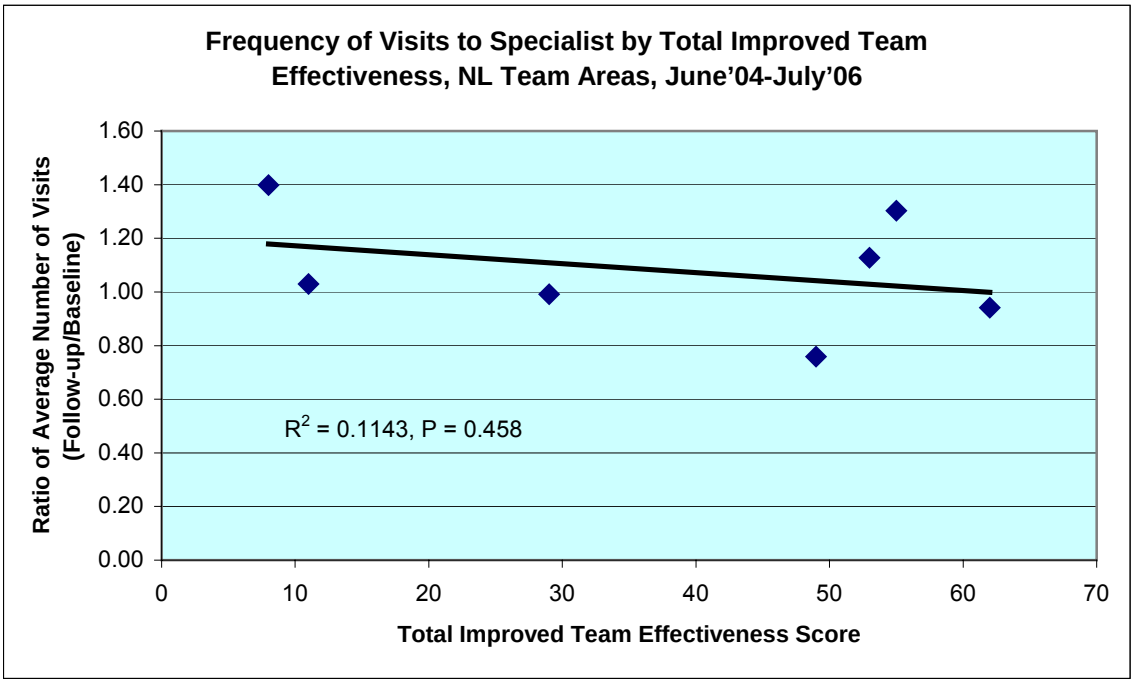



**Figure 28: Change in Client/Patient Frequency of Visits to See a Nurse Practitioner by Total Improved Team Effectiveness**

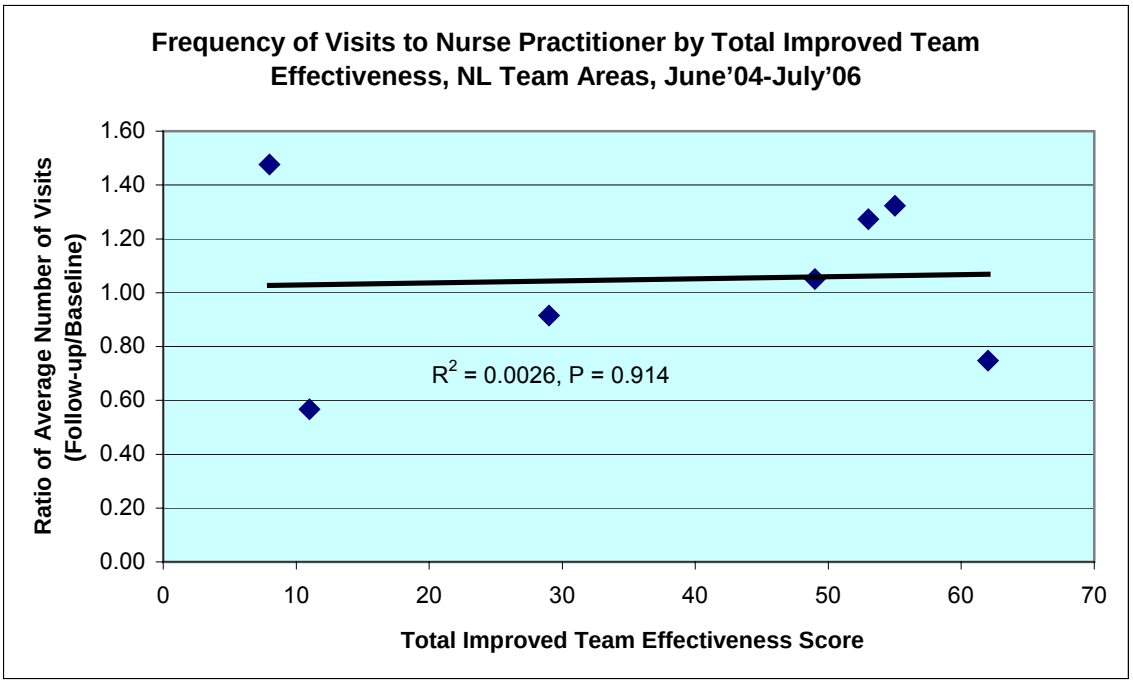


**Figure 29: Change in Client/Patient Frequency of Visits to See a Registered Nurse by Total Improved Team Effectiveness**

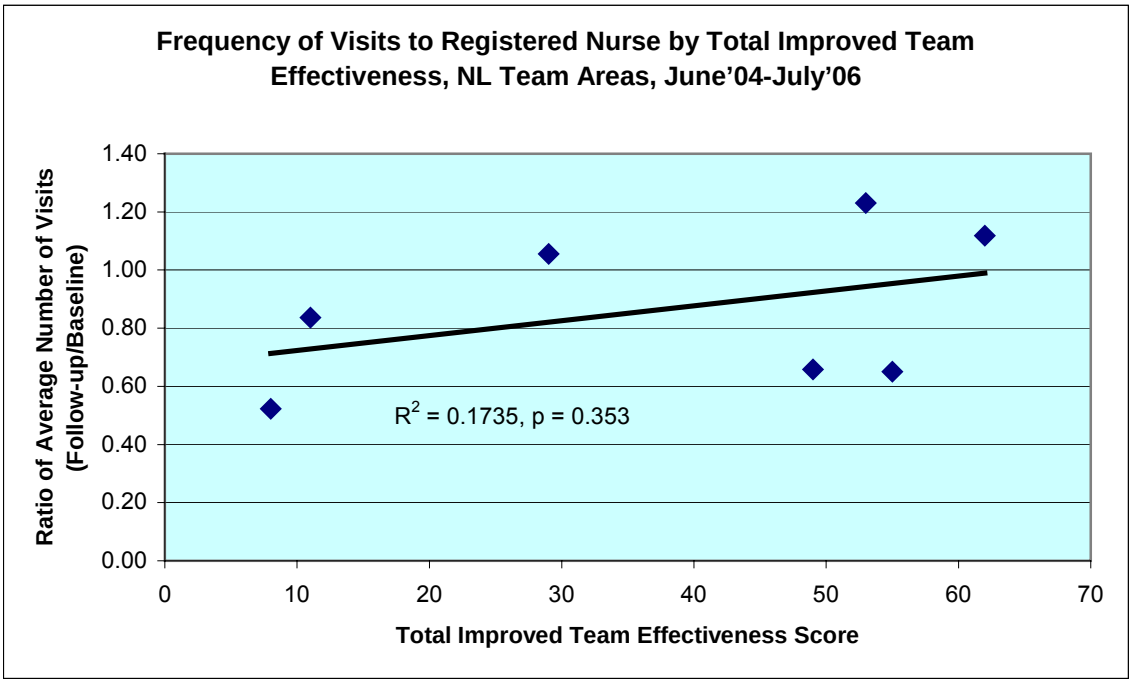
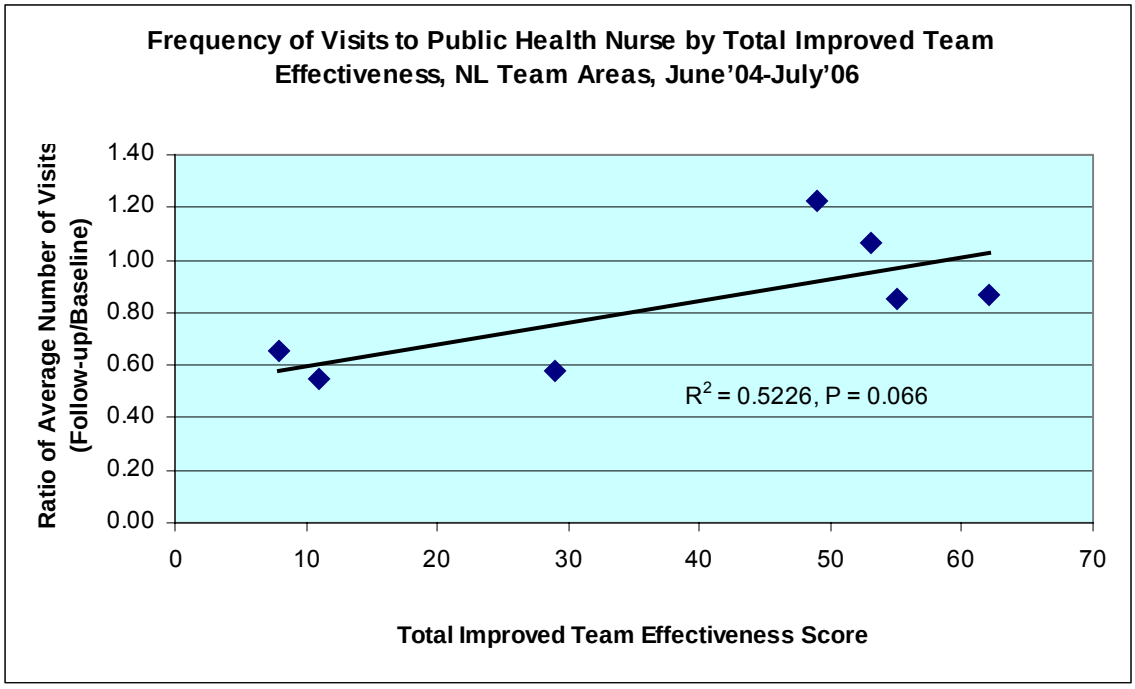



**Figure 30: Change in Client/Patient Frequency of Visits to See a Public Health Nurse by Total Improved Team Effectiveness**



### 7.3.3 Delivery of Accessible Services Summary and Conclusions

Accessibility to health services was examined using the results from the client/patient satisfaction survey which was administered to over 2,500 clients/patients on two occasions across seven of the team areas**.** Clients/patients identified a number of different barriers they experienced when trying to access primary health care services. The most common barrier identified is wait times for appointments. The next most common barrier is the lack of health professionals.

Regression analysis was used to examine the relationship between total improved team effectiveness and changes in the clients'/patients' perception of service delivery between baseline and follow-up. The results reveal that clients/patients in team areas that experienced more improvement in team effectiveness tended to experience lower wait times, fewer visits to emergency departments, and higher perceived ease of access to primary health care services (each at the conventional level of statistical significance). The results also reveal that team areas that experienced greater improved team effectiveness also tended to experience a greater willingness among clients/patients to visit providers other than a family physician in their area if providing similar services as their family physician Although this latter association was not at the conventional level of statistical significance, it is consistent with the pattern of decreasing visits to physicians and increasing visits to nurses (especially public health nurses) in team areas with more improvement in team effectiveness.

## 7.4 Chronic Disease Management

### 7.4.1 CDM Results from APR

Several of the Project Coordinators noted that patients in their team area are now receiving diabetes care that was not typically provided in the past and that the collaborative approach has addressed some of the service delivery gaps as patients can see more than one health care provider for consultations. Some of the team areas identified challenges associated with implementing the diabetes collaborative approach including lack of support from physicians. As described by one Project Coordinator the need for doctors to become more engaged in the process and refer diabetes patients to the program is crucial. In some cases patients have declined to participate in the program. The number of diabetes clinics and the total number of participants by team area is summarized in the following table.

**Table 34: Summary of CDM Diabetes Collaborative Activity by Team Area**

| | Bonne Bay | Bonavista | Twillingate | Connaigre | St. John's | Lab East | Placentia | Grenfell |
|---|---|---|---|---|---|---|---|---|
| Total number of session/clinics | 6 | 10 | 8 | 4 | 6 | NA | NA | NA |
| Total number of clients/participants | NA | 31 | 32 | 23 | 36 | NA | NA | NA |

NA – data not available

### 7.4.2 CDM Results from TET

As part of the second and third team effectiveness survey, team members were asked to report on their involvement with the local team area chronic disease management diabetes collaborative and their satisfaction with the different tools that were developed to facilitate the delivery of the most appropriate care for diabetes patients. A total of 59 providers that responded to the second TET survey and 60 providers that responded to the third TET survey reported that they were a member of the local team area CDM diabetes collaborative.[22] Just over 50% of the 59 respondents from the second TET survey and 77% of the 60 respondents from the third TET survey reported that they used the Diabetes Collaborative Flow Sheet.

[22] Results are combined from the following seven PHC team areas for both the 2nd and 3rd survey: Bonne Bay, Bonavista, Connaigre, Placentia, Twillingate, Grenfell, Labrador East.

As shown in Table 35, just over 53% of the second TET respondents reported that the Diabetes Collaborative Flow Sheet is easy to use while a further 27% reported that the Flow Sheet is somewhat easy to use. In comparison, only about 25% of the third TET respondents reported that the Flow Sheet is easy to use while a further 30% reported that it is somewhat easy to use. While only 13% of the second TET respondents reported difficulties in using the Flow Sheet, about 30% of the third TET respondents reported difficulties in using the tool.

**Table 35: Ease of Use of the Diabetes Collaborative Flow Sheet**

| The Diabetes Collaborative Flow Sheet is easy to use. | Time 2 | | Time 3 | |
|---|---|---|---|---|
| | Number of respondents | Percent | Number of respondents | Percent |
| 1 Strongly disagree | 1 | 3.3% | 7 | 14.9% |
| 2 | 2 | 6.7% | 1 | 2.1% |
| 3 | 1 | 3.3% | 6 | 12.8% |
| 4 | 2 | 6.7% | 7 | 14.9% |
| 5 | 8 | 26.7% | 14 | 29.8% |
| 6 | 11 | 36.7% | 7 | 14.9% |
| 7 Strongly agree | 5 | 16.7% | 5 | 10.6% |
| Total | 30 | 100 | 47 | 100 |
| Mean | 5.2 | | 4.3 | |

As shown in Table 36, just over 33% of the second TET respondents strongly believed that the Diabetes Collaborative Flow Sheet helps to ensure that appropriate care is provided to diabetes patients while a further 57% agreed to some extent that the Flow Sheet produces this result. In comparison, about 21% of the third TET respondents strongly believed that the Diabetes Collaborative Flow Sheet helps to ensure that appropriate care is provided to diabetes patients while a further 51% agreed to some extent that the Flow Sheet produces this result. None of the second TET respondents reported that the Flow Sheet provides no benefits at all while about 15% of the third TET respondents had doubts about whether the tool is effective.

**Table 36: Effectiveness of the Diabetes Collaborative Flow Sheet**

| The Diabetes Collaborative Flow Sheet helps to ensure that appropriate care is provided to diabetes patients. | Time 2 | | Time 3 | |
|---|---|---|---|---|
| | Number of respondents | Percent | Number of respondents | Percent |
| 1 Strongly disagree | 0 | 0.0% | 3 | 6.4% |
| 2 | 0 | 0.0% | 1 | 2.1% |
| 3 | 0 | 0.0% | 3 | 6.4% |
| 4 | 3 | 10.0% | 6 | 12.8% |
| 5 | 4 | 13.3% | 10 | 21.3% |
| 6 | 13 | 43.3% | 14 | 29.8% |
| 7 Strongly agree | 10 | 33.3% | 10 | 21.3% |
| Total | 30 | 100 | 47 | 100 |
| Mean | 5.2 | | 4.3 | |

Just over 32% of the 59 respondents from the second TET survey and 66% of the 59 respondents from the third TET survey reported that they used the Diabetes Collaborative Resource Tool Kit. As shown in Table 37, close to 78% of the second TET respondents reported that the Diabetes Collaborative Resource Tool Kit is easy to use while a further 17% reported that the Flow Sheet is somewhat easy to use. In comparison, about 42% of the third TET respondents reported that the Flow Sheet is easy to use while a further 21% reported that it is somewhat easy to use. While only one of the second TET respondents reported difficulties in using the Resource Tool Kit Flow Sheet, a total of five third TET respondents reported difficulties associated with the tool and nine respondents were undecided.

**Table 37: Ease of Use of the Diabetes Collaborative Resource Tool Kit**

| The Diabetes Collaborative Resource Tool Kit is easy to use. | Time 2 | | Time 3 | |
|---|---|---|---|---|
| | Number of respondents | Percent | Number of respondents | Percent |
| 1 Strongly disagree | 0 | 0.0% | 1 | 2.6% |
| 2 | 1 | 5.6% | 1 | 2.6% |
| 3 | 0 | 0.0% | 3 | 7.9% |
| 4 | 0 | 0.0% | 9 | 23.7% |
| 5 | 3 | 16.7% | 8 | 21.1% |
| 6 | 9 | 50.0% | 9 | 23.7% |
| 7 Strongly agree | 5 | 27.8% | 7 | 18.4% |
| Total | 18 | 1 | 38 | 100 |
| Mean | 5.2 | | 4.3 | |

As shown in Table 38, just over 29% of the second TET respondents strongly believed that the Diabetes Collaborative Resource Tool Kit helps to ensure that appropriate care is provided to diabetes patients while a further 71% agreed to some extent that the Resource Tool Kit is providing this benefit to patients. In comparison, about 16% of the third TET respondents strongly believed that the Resource Tool Kit helps to ensure that appropriate care is provided to diabetes patients while a further 63% agreed to some extent that the Resource Tool Kit is providing this benefit to patients. None of the second TET respondents reported that the Tool Kit provides no benefits at all while about 5% of the third TET respondents had doubts about whether the tool is effective.

**Table 38: Effectiveness of the Diabetes Collaborative Resource Tool Kit**

| The Diabetes Collaborative Resource Tool Kit helps to ensure that appropriate care is provided to diabetes patients. | Time 2 | | Time 3 | |
|---|---|---|---|---|
| | Number of respondents | Percent | Number of respondents | Percent |
| 1 Strongly disagree | 0 | 0.0% | 0 | 0.0% |
| 2 | 0 | 0.0% | 1 | 2.6% |
| 3 | 0 | 0.0% | 1 | 2.6% |
| 4 | 0 | 0.0% | 6 | 15.8% |
| 5 | 1 | 5.9% | 13 | 34.2% |
| 6 | 11 | 64.7% | 11 | 28.9% |
| 7 Strongly agree | 5 | 29.4% | 6 | 15.8% |
| Total | 17 | 1 | 38 | 100 |
| Mean | 5.2 | | 4.3 | |

### 7.4.3 CDM Results from CPST

As part of the second client/patient survey, respondents were asked to report on whether they were involved with the local team area chronic disease management diabetes collaborative as a patient and the result of their involvement in terms of the effect on their health. At the composite level a total of 81 survey respondents reported that they were involved in the diabetes collaborative as a patient. Additional details by team area are provided in Table 39.

**Table 39: Number and Percentage of Survey Respondents Involved in the CDM Diabetes Collaborative as a Patient by Team Area**

| Are you involved in the Chronic Disease Management (CDM) Diabetes Collaborative as a patient? | | | | |
|---|---|---|---|---|
| **Team Area** | | **Yes** | **No** | **Total** |
| Twillingate | Count | 16 | 340 | 356 |
| | % | 4.5% | 95.5% | 100.0% |
| Connaigre | Count | 9 | 343 | 352 |
| | % | 2.6% | 97.4% | 100.0% |
| Bonavista | Count | 14 | 352 | 366 |
| | % | 3.8% | 96.2% | 100.0% |
| Bonne Bay | Count | 10 | 341 | 351 |
| | % | 2.8% | 97.2% | 100.0% |
| Grenfell | Count | 9 | 383 | 392 |
| | % | 2.3% | 97.7% | 100.0% |
| Labrador East | Count | 9 | 357 | 366 |
| | % | 2.5% | 97.5% | 100.0% |
| Placentia | Count | 14 | 346 | 360 |
| | % | 3.9% | 96.1% | 100.0% |
| Composite (All Sites) | Count | 81 | 2462 | 2543 |
| | % | 3.2% | 96.8% | 100.0% |

Just over 56% of the survey respondents reported that their health was somewhat or much better as a result of their involvement with the diabetes collaborative. Additional details by team area are provided in Table 40.

**Table 40: Patient Perception of CDM Diabetes Collaborative Effect on Personal Health by Team Area**

| Based on your involvement with the Diabetes Collaborative, would you say your health is … | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Team Area | | 1 Much worse today than before | 2 Somewhat worse today than before | 3 The same as before | 4 Somewhat better today than before | 5 Much better today than before | Total | Mean Score |
| Twillingate | Count | 0 | 0 | 2 | 9 | 5 | 16 | 4.2 |
| | % | 0.0% | 0.0% | 12.5% | 56.3% | 31.3% | 100.0% | |
| Connaigre | Count | 0 | 1 | 5 | 3 | 0 | 9 | 3.2 |
| | % | 0.0% | 11.1% | 55.6% | 33.3% | 0.0% | 100.0% | |
| Bonavista | Count | 0 | 1 | 6 | 2 | 4 | 13 | 3.7 |
| | % | 0.0% | 7.7% | 46.2% | 15.4% | 30.8% | 100.0% | |
| Bonne Bay | Count | 0 | 1 | 5 | 2 | 2 | 10 | 3.5 |
| | % | 0.0% | 10.0% | 50.0% | 20.0% | 20.0% | 100.0% | |
| Grenfell | Count | 0 | 0 | 4 | 3 | 2 | 9 | 3.8 |
| | % | 0.0% | 0.0% | 44.4% | 33.3% | 22.2% | 100.0% | |
| Labrador East | Count | 1 | 0 | 3 | 3 | 2 | 9 | 3.6 |
| | % | 11.1% | 0.0% | 33.3% | 33.3% | 22.2% | 100.0% | |
| Placentia | Count | 1 | 1 | 4 | 3 | 5 | 14 | 3.7 |
| | % | 7.1% | 7.1% | 28.6% | 21.4% | 35.7% | 100.0% | |
| All Team Areas | Count | 2 | 4 | 29 | 25 | 20 | 80 | 3.7 |
| | % | 2.5% | 5.0% | 36.3% | 31.3% | 25.0% | 100.0% | |

### 7.4.4 Chronic Disease Management Summary and Conclusions

The CDM diabetes collaborative approach has been implemented to varying degrees in each of the team areas. A total of 59 primary health care providers who responded to the second TET survey and 60 who responded to the third TET survey are members of the local team area CDM diabetes collaborative.

Project Coordinators have noted that patients in their team area are now receiving diabetes care that was not typically provided in the past and that the collaborative approach has addressed some of the service delivery gaps as patients can see more than one health care provider for consultations. Some of the Project Coordinators identified the lack of support from physicians as a key challenge associated with implementing the diabetes collaborative.

As part of the second and third TET survey, team members were asked to report on their involvement with the local team area chronic disease management diabetes collaborative and their satisfaction with the different tools that were developed to facilitate the delivery of the most appropriate care for diabetes patients. Over half of these respondents have used the Diabetes Collaborative Flow Sheet and the majority of these respondents reported that the Flow Sheet is somewhat easy or easy to use. The majority of these respondents also believed that the Flow Sheet is helpful in ensuring that appropriate care is provided to diabetes patients.

Team members were also asked to report on their satisfaction with using the Diabetes Collaborative Resource Tool Kit. Just over 32% of the 59 respondents from the second TET survey and 66% of the 59 respondents from the third TET survey reported that they used the Diabetes Collaborative Resource Tool Kit. The majority of these respondents reported that the Resource Tool Kit is somewhat easy or easy to use. The majority of these respondents also believed that the Resource Tool Kit is helpful in ensuring that appropriate care is provided to diabetes patients.

As part of the second client/patient survey, participants were asked to report on whether they were involved with the local team area chronic disease management diabetes collaborative as a patient and the result of their involvement in terms of the effect on their health. At the composite level a total of 81 survey respondents reported that they were involved in the diabetes collaborative as a patient and just over half of these respondents reported that their health was somewhat better or much better as a result of their involvement with the diabetes collaborative.

## 7.5 Involvement and Satisfaction of Citizens

### 7.5.1 APR Results on Community Capacity Building

Training for the Community Capacity Building Tool (CCBT) was documented in the Administrative Process Record. Different team areas have implemented this initiative and utilized the CCBT to varying degrees. Five of the team areas reported that community capacity building training occurred in their team areas, whereas one team area reported that training was in progress.

Using a 5 point scale where 1=not useful and 5=very useful, team area Project Coordinators were asked to rank the level of usefulness of the CCBT in helping the team to identify priority areas to be addressed for their Action Plan. Only one of the team areas noted that the CCBT was helpful. This team area noted that the tool encouraged the group to think more holistically and inclusively about the initiative. It also provided more opportunities for the group to reflect on community challenges and strengths through the action plan. The other team areas suggested that the tool was too cumbersome and difficult to use in the early stages of planning. Some of the team areas also experienced time constraints in completing the tool and in a couple of cases the local Community Advisory Committee focused on completing the Circle of Health Framework rather than the CCBT.

### 7.5.2 APR Results on Wellness Initiative

Training for the Circle of Health Framework/Wellness Initiative was also documented in the Administrative Process Record. Six of the team area Project Coordinators reported that they received the Circle of Health Framework training. Of these six team areas, five indicated that they used the Circle of Health Framework to develop and plan for their PHC health promotion / wellness initiatives. The number of initiatives implemented ranged from one to six.

Using a 5 point scale where 1=not useful and 5=very useful, Project Coordinators were asked to rank the level of usefulness of the Circle of Health Framework in helping their group develop/plan their health promotion/wellness initiative. All the teams reported the Framework as somewhat or very useful. In St. John's the Framework was found to be very useful for "large picture planning" while in Bonavista the Circle of Health training will become integrated with staff development and will be offered on a regional basis. In Placentia, it was noted that the implementation of the Wellness Initiative led to the hiring of a Nurse Practitioner and thereby provided relief to services in the area.

### 7.5.3 Team Effectiveness in Relation to Partnerships

Table 41 (Parts 1 and 2) reports the mean scale scores for each of the three TET application periods in relation to a series of opinion statements related to partnerships. Table 41 also presents the resulting ratio of means and p-values. The ratio of means scores for all eight of the partnership opinion statements indicated a higher level of agreement (improvement) in team effectiveness between the baseline and follow-up surveys.

In comparing Time 1 and Time 2 results, the Time 2 group had statistically significantly higher scores ($p \leq 0.05$) on seven of the eight opinion statements related to partnerships of which three statements were significant at $p \leq 0.001$. With respect to the Time 3 results, the Time 3 group had statistically significantly higher scores on all eight opinion statements which were significant at $p \leq 0.001$. Additional details are provided in Table 41 Part 1 and 2.

**Table 41: Team Effectiveness Results – Partnerships Part 1**

| Theme | Opinion Statement | Time | Number of Respondents | Mean | Ratio of Means | | T1 vs T2 | | | T1 vs T3 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | T2 / T1 | T3 / T1 | t - value | df | p-value (2 tailed) | t - value | df | p-value (2 tailed) |
| Partnerships | Our team involves and supports the community in the planning and delivery of programs and services. | 1 | 208 | 4.26 | 1.08 | 1.15 | -2.016 | 383 | 0.045 | -3.959 | 385 | 0.000 |
| | | 2 | 177 | 4.60 | | | | | | | | |
| | | 3 | 179 | 4.89 | | | | | | | | |
| | Our team responds to client/patient and community input. | 1 | 210 | 4.43 | 1.09 | 1.14 | -2.306 | 384 | 0.022 | -3.825 | 385 | 0.000 |
| | | 2 | 179 | 4.82 | | | | | | | | |
| | | 3 | 179 | 5.03 | | | | | | | | |
| | Our team does ***not*** effectively involve network providers. | 1 | 214 | 3.62 | 0.91 | 0.81 | 1.856 | 385 | 0.064 | 4.306 | 392 | 0.000 |
| | | 2 | 173 | 3.29 | | | | | | | | |
| | | 3 | 180 | 2.92 | | | | | | | | |
| | Our team has developed partnerships with intersectoral groups to plan and deliver services (e.g. education, youth, seniors, police, clergy). | 1 | 206 | 4.17 | 1.20 | 1.17 | -5.232 | 376 | 0.000 | -4.219 | 384 | 0.000 |
| | | 2 | 172 | 5.01 | | | | | | | | |
| | | 3 | 180 | 4.86 | | | | | | | | |
| | Committees such as project planning committees or community advisory committees are supporting the team in improving the delivery of services. | 1 | 200 | 4.02 | 1.22 | 1.19 | -5.386 | 365 | 0.000 | -4.826 | 378 | 0.000 |
| | | 2 | 167 | 4.89 | | | | | | | | |
| | | 3 | 180 | 4.79 | | | | | | | | |

T1 = Time 1: Baseline survey results; T2 = Time 2: 1st follow-up survey results; T3 = Time 3: 2nd follow-up survey results; Mean score is based on a 7 point scale where 1 = 'Strongly Disagree' and 7 = 'Strongly Agree'; df = degrees freedom.

**Table 41: Team Effectiveness Results – Partnerships Part 2**

| Theme | Opinion Statement | Time | Number of Respondents | Mean | Ratio of Means | | T1 vs T2 | | | T1 vs T3 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | T2 / T1 | T3 / T1 | t - value | df | p-value (2 tailed) | t - value | df | p-value (2 tailed) |
| Partnerships cont. | In the past six months there has been increased participation by clients/patients in decisions related to self, family and community programs. | 1 | 189 | 3.37 | 1.27 | 1.28 | -4.970 | 354 | 0.000 | -5.524 | 360 | 0.000 |
| | | 2 | 167 | 4.26 | | | | | | | | |
| | | 3 | 174 | 4.30 | | | | | | | | |
| | In the past six months requests for health information by clients/patients and community members has increased. | 1 | 180 | 3.56 | 1.12 | 1.20 | -2.198 | 334 | 0.029 | -4.029 | 337 | 0.000 |
| | | 2 | 157 | 3.97 | | | | | | | | |
| | | 3 | 163 | 4.26 | | | | | | | | |
| | Overall, I am satisfied with the partnerships that the Primary Health Care Team has established. | 1 | 210 | 3.99 | 1.09 | 1.17 | -2.275 | 389 | 0.023 | -4.141 | 391 | 0.000 |
| | | 2 | 181 | 4.36 | | | | | | | | |
| | | 3 | 183 | 4.65 | | | | | | | | |

T1 = Time 1: Baseline survey results; T2 = Time 2: 1st follow-up survey results; T3 = Time 3: 2nd follow-up survey results; Mean score is based on a 7 point scale where 1 = 'Strongly Disagree' and 7 = 'Strongly Agree'; df = degrees freedom.

### 7.5.4 Partnership Development in Relation to Team Development Activity (TDA)

Regression analysis was used to examine the relationship between team development activity in each area and changes in team effectiveness in partnership development between Time 1 and Time 3. Figures 31 and 32 present the scatter plot and regression line displaying the association between TDA and the change in TET scores for partnership development opinion statements where the association p values were less than 0.2. These include the following statements:

- Our team responds to client/patient and community input; and
- Our team has developed partnerships with intersectoral groups to plan and deliver services (e.g. education, youth, seniors, police, clergy).

The results reveal that team areas (diamonds in the figures) that conducted more team development activities were likely to experience a more positive change in partnership development.

**Figure 31: Team Member Agreement that Team Responds to Client/Patient and Community Input by Team Development Activity**

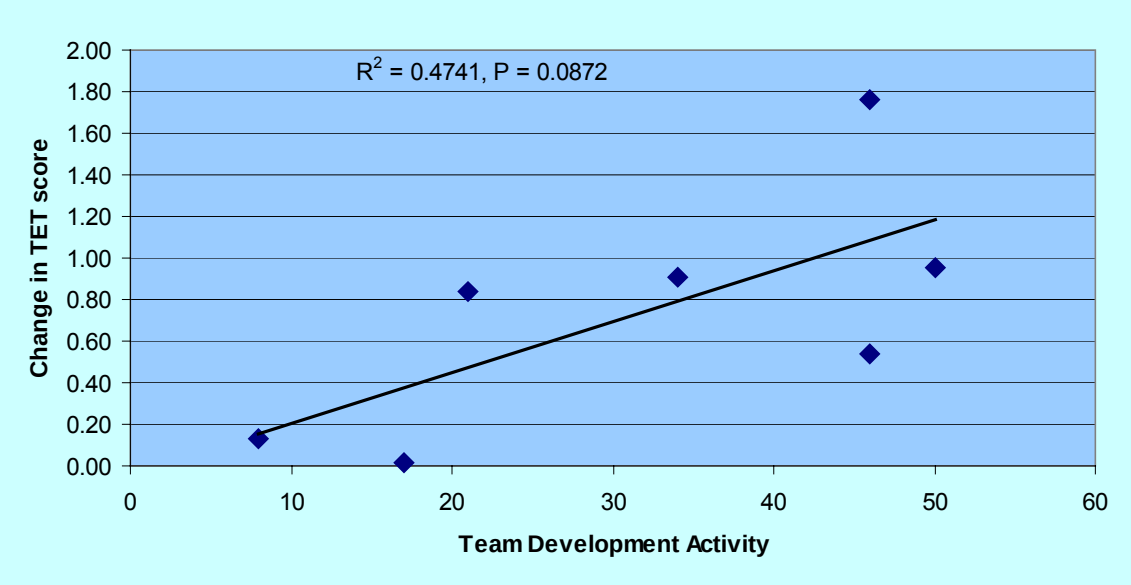
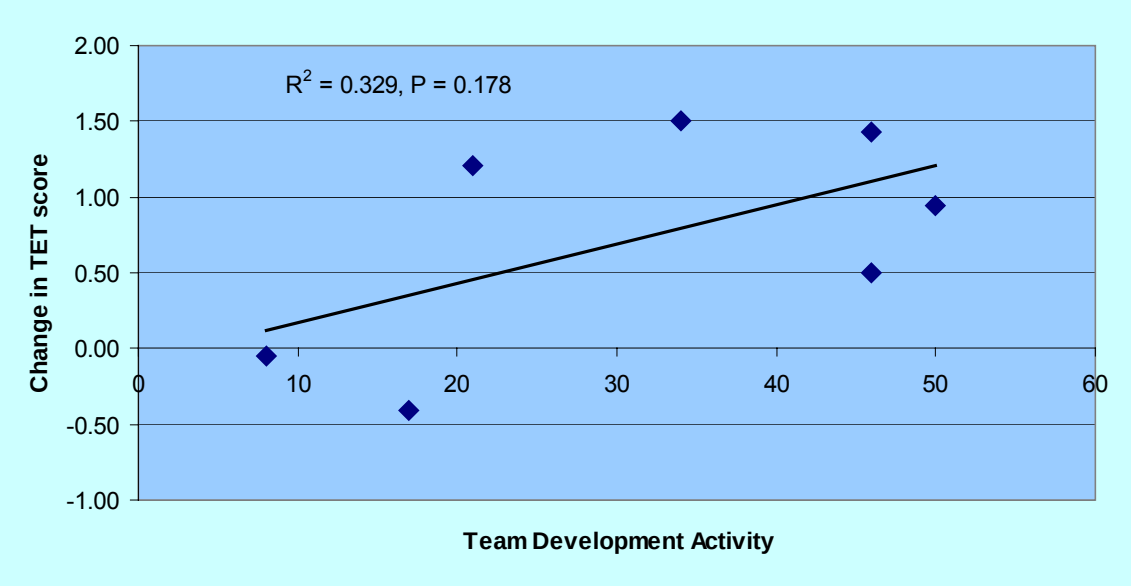


**Figure 32: Team Member Agreement that the Team Develops Partnerships with Intersectoral Groups by Team Development Activity**




### 7.5.5 Client/Patient Satisfaction

Clients/patients were asked to indicate their level of satisfaction with the most recent health service they received. Responses were scored on a 5-point scale where 1=not at all satisfied; 2=somewhat dissatisfied; 3=neutral; 4=somewhat satisfied; 5=very satisfied. At the composite (all teams) level the average score on the 5-point scale for the baseline was 4.29 which increased to 4.35 for the follow-up survey.[23] As shown in the following table, the difference was statistically significant at the composite level (p=0.025).

In general, the results indicate that clients/patients in each of the team areas were somewhat satisfied with the health services they received most recently. All of the team areas with the exception of two reported an increase in their average satisfaction score and the increase experienced in two team areas was found to be statistically significant (Bonne Bay p=.01; Twillingate p=.001). Additional details are provided in the following table.

[23] Based on a total of 2,463 baseline survey respondents and 2,541 follow-up survey respondents.

**Table 42: Average Score for Client/Patient Satisfaction by Team Area [a]**

| Time period | Bonavista | | Bonne Bay | | Connaigre | | Twillingate | | Lab East | | Grenfell | | Placentia | | All Teams | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mean | p - value (2-tailed) | Mean | p - value (2-tailed) | Mean | p - value (2-tailed) | Mean | p - value (2-tailed) | Mean | p - value (2-tailed) | Mean | p - value (2-tailed) | Mean | p - value (2-tailed) | Mean | p - value (2-tailed) |
| 1 | 4.398 | | 4.167 | | 4.345 | | 4.418 | | 4.012 | | 4.252 | | 4.392 | | 4.290 | |
| | | 0.696 | | 0.010 | | 0.739 | | 0.001 | | 0.818 | | 0.141 | | 0.787 | | 0.025 |
| 2 | 4.370 | | 4.383 | | 4.370 | | 4.608 | | 3.992 | | 4.351 | | 4.411 | | 4.353 | |

[a] Based on 5-point scale where 1=not at all satisfied; 2=somewhat dissatisfied; 3=neutral; 4=somewhat satisfied; 5=very satisfied.

*Client Satisfaction in Relation to TITE*

Regression analysis was used to examine the relationship between total improved team effectiveness (TITE) and changes in client/patient satisfaction between baseline and follow-up. As shown in Figure 33, the results reveal that team areas that experienced a higher TITE score, representing more improvement in general team effectiveness, also experienced a higher client/patient satisfaction score on follow-up (albeit far from the conventional level of statistical significance).

*Self Reported General Health Status*

Clients/patients were asked to indicate their current general health status. Responses were scored on a 6-point scale where 1=very poor; 2=poor; 3=fair; 4=good; 5=very good; 6=excellent. At the composite (all teams) level the average score on the 6-point scale remained unchanged between the baseline and follow-up survey at 4.3.[24]

In general, the results indicate that clients/patients in each of the team areas reported their health as good. Each of the team areas experienced very minimal change in their average health status score. Additional details are provided in Table 43.

[24] Based on a total of 2,468 baseline survey respondents and 2,537 follow-up survey respondents.

**Figure 33: Client/Patient Satisfaction with Recent Health Services by Total Improved Team Effectiveness**

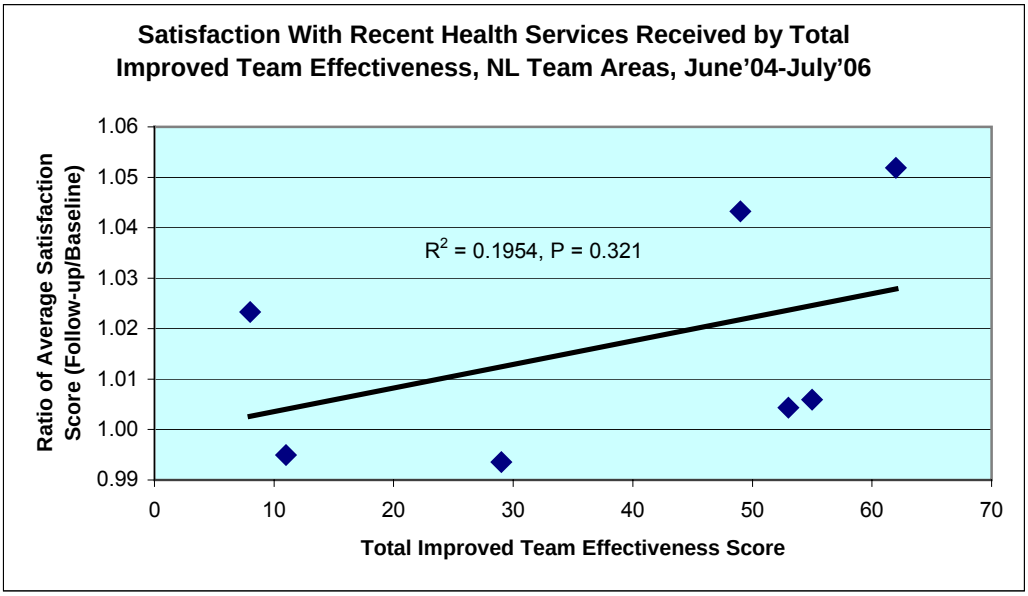



**Table 43: Average Score for Client/Patient Health Status by Team Area [a]**

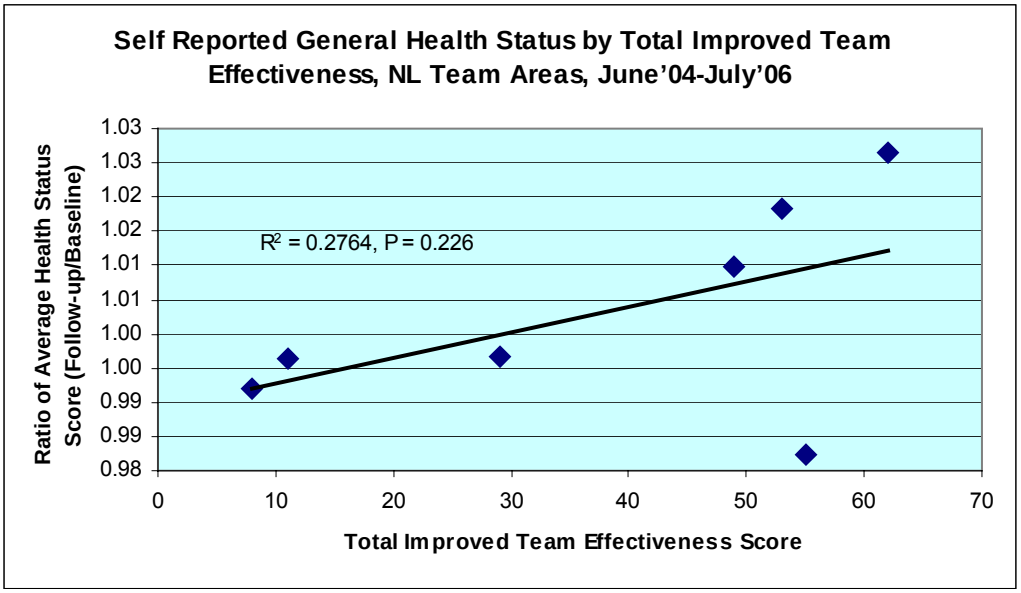
| Time period | Bonavista | | Bonne Bay | | Connaigre | | Twillingate | | Lab East | | Grenfell | | Placentia | | All Teams | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mean | p - value (2-tailed) | Mean | p - value (2-tailed) | Mean | p - value (2-tailed) | Mean | p - value (2-tailed) | Mean | p - value (2-tailed) | Mean | p - value (2-tailed) | Mean | p - value (2-tailed) | Mean | p - value (2-tailed) |
| 1 | 4.374 | 0.850 | 4.147 | 0.191 | 4.404 | 0.310 | 4.251 | 0.564 | 4.349 | 0.839 | 4.442 | 0.625 | 4.276 | 0.325 | 4.324 | 0.730 |
| 2 | 4.359 | | 4.257 | | 4.327 | | 4.293 | | 4.333 | | 4.407 | | 4.354 | | 4.334 | |

[a] Based on 6-point scale where 1=very poor; 2=poor; 3=fair; 4=good; 5=very good; 6=excellent.

*Self Reported General Health Status in Relation to TITE*

Regression analysis was used to examine the relationship between TITE and client/patient self reported general health status between baseline and follow-up. As shown in Figure 34, the results reveal that team areas that experienced a higher TITE score, representing more improvement in general team effectiveness, also experienced a greater improvement in client/patient health status, though not at a statistically significant level.

**Figure 34: Client/Patient Self Reported Health Status by Total Improved Team Effectiveness**




### 7.5.6 Focus Group Observations on the Community Advisory Committee

As noted section in 7.1.9, the purpose of the focus group was to bring together various project stakeholders (e.g. coordinator, facilitator, physician lead, community representative, regional health board, etc.) from each of the team areas and review/discuss their impressions of the PHC Initiative and its various components (PHC Team, PHC Network, Coordinator/Facilitator, Community Advisory Committee, Evaluation) in terms of successes/strengths over time, challenges/weaknesses over time, unexpected results, and suggestions for improvements.

Many of the focus group participants reported that the establishment of the Community Advisory Committee represented an important achievement as it promoted public participation and strengthened community involvement and ownership of the PHC Renewal Initiative.

Focus group participants were asked to rate the extent to which they felt the efforts of their Community Advisory Committee helped to move PHC forward in their team area using a 5 point scale where 1=not at all and 5=a very great extent. A total of 26 participants responded to this question and the average rating was 3 (a moderate extent). Approximately 15% provided a rating of 5 while 27% of respondents provided a rating of 4 and 23% provided a rating of 3. These respondents provided a number of reasons as to why the efforts of the Community Advisory Committee helped move Primary Health Care forward:

- They were quick to understand determinants of health and apply them to a wellness initiative;
- The projects were designed to reach all age groups;
- They completed several community based projects with a cross section of sectors; and
- They identified community issues, such as gambling, and moved to address the issues with other community partners.

Respondents who reported that the CAC had limited or no effect on moving PHC forward elaborated that they also believe the CAC has the potential to be effective in their area, but that it is still in its early stages. Other challenges included ensuring broad representation from various community agencies/organizations and providing CAC members with sufficient opportunities to identify and discuss initiatives.

### 7.5.6 Involvement of Citizens Summary and Conclusions

The PHC team areas have implemented the Community Capacity Building Training initiative and utilized the CCBT to varying degrees. In general, the team areas have not found the CCBT to be very helpful as the tool was reported to be too cumbersome and difficult to use in the early stages of planning. Some of the team areas also experienced time constraints in completing the tool and in a couple of cases the local Community Advisory Committee focused on completing the Circle of Health Framework rather than the CCBT.

The PHC team areas have implemented the Circle of Health Framework training initiative and utilized the Framework to varying degrees. In general, the team areas have found the Framework to be useful in helping their group develop/plan their health promotion/wellness initiative.

Results from the Team Effectiveness Tool showed improvements in the development of team area partnerships including the engagement of community members in the PHC Renewal Initiative. Results showed statistically significantly higher scores ($p \leq .001$) on 100% (8 of 8) of the partnership indicator statements between the baseline and final TET survey.

Regression analysis was used to examine the relationship between changes in team partnership development between Time 1 and Time 3 and total team development activity. The results indicate that team areas that conduct more team development activities are likely to experience a more positive change in team effectiveness in partnership development (although not at the conventional level of statistical significance).

Results from the client/patient survey revealed that on average clients/patients across all team areas reported a small but statistically significant increase in satisfaction with the most recent health service they received. All of the team areas with the exception of two reported an increase in their average satisfaction score between the baseline and follow-up survey, and the increase experienced in two team areas was found to be highly statistically significant (Bonne Bay p=.01; Twillingate p=.001).

Regression analysis was used to examine the relationship between total improved team effectiveness (TITE) and client/patient satisfaction between baseline and follow-up. The results reveal that team areas that experienced a higher TITE score, representing more improvement in overall team effectiveness, also experienced a higher degree of client/patient satisfaction (although not statistically significant).

Results from the client/patient survey reveal that on average clients/patients across all team areas were in good health based on their self-reported general health status. This composite result remained unchanged between the baseline and follow-up survey. Similarly, clients/patients in each of the team areas reported their health as good, and each of the team areas experienced very minimal change in their average health status score.

Many of the focus group participants reported that the establishment of the Community Advisory Committee represented an important achievement in their team area as it promoted public participation and strengthened community involvement and ownership of the PHC Renewal Initiative. Approximately 65% of the participants reported that the Community Advisory Committee helped to some extent in moving PHC forward in their team area.

## 8.0 SUMMARY AND CONCLUSIONS

This report presents the findings for the evaluation of the Newfoundland and Labrador Primary Health Care Renewal Initiative. The Initiative was designed to address a number of features in the Provincial Primary Health Care Framework including establishing primary health care teams, maximizing scope of practice, enhancing access to the primary health care team, and promoting and enhancing community input and community capacity building.

### *PHC Team Development and Team Effectiveness*

One of the key features of the Primary Health Care Renewal Initiative was the development of effective Primary Health Care teams. PHC teams were established in eight team areas including Bonavista, Bonne Bay, Connaigre, Grenfell, Labrador East, Placentia, St. John's and Twillingate/New World Island. The Initiative in St. John's was delayed as the focus of the team changed midway through the Renewal Initiative. As a result, St.John's is not included in some of the analyses reported.

A survey of PHC team members in seven team areas was conducted to assess team effectiveness over time. Although low response rates limited the degree of analysis that could be conducted at the individual team area level there was a sufficient number of responses at the composite level to identify trends.

The results from the PHC team survey show an improvement in team effectiveness over time. Statistically significant ($p \leq 0.05$) improvements were observed in relation to service provider awareness and understanding of team purpose/vision/roles, team communication, team support, service delivery, scope of practice, and personal satisfaction. As well, the evaluation shows that team areas that conduct more team development activities are likely to experience a more positive change in team effectiveness (although not at the conventional level of statistical significance).

The success of the PHC Initiative in improving team effectiveness is notable in light of a number of challenges experienced in the team areas including:

- The restructuring of the regional health boards which occurred concurrently with the implementation of the PHC Initiative;
- Limited support from physicians in some team areas;
- Staff turnover and lack of leadership in some team areas;
- Large catchments areas and team sizes in some team areas which restricted team development; and
- Uncertainty about the sustainability of the initiative in terms of funding and human resources.

### *PHC Team Development and Maximizing Scope of Practice*

Another key feature of the Primary Health Care Renewal Initiative was maximizing scopes of practice. All of the team areas prepared scope of practice action plans which identified short-, intermediate- and long-term issues and actions for addressing service delivery gaps and overlaps.

The Team Effectiveness Tool included five scope of practice indicator statements, and the results were analyzed to identify any changes in the providers' perception of their scope of practice. Improvements were observed with statistically significantly higher scores (≈10%, $p \leq 0.05$) on all five of the indicator statements between the baseline and final TET survey. Further, team areas that conducted more team development activities were likely to experience a more positive change in scope of practice (although not at the conventional level of statistical significance).

Improvements in scope of practice were observed despite a number of challenges including:

- Difficulties related to educating staff and management about maximizing scope of practice;
- Limited opportunities to meet to discuss roles and become more familiar with other providers roles;
- Loss of momentum due to conflicting priorities of staff and management;
- Loss/turnover of staff and management;
- The regional health board restructuring process; and
- Limited ability of health service providers to share relevant information due to lack of electronic records.

While the results show some progress in addressing short-term issues, most of the team area action plans are still in the early stages of implementation. As well, many of the long-term SOP issues were identified as being beyond the control/influence of the local PHC team and required the attention/actions of regional and/or provincial organizations. Further monitoring and analysis of the SOP process is merited to better understand the outcomes associated with the process.

### *Enhancing Access to Primary Health Care*

There is some evidence which indicates that the PHC Renewal Initiative enhanced client/patient access to primary health care. Clients/patients who resided in team areas that experienced more improvement in team effectiveness tended to experience lower wait times for appointments ($p=0.036$), fewer visits to emergency departments ($p=0.025$), and higher perceived ease of access to primary health care services ($p=0.061$).

The results also show that clients/patients in team areas that experienced more improvement in team effectiveness also tended to report a greater willingness to visit providers other than a family physician in their area if providing similar services as their family physician. Although not statistically significant, this association is consistent with the observations that clients/patients in team areas that experienced more improvement in team effectiveness also tended to report fewer visits to family physicians and specialists and increased visits to registered nurses and public health nurses. The movement away from reliance on physicians to other health service providers is supportive of the team approach being promoted through the PHC Initiative.

Another indication of enhanced access to PHC is the establishment of the CDM diabetes collaborative approach in each of the team areas. Clients/patients are now receiving diabetes care that was not typically provided in the past and the collaborative approach has addressed some of the service delivery gaps as patients can see more than one health care provider for consultations. Results from the client/patient survey show that most participants in the diabetes collaborative have reported an improvement in their health as a result of their involvement in collaborative.

While the above results show progress in enhancing access to health services, wait times for appointments and the lack of health professionals continue to represent the most common types of barriers experienced by clients/patients. As well, one of the ongoing challenges faced by the diabetes collaborative approach in some team areas is gaining the support of physicians.

***Maximizing Individual and Community Involvement in Improving and Protecting Quality of Life and Well Being***

All of the team areas participated in activities designed to promote individual and community involvement in health and wellness initiatives. Most of the teams reported that they received training for the Circle of Health/Wellness Framework. Given that the Circle of Health training came at the later stages of the PHC Initiative the intent was for team areas to increase their awareness of the Framework and begin to explore its application in developing health promotion/wellness initiatives. In general, the team areas found the Framework to be useful in helping their group develop/plan their health promotion/wellness initiatives.

***Promoting and Enhancing Community Input and Community Capacity Building***

All of the team areas developed Community Advisory Committees (CAC). The establishment of CACs was widely viewed by health service providers and community members in all team areas as an important achievement in their team area as they promoted public participation and strengthened community involvement and ownership

of the PHC Renewal Initiative. Health service providers and community members alike reported that the CAC helped to some extent in moving PHC forward in their team area.

All of the team areas participated in activities designed to enhance community input and community capacity building. Most of the teams reported that community capacity building training (CCBT) had occurred or was in progress. In general, the team areas have not found the CCBT to be very helpful as the tool was reported to be too cumbersome and difficult to use in the early stages of planning. Some of the team areas also experienced time constraints in completing the tool and in a couple of cases the local Community Advisory Committee focused on completing the Circle of Health Framework rather than the CCBT.

Results from the PHC team effectiveness survey showed statistically significant ($p \leq 0.001$) improvements in the development of team area partnerships with community residents and organizations (e.g. increased community engagement in the planning and delivery of programs and services, increased service provider responsiveness to client/patient and community input, increased/enhanced partnerships with intersectoral groups to plan and deliver services). The results also revealed that team areas that conducted more team development activities are likely to experience a more positive change in team effectiveness/partnership development (although not at the conventional level of statistical significance).

### *Improved Client/Patient Satisfaction and Health Status*

Results from the client/patient survey indicate that, at a composite level, clients/patients reported a slight but statistically significant ($p=0.025$) increase in satisfaction with the health services they received most recently. All of the team areas with the exception of two reported an increase in satisfaction, and the increase experienced in two team areas was found to be significant at the $p \leq 0.01$ level. The results revealed that team areas that experienced a higher total improved team effectiveness score also experienced a higher degree of client/patient satisfaction (although not at the conventional level of statistical significance).

The client/patient survey indicated very minimal change in self-reported general health status between the baseline and follow-up survey. Long-term outcomes such as a change in the prevalence of diabetes were beyond the scope of this two-year evaluation,

### *Conclusion*

The two year PHC Renewal Initiative in Newfoundland and Labrador has led to a number of significant short-term outcomes. From the health service provider perspective the Initiative resulted in the establishment of PHC teams in eight team

areas. Over the course of the Renewal Initiative the PHC teams experienced improved team effectiveness and some enhancements in provider scopes of practice. From the client/patient perspective, the Initiative resulted in client reports of lower wait times, fewer visits to the emergency department, improved ease of access, and increased client satisfaction. Although the Initiative encountered several challenges in relation to team building and enhancing scopes of practice, the evaluation revealed important progress in moving PHC forward. The Renewal Initiative warrants continuation with ongoing monitoring and evaluation to assess intermediate and long-term outcomes.

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